Complementary and alternative medicine practice and perceptions of Saudi subjects in Western region of Saudi Arabia

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Abstract

Background: Complementary and alternative medicine (CAM) offers a different approach to conventional medicine. CAM is very popular in many countries.

Objectives: To study the magnitude of use, and determinants and awareness of CAM therapy use among the population in Western region of Saudi Arabia.

Method: This was a cross sectional study; a non-probability convenient sampling method was used to select 1073 subjects through online Google survey. Data were collected using interview questionnaire, which provided information on the sociodemographic characteristics of the subjects, as well as questions on the practices and awareness of CAM therapies. The GAD-7 test to assess anxiety state was also used.

Results: Almost half of the study population used CAM (51.6%), particularly those who live in the villages of Makkah city. CAM therapies were used by almost half of all patients with chronic diseases particularly those with gastrointestinal disorders and anxiety. Most common CAM method were Honey, Herbs, Ruqayyah and black seeds; while Acupuncture was the least method used. CAM methods were mainly used if needed, and main source of information about its use, was from the family. Almost half of the users were satisfied with the results of using it; however, their attitude about CAM in general was neutral.

Conclusion: Use of CAM is a common health practice among the Saudi population. The majority of the participants had equivocal awareness about its effects. More health education programs by specialized health care authorities on the use and benefits of CAM are needed. Doctor-patient communication regarding CAM use is important. Increasing awareness of Saudi population about instructions and restrictions when using CAM is greatly needed.

Keywords: CAM, Saudi Arabia, anxiety, Jeddah city, Gastro intestinal disorders.

Introduction

Complementary and alternative medicine (CAM) is the term for medical products and practices that are not part of standard medical care. Many different areas make up the practice of complementary and alternative medicine (CAM) (1-3). Females were more likely than men to use CAM (4-6). In Saudi Arabia, CAM therapy was more frequently used among those living in Riyadh region, housewives, employees, and students, and among those people with low income (4). Spiritual healers, herbalists, providers of honeybee products, and Hijama (cupping) therapists were providers most commonly visited. More than half were satisfied with outcome of last visit mostly for honeybee products. Self-reciting of Quran on water or oil represents most of all CAM users then represents recited oil or water by a friend or relative. Fathers and mothers used recited oil on their children. Most of those who used CAM were with poor health (4-11). CAM users agreed that CAM methods are safer and more effective than traditional Western medicine, respectively, and most CAM users planned to continue to use CAM in the future. Less than half CAM users did not consult a doctor before using CAM. Most patients were willing to use CAM with modern medicine in future (5). The most frequently stated information sources regarding CAM use were family, friends, and religious guidance (12 -18). In a US study, a quarter of patients revealed that their physicians did not know about their CAM use and patients used alternative therapy for chronic disorders (19 -30). The aim of the present study was to investigate the magnitude of CAM practices among Saudi subjects, and to study its determinants and the awareness of the Saudi population about it.

Subject and Method

The design of the study was a cross sectional one where a convenient nonprobability sampling method was used. The minimal sample size according to alpha 5%, and beta 20%, and 5 degrees of freedom is 227 (31). The study was conducted online, where 1037 subjects were enrolled in the study. A questionnaire was delivered for all subjects; it provided information on personal and socio-demographic characteristics, health status, as well as information on CAM practice, and perception about it. Also GAD7 questionnaire on anxiety disorder was asked of each participant (32). Scores of 0, 1, 2 and 3 are given for experiencing symptoms ‘not at all’, for ‘several days’, for ‘more than half the days’ and for ‘nearly every day’, respectively. The scores are then totaled and presented from 0 to 21. Scores of 5, 10 and 15 represent cut-off points for mild, moderate and severe anxiety, respectively. Statistical analysis: data was analyzed using SPSS version 23. Chi square test of significance was used. Level of significance was 0.05.

Availability of the data: the row data is available at the research center of ISNC and all results of the data are included in the paper.

Results

The present study included 1037 subjects (40% males, and 60 % females). Almost half of the subjects used CAM (51.6%). Table 1 displays the relationships between use of CAM and sociodemographic characteristics of the studied subjects. A higher proportion of females were found among subjects who used CAM compared to those who did not (64.1%, and 56.4% respectively) compared to males (35.9%, and 43.6% respectively). This difference was significant where $p < 0.011$. Use of CAM was significantly more common among Non-Saudi subjects compared to Saudi ones ($p <0.05$). Residents of the city of Makkah used CAM significantly more than residents in the other cities of Makkah region e.g. Jeddah, Al-Laith and Al-Taif ($p< 0.01$). However, there were no significant differences in the use of CAM between residents of Makkah region and other regions of the Kingdom ($p < 0.826$). Subjects who lived in villages used CAM significantly more than those who lived in urban areas ($p<0.041$). Educational level, the monthly income, and ownership of the home were irrelevant to the use of CAM among studied subjects ($p > 0.05$).

Table 2 displays the distribution of the studied subjects according to use of CAM and history of chronic disorders. Greater proportions of those who used CAM, had history of gastro-intestinal disorders for 5 years or less (16.4%), or for more than five years or more (11.2%) , compared to those who didn’t use CAM (14.1%, and 4.1% respectively). These differences were statistically significant ($P < 0.000$). Greater proportions of those who used CAM, had a history of moderate anxiety score (17.6%), compared to those who didn’t use CAM (11.0%). This difference was statistically significant ($P < 0.024$). History of other chronic disorders e.g. hypertension, DM, respiratory or cardiovascular disorders, endocrine disorders, immunological disorders, or cancer were irrelevant to use of CAM ($p >0.05$). Table 3 shows the relationships between gender and type of CAM used by the subjects who used CAM. The most common substances used by the subjects as CAM were Honey (82.8%), herbs (75.5%), Ruqayyah (73.1%) and Black seeds (69.0%). Use of Hijama was more common among males compared to females (43..3% and 26.8 respectively), and $p<0.000$. Use of black seeds and Herbs for less than 5 years was significantly more common in females compared to males; on the other hand its use 5 years or more was more common in males compared to females. These differences were statistically significant compared where p values were <0.05. The use of the other methods of CAM were similar in both males and females. Table 4 shows the relationships between age categories and type of CAM used by the subjects who used CAM. Use of Hijama, Oil Recited, Ruqayyah, and Zamzam water were significantly more used by subjects older than 40 years old, compared to those younger than 40 years of age. The other methods were similarly used by both the younger and older than 40 years of age.

Table 5 reveals the distribution of the subjects who used CAM according to gender and practicing CAM. The majority of the subjects used CAM only if needed (78.5%),

and no significant differences were found between males and females (p >0.05). About one third of the subjects (36.6%) visited sheikhs for CAM, and this was similar in males and females (p >0.5). Almost half of the subjects did not visit the doctors for CAM (49.6%); no significant differences were found between males and females (p> 0.05). The majority of the subjects felt more efficient after use of CAM (79.4%), and this was significantly higher in males compared to females (p <0.01). A greater proportion of male subjects significantly reported that they improved after CAM compared to females (p < 0.006). Although the proportions of those who reported that the symptoms improved after doctor consultation (53.3%), a large proportion of the subjects using CAM reported that their symptoms improved after practicing CAM (46.7%). No significant differences were found in both genders (p > 0.05). About one-third of the subjects got their information about using CAM from their families (33.7%). A greater proportion of females got their information about using CAM from their families compared to males; on the other hand a greater proportion of males got their information from doctors, compared to females. These differences were statistically significant where p < 0.002. Table 6 shows the distribution of the studied subjects according to use of CAM and their perception and awareness of the benefits and advantages of CAM for the individuals and the community. No significant differences were found between those who used CAM and those who did not, regarding their perception and awareness about CAM and its advantages to the individuals and community. The greatest proportion for each question of this CAM awareness questionnaire was for the neutral response.

Table 1: Distribution of Studied Subjects by use of CAM & sociodemographic characteristics

Variable	Categories	Practicing CAM				Total		X^2 (p- value)
		No		Yes				
		N	%	N	%	N	%	
Gender	Male	219	43.6%	192	35.9%	411	39.9%	6.481 (0.011)
	Female	283	56.4%	343	64.1%	626	60.4%	
Age in years	< 40 years	444	88.4%	465	86.9%	909	87.7%	0.56 (0.45)
	≥ 40 years	58	11.6%	70	13.1%	128	12.3%	
Nationality	Saudi	364	72.5%	358	66.9%	722	69.6%	3.832 (0.050)
	Non-Saudi	138	27.5%	177	33.1%	315	30.4%	
	Yes	446	88.8%	473	88.4%	919	88.6%	
Cities of Makkah Region	Jeddah	390	87.4%	415	87.7%	805	87.6%	11.326 (0.010)
	Makkah	42	9.4%	56	11.8%	98	10.7%	
	Al-leith	4	0.9%	0	0%	4	0.4%	
	Al-taif	10	2.2%	2	0.4%	12	1.3%	
Educational Level	Illiterate	3	0.6%	0	0%	3	0.3%	3.218 (0.200)
	School	147	29.3%	156	29.2%	303	29.2%	
	College or Higher	352	70.1%	379	70.8%	731	70.5%	
Living Area	City	491	97.8%	511	95.5%	1002	96.6%	4.182 (0.041)
	Village	11	2.2%	24	4.5%	35	3.4%	
House Ownership	Owned	259	51.6%	299	55.9%	558	53.8%	1.921 (0.166)
	Rented	243	48.4%	236	44.1%	479	46.2%	
Salary	Less than 10,000	307	61.2%	322	60.2%	629	60.7%	0.102 (0.750)
	More than 10,000	195	38.8%	213	39.8%	408	39.3%	

Table 2: Distribution of studied subjects by use of CAM and history of chronic disorders

Variable	Categories	Practicing CAM				Total		X^2 (p- value)
		No		Yes		N	%	
		N	%	N	%			
Hypertension	No	466	92.8%	489	91.4%	955	92.1%	1.823[a] (0.402)
	Yes, ≤ 5years	21	4.2%	32	6.0%	53	5.1%	
	Yes, > 5 years	32	6.0%	14	2.6%	29	2.8%	
Diabetes Mellitus	No	463	92.2%	495	92.5%	958	92.4%	0 .337[a] (0.845)
	Yes, ≤ 5years	21	4.2%	24	4.5%	45	4.3%	
	Yes, > 5 years	18	3.6%	16	3.0%	34	3.3%	
Endocrine disorders	No	482	96.0%	503	94.0%	985	95.0%	2.169a (0.338)
	Yes, ≤ 5years	10	2.0%	16	3.0%	26	2.5%	
	Yes, > 5 years	10	2.0%	16	3.0%	26	2.5%	
Heart disease	No	486	96.8%	520	97.2%	1006	97.0%	0.928a (0.629)
	Yes, ≤ 5years	12	2.4%	9	1.7%	21	2.0%	
	Yes, > 5 years	4	0.8%	6	1.1%	10	1.0%	
Respiratory disorders	No	463	92.2%	491	91.8%	954	92.0%	452 (0.798)
	Yes, ≤ 5years	14	2.8%	13	2.4%	27	2.6%	
	Yes, > 5 years	25	5.0%	31	5.8%	56	5.4%	
Gastrointestinal and colorectal disorders	No	409	81.5%	387	72.3%	796	76.8%	19.005 (0.000)
	Yes, ≤ 5years	71.	14.1%	88	16.4%	159	15.3%	
	Yes, > 5 years	22.	4.4%	60	11.2%	82.	7.9%	
Liver	No	500	99.6%	530	99.1%	1030	99.3%	2.026 (0.363)
	Yes, ≤ 5years	2	0.4%	3	0.6%	5	0.5%	
	Yes, > 5 years	0	0.0%	2	0.4%	2	0.2%	
Immunological disorders	No	488	97.2%	520	97.2%	1008	97.2%	0.018a (0.991)
	Yes, ≤ 5years	9	1.8%	10	1.9%	19	1.8%	
	Yes, > 5 years	5	1.0%	5	0.9%	10	1.0%	
Cancer	No	501	99.8%	531	99.3%	1032	99.5%	1.824a (0.402)
	Yes, ≤ 5years	1	0.2%	3	0.6%	4	0.4%	
	Yes, > 5 years	0	0.0%	1	0.2%	1	0.1%	
Skin disease	No	472	94.0%	487	91.0%	959	92.5%	3.986a (0.136)
	Yes, ≤ 5years	16	3.2%	21	3.9%	37	3.6%	
	Yes, > 5 years	14	2.8%	27	5.0%	41	4.0%	
Categories of anxiety score	Minimal	201	42.7%	210	40.5%	411	41.6%	9.474 (0.024)
	Mild	169	35.9%	176	34.0%	345	34.9%	
	Moderate	52	11.0%	91	17.6%	143	14.5%	
	Severe	49	10.4%	41	7.9%	90	9.1%	

Table 3: Distribution of the subjects who used CAM by gender and type of CAM

Variable	Categories	Gender				Total		x^2 (p- value)
		Female		Male		N	%	
		N	%	N	%			
Zamzam Water	No	154	44.9%	83	43.2%	237	4.3%	0.148 (0.928)
	Yes, ≤ 5years	93	27.1%	53	27.6%	146	7.3%	
	Yes, >5 years	96	28.0%	56	29.2%	152	28.4%	
Ruqayyah (Quran)	No	86	25.1%	58	30.2%	144	26.9%	2.166 (0.539)
	Yes, ≤ 5years	105	30.6%	54	8.1%	159	29.7%	
	Yes, >5 years	152	44.3%	80	41.7%	232	43.4%	
Acupuncture	No	318	92.7%	175	91.1%	493	92.1%	0.633 (0.729)
	Yes, ≤ 5years	15	4.4%	9	4.7%	24	4.5%	
	Yes, >5 years	10	2.9%	8	4.2%	18	3.4%	
Herbs	No	79	23.0%	52	27.1%	131	24.5%	9.104 (0.011)
	Yes, ≤ 5years	158	46.1%	63	32.8%	221	41.3%	
	Yes, >5 years	106	30.9%	77	40.1%	183	34.2%	
Honey	No	57	16.6%	35	18.2%	92	17.2%	5.410 (0.067)
	Yes, ≤ 5years	136	39.7%	57	29.7%	193	36.1%	
	Yes, >5 years	150	43.7%	100	52.1%	250	46.7%	
Oil Recited	No	169	49.3%	106	55.2%	275	51.4%	1.916 (0.384)
	Yes, ≤ 5years	72	21.0%	38	19.8%	110	20.6%	
	Yes, >5 years	102	29.7%	48	25%	150	28.0%	
Hijama	No	251	73.2%	109	56.8%	360	67.3%	15.638 (0.000)
	Yes, ≤ 5years	47	13.7%	47	24.5%	94	17.6%	
	Yes, >5 years	45	13.1%	36	18.8%	81	15.1%	
Blackseed	No	107	31.2%	59	30.7%	166	31.0%	6.747 (0.034)
	Yes, ≤ 5years	120	35.0%	49	25.5%	169	31.6%	
	Yes, >5 years	116	33.8%	84	43.8%	200	37.4%	

Table 4: Distribution of people who use CAM by type of CAM and age groups

Variable	Categories	Age groups				Total		X^2 (p- value)
		40 years or less		Over 40 years		N	%	
		N	%	N	%			
Zamzam Water	No	213	45.8%	24	34.3%	237	44.3%	9.980 (0.007)
	Yes, ≤ 5years	131	28.2%	15	21.4%	146	27.3%	
	Yes, >5 years	121	26.0%	31	44.3%	152	28.4%	
Ruqayyah (Quran)	No	137	29.5%	7	10.0%	144	26.9%	13.858 (0.003)
	Yes, ≤ 5years	137	29.5%	21	30.0%	158	29.5%	
	Yes, >5 years	190	40.9%	42	60.0%	232	43.4%	
Acupuncture	No	427	91.8%	66	94.3%	493	92.1%	0.578 (0.749)
	Yes, ≤ 5years	22	4.7%	2	2.9%	24	4.5%	
	Yes, >5 years	16	3.4%	2	2.9%	18	3.4%	
Herbs	No	117	25.2%	14	20.0%	131	24.5%	2.036 (0.361)
	Yes, ≤ 5years	194	41.7%	27	38.6%	221	41.3%	
	Yes, >5 years	154	33.1%	29	41.4%	183	34.2%	
Honey	No	79	17.0%	13	18.6%	92	17.2%	1.293 (0.524)
	Yes, ≤ 5years	172	37.0%	21	30.0%	193	36.1%	
	Yes, >5 years	214	46.0%	36	51.4%	250	46.7%	
Oil Recited	No	248	53.3%	27	38.6%	275	51.4%	**12.475 (0.002)**
	Yes, ≤ 5years	99	21.3%	11	15.7%	110	20.6%	
	Yes, >5 years	118	25.4%	32	45.7%	150	28.0%	
Hijama	No	326	70.1%	34	48.6%	360	67.3%	13.924 (0.001)
	Yes, ≤ 5years	77	16.6%	17	24.3%	94	17.6%	
	Yes, >5 years	62	13.3%	19	27.1%	81	15.1%	

Table 5: Distribution of subjects who used CAM according to gender and practicing and outcome of using CAM

Variable	Categories	Gender		Total	X^2 (p- value)
		Female	Male	N %	
		N %	N %		
Frequency of Alternative Medicine Usage	If needed	281 8.1%	161 79.3%	442 78.5%	2.872 (0.412)
	Weekly	28 7.8%	18 8.9%	46 8.2%	
	Monthly	17 4.7%	4 2.0%	21 3.7%	
	Daily	34 9.4%	20 .9%	54 9.6%	
Sheikh Visitation	No	228 63.3%	129 63.5%	357 63.4%	0.003 (0.960)
	Yes	132 36.7%	74 36.5%	206 36. 6%	
Doctor Consultation	No	188 52.2%	91 44.8%	279 49.6%	2.839 (0.092)
	Yes	172 47.8%	11255.2%	284 50.4%	
Efficacy after using Alternative Medicine	No effect	84 23.3%	26 12.8%	110 19.5%	9.234 (0.010)
	Worse	4 1.1%	2 1.0%	6 1.1%	
	Better	272 75.6%	175 86.%	447 79.4%	
Symptoms improvement After Practicing Alternative Medicine	Highly	85 23.6%	54 26.6%	139 24.7%	14.491 (0.006)
	Mild	89 24.7%	64 31.5%	153 27.2%	
	No	146 40.6%	52 25.6%	198 35..2%	
	Got severe	25 6.9%	24 11.8%	49 8.7%	
	Got very severe	15 4.2%	9 4.4%	24 4.3%	
Symptom Improvement with	Doctor consultation	187 51.9%	113 55.7%	300 53.3%	0.722 (0.396)
	using CAM	173 48.1%	90 44.3%	263 46.7%	
Source of Information	Family	234 37.4%	115 28.0%	349 33.7%	16.593 (0.002)
	Friends	69 11.0%	60 14.6%	129 12.4%	
	Social media	140 22.4%	79 19.2%	219 21.1%	
	Doctor	121 19.3%	108 26.3%	229 22.1%	
	Others	62 9.9%	49 11.9%	111 10.7%	

Table 6: Distribution of the studied subjects according to their perception and awareness of benefits and advantages of CAM for the individuals and the community

Variables	Categories	Practicing CAM		Total		X^2 (p- value)
		No		Yes		
		N	%	N	%	N %
CAM Contribution in Community Health	Strongly agree	110	17.6%	79	19.2%	189 18.2%	5.511 (0.239)
	Agree	100	16.0%	53	12.9%	153 14.8%	
	Neutral	268	42.8%	191	46.5%	459 44.3%	
	Disagree	89	14.2%	44	10.7%	133 12.8%	
	Strongly disagree	59	9.4%	44	10.7%	103 9.9%	
CAM Improves People's lives	Strongly agree	97	15.5%	62	15.1%	159 15.3%	1.870 (0.760)
	Agree	102	16.3%	78	19.0%	180 17.4%	
	Neutral	254	40.6%	163	39.7%	417 40.2%	
	Disagree	96	15.3%	65	15.8%	161 15.5%	
	Strongly disagree	77	12.3%	43	10.5%	120 11.6%	
CAM Contribution in Society Perceptions	Strongly agree	89	14.2%	64	15.6%	153 14.8%	4.396 (0.355)
	Agree	102	16.3%	67	16.3%	169 16.3%	
	Neutral	234	37.4%	169	41.1%	403 38.9%	
	Disagree	112	17.9%	55	13.4%	167 16.1%	
	Strongly disagree	89	14.2%	56	13.6%	145 14.0%	
Practicing CAM is healthier than following treatment plan from any trustable sources	Strongly agree	93	14.9%	60	14.6%	153 14.8%	7.940 (0.094)
	Agree	85	13.6%	47	11.4%	132 12.7%	
	Neutral	234	37.4%	188	45.7%	422 40.7%	
	Disagree	111	17.7%	60	14.6%	171 16.5%	
	Strongly disagree	103	16.5%	56	13.6%	159 15.3%	
CAM Contribution in Feeling Healthy	Strongly agree	114	18.2%	73	17.8%	187 18.0%	1.985 (0.739)
	Agree	123	19.6%	83	20.2%	206 19.9%	
	Neutral	226	36.1%	162	39.4%	388 37.4%	
	Disagree	84	13.4%	47	11.4%	131 12.6%	
	Strongly disagree	79	12.6%	46	11.2%	125 12.1%	

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Table 6: Distribution of the studied subjects according to their perception and awareness of benefits and advantages of CAM for the individuals and the community (continued)

CAM Contribution in Society Affiliation	Strongly agree	99 15.8%	65 15.8%	164 15.8%	0.899 (0.925)
	Agree	92 14.7%	61 14.8%	153 14.8%	
	Neutral	244 39.0%	170 41.4%	414 39.9%	
	Disagree	99 15.8%	60 14.6%	147 14.2%	
	Strongly disagree	92 14.7%	55 13.4%	147 14.2%	
CAM Decreasing The Medical Consultation	Strongly agree	100 16.0%	64 15.6%	164 15.8%	3.676 (0.452)
	Agree	81 12.9%	57 13.9%	138 13.3%	
	Neutral	225 35.9%	167 40.6%	392 37.8%	
	Disagree	85 13.6%	48 11.7%	133 12.8%	
	Strongly disagree	135 21.6%	75 18.2%	210 20.3%	

Discussion

The present study included 1037 subjects (40% males, and 60 % females). Almost half of the subjects used CAM (51.6%). A higher proportion of females used CAM compared to males.

The majority of national survey studies in both UK (1) and US report that women are more likely than men to use CAM. However, some national studies have not found significant gender differences (33) and a small number of studies reported men more likely to use CAM (2). The present difference between females and males may be attributed to the reduced accessibility that women in Saudi Arabia have to the health care system, in addition to their long stay at home where many herbs are available as well as the influence of the media. In the present study almost 50% of the subjects with chronic disorders like hypertension, diabetes mellitus, Heart diseases, skin diseases and particularly GIT and anxiety disorders used CAM therapies. This is in line with reported previous studies (9, 16, 19, 21). In this study, the most common substances used as CAM were Honey, herbs, Ruqayyah and Black seeds. Use of Hijama was commoner among males than female. Use of black seeds and Herbs for <5 years was significantly more in females than males; on the other hand its use ≥5 years was commoner in males than females. Use of Hijama, Oil Recited, Ruqayyah, and Zamzam water were significantly more used by subjects > 40 years than < 40 years of age. The other methods were similarly used by both the younger and older than 40 years of age. In Qassim province, Spiritual healers, herbalists, providers of honeybee products, and hijama (cupping) therapists were providers most commonly visited. More than 50% were satisfied with the outcome (33). In this study, the majority of subjects used CAM only if needed and no significant differences were found between males and females. About one third of subjects visited sheikhs for CAM, and this was similar in males and females. This is in line with previous study results in Saudi Arabia where more than 50% of studied subjects were satisfied with outcome of their last visit to CAM providers. The most prominent types of CAM were of a religious nature, such as supplication, Quran recitation, consuming Zamzam water, and water upon which Quran was read (28). In another study they reported that CMA types used were self-reciting of Quran on water or oil, and recited oil or water by a friend or relative and fathers and mothers who used recited oil on their children (4). In the present study, the majority of the subjects felt more improved after use of CAM, and this was significantly higher in males compared to females. Although the proportions of those who reported that the symptoms improved after a doctor consultation, a large proportion of the subjects using CAM reported that their symptoms improved after practicing CAM. This is in line with previous studies (4, 33). In the present study, most CAM users believed that CAM was safe and saw no harm in using CAM for their skin problems. CMA types used were self-reciting of Quran on water or oil, and recited oil or water by a friend or relative and fathers and mothers used recited oil on their children (4). This is in line with a previous study where they observed that CAM users reported that CAM methods are safer and more effective than traditional Western medicine, and most CAM users planned to continue to use CAM in future (5). In this study, about one-third of the subjects got their information about using CAM from their families. A greater proportion of females got their information about using CAM from their families compared to males; on the other hand a greater

proportion of males got their information from doctors, compared to females. This is in line with previous studies (12, 16). In a previous study in Saudi Arabia, they found a high prevalence and increased public interest in CAM use in the Riyadh region; there was a positive attitude towards CAM, yet most participants were reluctant to share and discuss CAM information with their physicians (34). Similarly, in the present study there was no significant differences between those who used CAM and those who did not, regarding their perception and awareness about CAM and its advantages to individuals and community. The greatest proportion for each question of this CAM awareness questionnaire was for the neutral response.

Limitations

There are some limitations to this study: as this study is cross-sectional, the causal relationship remains unknown. It is also a nonprobability convenient sample, and its generalization to the population may be defective; however, it is an exploratory study, which threw some light on the use of CAM and awareness of the population of its benefits and adverse effects.

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Conclusion

Use of CAM is a common health practice among the Saudi population, particularly those residing in Makkah city. The majority of the participants have equivocal awareness about its effects. Increasing awareness of Saudi population about instructions and restrictions when using CAM is greatly needed. More health education programs by specialized health care authorities on the use and benefits of CAM are needed to increase the awareness of the population on the use of different CAM therapy methods. Doctor-patient communication regarding CAM use is of paramount importance.

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