

Knowledge, Attitudes, and Practice of Complementary and Alternative Medicine in the Abu Dhabi Region

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Received: May 2019; Accepted: June 2019; Published: July 1, 2019. Citation: Shaikhah Al Marshedi et al. Knowledge, Attitudes, and Practice of Complementary and Alternative Medicine in the Abu Dhabi Region. World Family Medicine. 2019; 17(7): 8-16. DOI: 10.5742MEWFM.2019.93663

Abstract

Background: Complementary and Alternative Medicine (CAM) is among the major practices that have been used for decades as a substitute or an addition to standard medical practices. Interestingly, the popularity of CAM is increasing. Approximately two-thirds of the world population seeks health care from sources other than those that provide standard care. The study aimed to assess the knowledge, attitudes, and practice of CAM among people living in the Abu Dhabi region.

Methods: This was a descriptive cross-sectional study conducted during 2016–2017 using a self-administered questionnaire. The study targeted both UAE nationals and non-nationals attending seven clinics that are located in the Abu Dhabi region. The inclusion criteria were 1) being >18 years of age and 2) being able to speak Arabic or English. Patients with mental disabilities or those who were illiterate, were excluded. A total of 384 individuals were required for a 95% confidence interval with 5% margin error; thus, the final sample size was 405. Data analysis was performed using the SPSS program. The chi-square test and t-test were used for analyzing categorical and numerical data, respectively.

Results: Most of the participants were UAE nationals (75%) and females (72.7%), and more than half were married, Muslims, between 18 and 44 years of age, and employed. Thirty-seven percent of the respondents reported they had chronic disease. The proportions of respondents who had good, fair, and poor knowledge were 28.4%, 68.6%, and 3%, respectively. Higher education was associated with better knowledge ($P = 0.044$).

The sources of CAM knowledge differed according to certain population characteristics. Educated people used the internet as a source of knowledge, whereas patients with chronic diseases obtained their knowledge primarily from health care providers ($P = 0.02, 0.039$, respectively). Neutral attitudes toward CAM were held by 68.1% of the respondents. Only 7.7% of the respondents had a positive attitude, and 24.2% had a negative attitude toward CAM. Ninety-five percent of the study group used CAM. The most common practices involved the use of herbs (53.6%), dietary supplements (44.7%), and honey products; the least common practices were chiropractic (9.9%) and cautery (8.6%). Among the respondents, 77.9% did not discuss CAM usage with their primary physicians; however, almost 80% recommended discussing CAM with their doctors. Interestingly, the respondents with higher education and those with chronic diseases were more likely to recommend using CAM as first-line treatment ($P = 0.014, 0.036$, respectively).

Conclusion: The use of CAM is increasing in the Abu Dhabi region. The results showed fair knowledge in most of the participants, and neutral attitudes toward CAM. Most of our respondents did not discuss CAM with their primary physicians; however, 80% recommend to start discussing CAM usage, with their primary doctors. The most common practices were the use of herbs, dietary supplements, and honey products. Primary care physicians need to raise awareness about the benefits and risks of CAM use among the population, which can be achieved by patient education regarding evidence-based CAM practices.

Key words: Alternative medicine, complementary medicine, Abu Dhabi region, UAE

Introduction

Complementary and Alternative Medicine (CAM) is among the major practices that have been used for decades. It is either used as a substitute or an addition to standard medical practices. According to the United States National Center for Complementary and Alternative Medicine, CAM is defined as “a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine”(1).

“CAM can be classified into five categories that include the following:

1. Traditional alternative medicine (homeopathic and naturopathic, Chinese, and Ayurvedic medicine)
2. Mind therapies (meditation, prayer, mental healing, art, and music)
3. Biological therapies (herbs and dietary supplementation)
4. Body therapies (chiropractic and osteopathic manipulation, massage)
5. Energy therapies (qigong, reiki, therapeutic touch, and electromagnetic field exposure)” (2).

Interestingly, the popularity of CAM is increasing. Approximately two-thirds of the world’s population seeks health care from sources other than those that provide standard medical treatment. The percentages of utilization in developing countries were found to be 90% in Ethiopia, 80% in Africa, 70% in Benin, 70% in India, and 60% in Uganda (4). In developed countries, the usage rate is less than that in developing countries, but it has increased within the last decade. The USA (42%), France (49%), Australia (48%), and Canada (70%) are examples of CAM usage in developed countries(4).

CAM has had a great impact economically. In 2012, Americans spent almost \$30.2 billion on different CAM practices like chiropractic, yoga, acupuncture, natural products, and educational resources (books, CDs, and videos) about the use of CAM.(5) Moreover, CAM expenditure in the UK has reached approximately US \$2300 million per year, whereas globally, it is estimated to be \$60 billion per year (3).

Many studies have shown that CAM is used more often by patients who have chronic illnesses. One study showed that >50% of cancer patients in the USA were using CAM therapies in addition to their standard medical treatment(2). Surprisingly, some treatment guidelines have started to integrate CAM. The NICE guidelines for the treatment of chronic back pain suggest two new methods of CAM (acupuncture and spinal manipulation) as therapeutic options(6). Acupuncture was also shown to be effective in treating high blood pressure, depression, and morning sickness(7). Furthermore, CAM has been found to help alleviate postoperative pain and adverse reactions to chemotherapy(7). Certain populations, such as Ethiopians, have started to incorporate some herbal substances as ingredients in their food. Moreover, other countries (China, North and South Korea, and Vietnam) have integrated

traditional medicine into their health care systems(8). As in other countries, the UAE population has shown great interest in CAM. In one study, out of 330 people, 76% were using some kinds of herbal medicine for 48 medical conditions (9). In addition, the same study showed that people believe that herbal medicine is safe, although 27% of them developed side effects. Their main sources of knowledge about herbals were family and friends (9).

Although the UAE has many centers that specialize in alternative medicine, there is insufficient data regarding the efficacy of certain types of CAM. Nonetheless, people still spend money on such therapies. Moreover, CAM can be beneficial, but it can be associated with adverse side effects. Hence, the study aim was to assess the knowledge, attitudes, and practice of people living in Abu Dhabi regarding the use of CAM.

Methods

This was a cross-sectional descriptive study conducted among people living in the Abu Dhabi region from 2016–2017. The study targeted both UAE nationals and non-nationals who attended seven clinics in the Abu Dhabi region, which were Al Bateen, Rowdha, Zaafrana, Maqtaa, Mohammed bin Zayed, Khalifa A., and Bani Yas health care centers. Data were collected by using a simple stratified sampling. Using the sample size calculator, 384 individuals were required to achieve a 95% confidence interval and 5% margin error, so the final sample size was 405. The inclusion criteria were any person >18 years old and ability to speak Arabic or English. Any patients with mental disabilities or who were illiterate were excluded.

Data were collected by using a designed structured questionnaire consisting of four parts. The first part included socio-demographic data, including age, nationality, religion, marital status, education, employment, and presence of chronic diseases. The second part contained 23 questions about knowledge. People who scored 16–23 were considered to have good knowledge about CAM, whereas scores from 8–15 and from 0–7 were considered to have fair and poor knowledge, respectively. The third part included eight questions about attitudes. Scores of 6–8, 3–5, and 0–2 reflected positive, neutral, and negative attitudes, respectively. The fourth part contained questions regarding the most common practices, whether they used CAM as a first-line treatment and if they discussed CAM with their primary care physicians.

This study was approved by the national ethics committee of the Emirate of Abu Dhabi. Two versions of the questionnaire, in Arabic and English, were provided for the participants who met the criteria. The participants were given a brief explanation regarding the purpose of the study and provided written consent. Confidentiality was assured before participation.

Data were presented and analyzed by using the latest version of the Statistical Package for Social Sciences program. A chi-square test was used to test the correlations

between variables. A Likert scale was used to evaluate the attitude of participants to CAM. P values < 0.05 were considered as indicative of statistical significance with a confidence interval of 95%.

Results

Socio-demographic characteristics of the participants in the study

In total, 405 questionnaires were collected. As shown in Table 1, most of the participants were females (72.7%), locals (75.2%), aged between 18–44 (86.7%), married (58.9%), educated at a university and/or above (62.3%), employed (58.1%), and Muslims (92.9%). Chronic disease was reported to be present in 37% of the respondents.

Table 1: Socio-Demographic Characteristics of the Study Sample (n = 405)

Characteristic	No.	(%)
Gender n= 403		
- Male	110	(27.3)
- Female	293	(72.7)
Age (years) n= 390		
- 18–44	338	(86.7)
- 45–65	42	(10.8)
- >65	10	(2.6)
Nationality n= 403		
- Local	303	(75.2)
- Non-local	100	(24.8)
Religion n= 396		
- Muslims	368	(92.9)
- Christian/Catholic	21	(5.3)
- Others	7	(1.8)
Marital status n= 377		
- Single	134	(35.5)
- Married	222	(58.9)
- Divorced	21	(5.6)
Educational level n= 401		
- Primary school and less	26	(6.5)
- Secondary school	125	(31.2)
- University and above	250	(62.3)
Employment status n= 403		
- Student	73	(18.1)
- Employed	234	(58.1)
- Self-employed	11	(2.7)
- Unemployed	85	(21.1)
Have chronic disease n= 405		
- Yes	150	(37)
- No	255	(63)

Knowledge of CAM

A total of 28.4% of the participants had good knowledge, 68.6% had fair knowledge, and 3% had poor knowledge. The percentages of people who recognize the following practices as part of CAM were as follows: 68.6% herbs, 55.8% honey, 53.8% massage, 50% acupuncture, 41.5% yoga, 36.8% prayers, 36.3% cauterization, and 27.4% dietary supplements. The percentages of respondents who correctly identified the benefits of Hijama (cupping therapy) were 75.1% (reduces pain), 51.6% (promotes relaxation), 25.5% (boosts skin), and only 6.4% (helps treat flu symptoms).

The following sources of knowledge on CAM were reported: 61.2% from friends, 42.7% from the internet, 35.6% from the media, 35.5% from personal experience, 12.1% from herbalists, and 6.7% from health care providers.

Factors that affected the knowledge level among the respondents

As shown in Table 2, we found that 31.2% of the respondents who were highly educated (university and above) had good knowledge about CAM compared with only 26.9% of those who only had primary school education. This result was statistically significant ($P = 0.044$). There were no statistically significant associations between knowledge and sex, age, marital status, nationality, religion, employment, and presence of chronic diseases.

Table 2: Factors that Affected the Knowledge Level Among the Study Population (n = 405)

Characteristic	Good No. (%)	Fair No. (%)	Poor No. (%)	P-value
Sex				0.127
- Male	24 (21.8)	84 (76.4)	2 (1.8)	
- Female	91 (31.1)	193 (65.9)	9 (3.1)	
Age (years)				0.160
- 18–44	95 (28.1)	235 (69.5)	8 (2.4)	
- 45–65	16 (38.1)	26 (61.9)	0 (0)	
- >65	1 (10)	8 (80.0)	1 (10)	
Nationality				0.0785
- Local	87 (28.7)	206 (68.0)	10 (3.3)	
- Non-local	28 (28)	70 (70.0)	2 (2.0)	
Religion				0.848
- Muslims	105 (28.5)	252 (68.5)	11 (3.0)	
- Christian/Catholic	5 (23.8)	15 (71.4)	1 (4.8)	
- Others	1 (14.3)	6 (85.7)	0 (0)	
Marital status				0.896
- Single	36 (26.9)	94 (70.1)	4 (3.0)	
- Married	65 (29.3)	150 (67.6)	7 (3.2)	
- Divorced	7 (33.3)	14 (66.7)	0 (0)	
Educational level				0.044
- Primary school and less	7 (26.9)	19 (73.1)	0 (0)	
- Secondary school	28 (22.4)	89 (71.2)	8 (6.4)	
- University and above	78 (31.2)	168 (67.2)	4 (1.6)	
Employment status				0.148
- Student	24 (32.9)	46 (63)	3 (4.1)	
- Employed	65 (27.8)	160 (68.4)	9 (3.8)	
- Self-employed	0 (0)	11 (100)	0 (0)	
- Unemployed	26 (30.6)	59 (69.4)	0 (0)	
Has chronic disease				0.681
- Yes	43 (28.7)	104 (69.3)	3 (2)	
- No	27 (12.9)	174 (82.9)	9 (4.2)	

Sources of knowledge about CAM

As shown in Table 3, there was a statistically significant association between the internet as a source of CAM information and sex and education. Females tended to use the internet as the source of knowledge more than males ($P = 0.013$). Higher educational level was associated with greater use of the internet as a source of knowledge ($P = 0.002$). Non-UAE nationals tended to obtain their CAM information from health care providers more than did UAE nationals ($P = 0.02$).

Table 3: Sources of Knowledge about CAM

Socio-demographic	Friends No. (%)	P- value	Personal experience No. (%)	P- value	Internet No. (%)	P- value	Herbalist No. (%)	P- value	Health care No. (%)	P- value
Sex		0.623		0.821		0.013		0.114		0.104
- Male	65 (59.1)		40 (36.4)		36 (32.7)		18 (16.4)		11 (10)	
- Female	181 (61.8)		103 (35.2)		136 (46.4)		31 (10.6)		16 (5.5)	
Age (years)		0.121		0.068		0.43		0.845		0.618
- 18–44	207 (61.2)		114 (33.7)		141 (41.7)		42 (12.4)		23 (6.8)	
- 45–65	27 (64.3)		21 (50)		21 (50)		4 (9.5)		2 (4.8)	
- >65	3 (30)		2 (20)		3 (30)		1 (10)		0 (0)	
Nationality		0.153		0.401		0.286		0.446		0.047
- Local	191 (63)		111 (36.6)		124 (40.9)		39 (12.9)		16 (5.3)	
- Non-local	55 (55)		32 (32)		47 (47)		10 (10)		11 (11)	
Religion		0.086		0.477		0.895		0.215		0.06
- Muslims	229 (62.2)		133 (36.1)		156 (42.4)		47 (12.8)		23 (6.2)	
- Christian/Catholic	9 (42.9)		7 (33.3)		10 (47.6)		0 (0)		2 (9.5)	
- Others	6 (85.7)		1 (14.3)		3 (42.9)		1 (14.3)		2 (28.6)	
Marital status		0.906		0.219		0.825		0.05		0.278
- Single	82 (61.2)		38 (28.4)		55 (41)		9 (6.7)		8 (6)	
- Married	141 (63.5)		83 (37.4)		96 (43.2)		34 (15.3)		19 (8.6)	
- Divorced/widowed	13 (63.5)		7 (33.3)		10 (47.6)		2 (9.5)		0 (0)	
Educational level		0.221		0.921		0.02		0.656		0.702
- Primary school	18 (69.2)		10 (38.5)		7 (26.9)		2 (7.7)		1 (3.8)	
- Secondary school	69 (55.2)		43 (34.4)		45 (36)		14 (11.2)		10 (8)	
- University and above	158 (63.2)		89 (35.6)		120 (48)		33 (13.2)		16 (6.4)	

Based on the information in Table 4, there was a statistically significant correlation between chronic disease and health care professionals as the source of CAM information ($P = 0.039$). Back pain and hypertensive patients obtained knowledge from personal experience ($P = 0.001$ and 0.041 , respectively). On the other hand, the respondents with musculoskeletal problems and skin problems reported herbalists as their source of knowledge ($P = 0.037$ and 0.000 , respectively).

Respondents' attitudes toward CAM

Most of the respondents had a neutral attitude toward CAM (68.1%). Only 7.7% of the respondents had a positive attitude, and 24.2% had a negative attitude toward CAM. The attitude that CAM improves immunity and general health was held by 72% of the population, and 84.7% thought falsely that CAM was always safe and had no side effects. Only 24% believed that CAM might have a bad interaction when combined with conventional medicine, and 14.8% agreed that CAM was not always cheaper than conventional medicine.

Factors that affected the attitudes among the study population

Knowledge has an effect on attitudes, as shown in Table 5. Among those who had a positive attitude toward CAM, 17% had good knowledge compared with none (0%) who had poor knowledge ($P = 0.000$). There were no significant associations between sex, age, nationality, religion, marital status, employment, having a chronic disease, and the attitude of the respondents toward CAM.

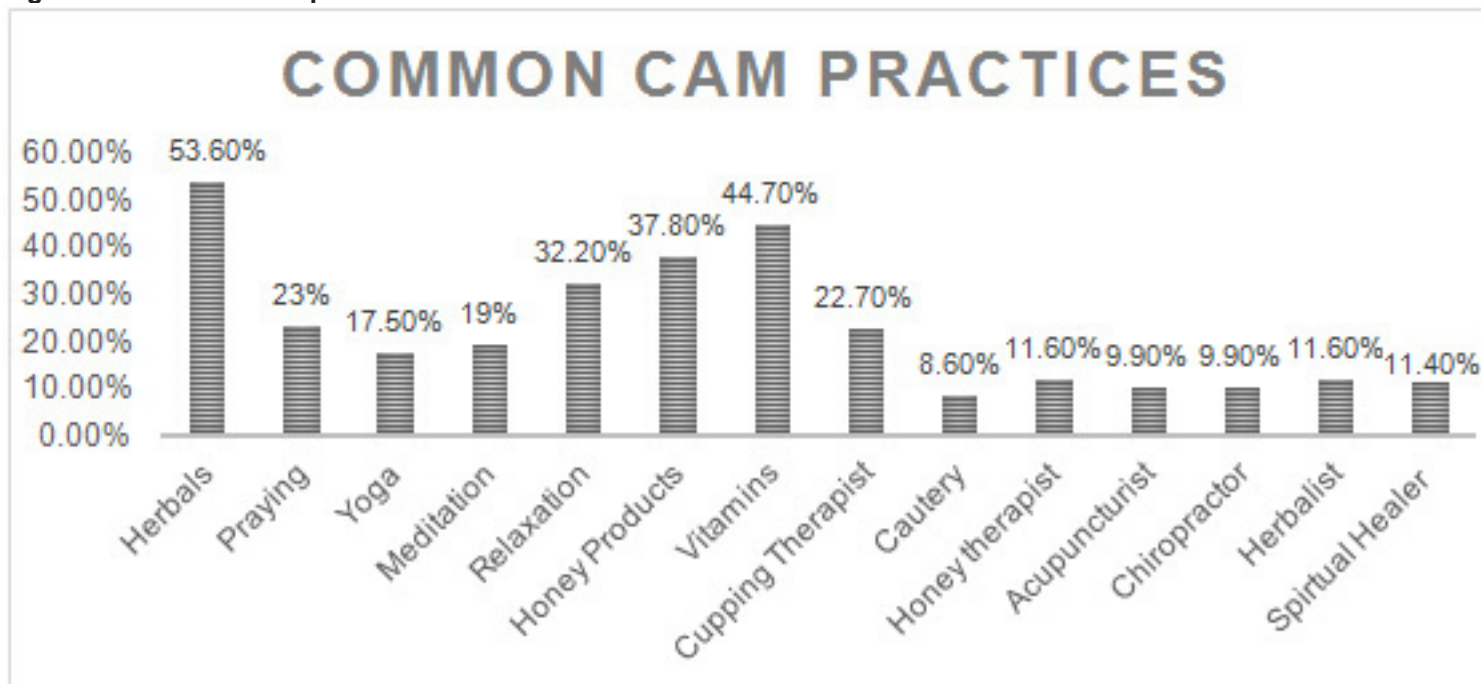
Table 5: Factors that Affected the Attitude among the Study Population (n = 405)

Characteristic	Positive No. (%)	Neutral No. (%)	Negative No. (%)	P-value
Sex				0.162
- Male	4 (12.9)	77 (28)	29 (29.9)	
- Female	27 (87.1)	198 (72)	68 (70.1)	
Age (years)				0.058
- 18–44	23 (74.2)	231 (87.2)	84 (89.4)	
- 45–65	8 (25.8)	27 (10.2)	7 (7.40)	
- >65	0 (0)	7 (2.6)	3 (3.2)	
Nationality				0.571
- Local	21 (67.7)	209 (76.3)	73 (74.5)	
- Non-local	10 (32.3)	65 (23.7)	25 (25.5)	
Religion				0.558
- Muslims	29 (96.7)	254 (93.7)	85 (89.5)	
- Christian/Catholic	1 (3.3)	13 (4.8)	7 (7.4)	
- Others	0 (0)	4 (1.5)	3 (3.2)	
Marital status				0.307
- Single	8 (26.7)	94 (37)	32 (34.4)	
- Married	22 (73.3)	143 (56.3)	57 (61.3)	
- Divorced	0 (0)	17 (6.7)	4 (4.3)	
Educational level				0.233
- Primary school and less	4 (12.9)	14 (5.1)	8 (8.3)	
- Secondary school	6 (19.4)	86 (31.4)	33 (34.4)	
- University and above	21 (67.7)	174 (63.5)	55 (57.3)	
Employment status				0.134
- Student	2 (6.5)	49 (17.8)	22 (22.7)	
- Employed	19 (61.3)	156 (56.7)	59 (60.8)	
- Self-employed	0 (0)	10 (3.6)	1 (1)	
- Unemployed	10 (32.3)	60 (21.8)	15 (15.5)	
Has chronic disease				0.619
- Yes	14 (9.3)	100 (66.7)	36 (24.2)	
- No	17 (6.7)	176 (69.0)	62 (24.3)	
Knowledge				0.000
- Good	20 (17.4)	70 (60.9)	25 (21.7)	
- Fair	11 (4)	199 (71.6)	68 (24.5)	
- Poor	0 (0)	7 (58.3)	5 (41.7)	

Practice of CAM

Approximately 95% of the study population reported using CAM practices. Figure 1 shows that use of herbals was the most common alternative medicinal treatment in CAM (53.6%), followed by dietary supplements (44.7%), honey products (37.8%), relaxation (32.3%), praying (23%), Hijama (22.7%), and meditation (19%).

Figure 1: CAM common practices



CAM was never discussed with their health care providers, by 77.8% of the respondents, but 80% recommended that people should start discussing the use of CAM with their physicians, and 58.8% showed interest in using CAM as a first-line treatment.

Factors that affected the practice of CAM

As presented in Table 6, the results showed that 57% of university graduates recommended CAM as a first-line treatment compared with 6.3% of respondents with only a primary school education or less ($P = 0.014$). There was also a strong association between using CAM as a first-line treatment by people who had chronic disease; 66% of the respondents with chronic disease recommended CAM as a first-line treatment compared with 34.01% who had no chronic illness ($P = 0.036$).

Discussion

To our knowledge, this is the first study in the UAE about knowledge, attitudes, and practice of CAM by residents living in Abu Dhabi. We have similar studies that were conducted in Saudi Arabia and Bangladesh, the results of which can be compared with those of the present study. In this study, there were 27.2% males and 72.7% females. This sex distribution differs from those in the Saudi Arabia and Bangladesh studies in which the percentages of each sex were almost evenly distributed(10,11).

Knowledge related to CAM

In our study, almost 28.4%, 68.6%, and 3% of the respondents had good, fair and poor knowledge, respectively.

The results showed that higher education was associated with better knowledge. This finding was similar to what we found in the study done in Bangladesh(10); however, this finding was contrary to that in the Saudi Arabia study, in which CAM use was common among people with lower education levels(11). These results could be explained by the fact that highly educated people have more access to written materials and evidence-based medicine and are more likely to ask their physician about concerns. We presumed that there would be an association between the level of knowledge and age; however, we did not find a significant

association. The presumption that older generations know more about alternative medicine can be justified by the fact that before the revolution of medicines and hospitals, people used the available resources; for example, herbals as a treatment, whereas presently there are health care services that provide the needed care, so older people are no longer dependent on alternative medicine. We also expected that UAE nationals would have more knowledge about alternative medicine than would non-nationals, but our study did not show that. Our sample included mostly people inside Abu Dhabi island, but if we included more clinics from outside Abu Dhabi island, the results might have been different. The Bangladesh study results are similar to our results in terms of age and nationality in association with knowledge(10), but they are different from those of the Saudi Arabia study which showed that nationals and older people knew more about CAM than did non-nationals and younger populations(11), with similar results regarding age and knowledge reported by Miller (1997)(12).

The sources of CAM knowledge varied in our study. Highly educated people tended to get their knowledge from the internet. We could have assumed that was because of the easy accessibility to evidence-based medicine through the internet. Interestingly, patients with chronic diseases tended to get their knowledge about CAM from health care providers. However, health care providers now seem to know

Table 6: Factors that Affect the Practice of CAM

Factors	Use of CAM as first-line treatment No. (%)	P-value
Sex		0.469
- Male	62 (26.2)	
- Female	175 (73.8)	
Age (years)		0.492
- 18–44	197 (87.6)	
- 45–65	21 (9.3)	
- >65	7 (3.1)	
Nationality		0.452
- Local	175 (74.2)	
- Non-local	61 (25.8)	
Religion		0.177
- Muslims	218 (94.4)	
- Christian/Catholic	8 (3.5)	
- Others	5 (2.2)	
Marital status		0.099
- Single	70 (32.1)	
- Married	133 (61)	
- Divorced	15 (6.9)	
Educational level		0.014
- Primary school and less	15 (6.3)	
- Secondary school	87 (36.7)	
- University and above	135 (57)	
Has chronic disease		0.036
- Yes	97 (66.0)	
- No	50 (34.01)	
Knowledge		0.441
- Good	67 (28.2)	
- Fair	166 (69.7)	
- Poor	5 (2.1)	

more about approved alternative medicines and, apparently, have started to offer them to their patients. The respondents with musculoskeletal and skin disorders reported that they obtained their knowledge from herbalists. This finding could be because of the widespread knowledge about the herbs used by our ancestors to treat skin and joint disorders and the fact that such practices are still continuing for these disorders.

Attitudes toward CAM

Our data showed that more than two-thirds of the respondents had a neutral attitude toward CAM and a quarter had a positive attitude. Only 7.7% had a negative attitude. Neither the Saudi Arabia nor Bangladesh study classified the overall attitudes of their participants (10,11). In the present study, more than two-thirds of the

respondents believed that all CAM treatments are cheaper than conventional medicinal treatments, with a similar percentage believing incorrectly that CAM is always safe. These percentages are somehow similar to those of the Bangladesh study although their numbers were lower (10).

Although the costs of CAM methods were not explored in our study, we know that some CAM practices are more expensive. People believe that CAM is always cost effective and lower cost. In terms of safety, many people believe that because CAM remedies are natural and do not contain chemicals, they will be safe. However, "natural" does not always mean safe since some natural products can be harmful.

Practice of CAM

The percentage of respondents who used CAM was almost 95% in the present study. This percentage is similar to that of the study conducted in Bangladesh (97%), but use of CAM in Saudi Arabia was slightly lower (85%). We included prophet medicine, herbals, and dietary supplements in CAM practices, which might explain the high percentage of CAM use in our study. The most common practice of CAM in this study was the use of herbals, followed by the use of vitamins, honey products, relaxation, praying, cupping, and meditation. These findings were similar to those of the Saudi Arabia study in which the most common practices were the use of herbs, prayer, honey, and Hijama(11). It seems that we share the same practices because Saudi Arabian culture is similar to our own in term of habits and religious background. On the other hand, the most common practices in Bangladesh included the use of herbs, oil massage, and Holy water(10).

In the present study, 77.8% did not discuss CAM use with their primary care physicians, a finding that was significantly different from that in the study in Saudi Arabia in which the percentage was lower (50%) (11). Al Faris et al. reported that 7.7% of people would not discuss CAM with their physicians and 37.7% would discuss CAM use with their physicians if they asked (12). People with chronic diseases recommended using CAM as a first-line treatment, which could have been because they felt overwhelmed by having to take multiple medications and wanting to cut down on the number they are using.

Conclusion

The majority of our sample had fair knowledge about CAM, with one-third having good knowledge. The respondents with higher educational levels had better knowledge. Sources of CAM knowledge differed based on certain population characteristics and factors. The respondents with higher educational levels more often used the internet as a source of knowledge, whereas those with chronic diseases obtained their knowledge most often from health care providers.

Most of the respondents had a neutral attitude toward CAM. More than two-thirds believed that CAM is always cheaper than conventional medicine, with a similar percentage believing that CAM is always safe.

Most of the respondents did not discuss CAM use with their physician, but almost 80% of them recommended starting discussing CAM with their doctors. People with better knowledge and those with chronic diseases recommended using CAM as a first-line treatment.

As primary care physicians, we recommend improving the knowledge of patients about CAM by establishing educational programs about the benefits and safety of CAM methods. We also recommend that physicians start to teach patients about evidence-based CAM practices. More studies need to be conducted in different regions of the UAE to assess the knowledge, attitudes, and practice of CAM.

Competing interests

The authors declare that they have no competing interests.

Acknowledgments

The authors would like to thank all of the participants and the physicians in Abu Dhabi AHS clinics for their contributions.

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