

Knowledge, Attitude and Practice of Primary Health Care Physicians toward Complementary and Alternative Medicine in Jazan Province.

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ABSTRACT

Background: Complementary and alternative medicine is defined as a group of health care systems, practices, and products that are not part of conventional medicine. It was found that the use of CAM is increasing among different populations. Physicians are the personnel responsible for providing medical treatment and medical care for patients, so it is important to have knowledge about this strategy that people widely use.

Objectives: The aim of this study was to assess knowledge, attitudes, and utilization of complementary and alternative medicine among PHC physicians in Jazan Region.

Methods: This is cross sectional study which was conducted among 367 physicians of PHC centers in Jazan region. The study used a self-administrated questionnaire which involved four parts to investigate demographics of physicians, knowledge, attitude and practice.

Results: The mean score of knowledge was 45.25 ± 15.5 , while that of attitude was 15.89 ± 4.25 and CAM was used by 37.6% of physicians. The most familiar modalities of CAM were dietary supplements (27.8%), massage (22.1%) and relaxation (17.7%). Qualification was the factor that influenced both knowledge (P-value=0.04) and attitude (P-value=0.001).

Conclusion and Recommendation: There was low knowledge and practice of CAM among physicians, however there was a positive attitude toward it. The most common modalities of CAM used were dietary supplements, massage and relaxation. The findings of this study is in accordance with that reported previously from different areas from Saudi Arabia which reflect the need for establishing training programs and encourage physicians to attend them to increase their knowledge about CAM as this strategy is widely increased among public.

Keywords: Physician, Knowledge, Practices, Complementary, Alternative Medicine.

1. INTRODUCTION

Complementary and alternative medicine (CAM) refers to "a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine" as defined by the National Centre for Complementary and Alternative Medicine (NCCAM) in the USA (1). The World Health Organization (WHO) estimated that 36% of adults use CAM and it rose to 60% when praying was involved (2). It was found that 11.8% of children and 40% of adults in US in 2008 had used CAM therapies (3), while in 2008 in Saudi Arabia, it was found that there were 68% using CAM, and the number of patients seeking for CAM is increasing (4). A close percent was reported from Australia, where 69% of population was found to use one or more forms of CAM (5). Another study from Saudi Arabia (6), Showed that more than

70% of population in Riyadh were practicing activities related to prophetic medicine. Complementary and alternative medicine curriculum is widely incorporated as an elective or mandatory course in many universities around the world to teach students about CAM practice (7,8). Health care workers may become the source of information for their patients about CAM, there is a wide variation in the level of knowledge, attitude and practice of physicians about CAM (9).

A study from Riyadh demonstrated that 88.9% of physicians knew about CAM (10). A study from Trinidad and Tobago showed that the knowledge about CAM was low among health care providers (11). Also, other studies from industrialized and developing countries reported that knowledge was poor among health care providers (12,13). The attitude toward CAM is influenced by several factors including ready availability of CAM services, whereas there is lack in access to health care services (14) and dissatisfaction with conventional care (15). A study conducted on medical students in Saudi Arabia showed that 74% had positive attitude toward CAM to be integrated to provide better health care outcome (16). A previous study from Riyadh showed that there was a positive attitude among physicians regarding CAM and more than half used it for themselves and their families (17). Another study from Riyadh (10) showed that 80% of physicians were ready to talk about CAM with their patients. However, according to Canadian and US data base search physicians showed more negative attitude toward CAM than other health care providers (18). Regarding practice of CAM, it was found that pharmacy and medical students used herbal medicine the most (19,20)

2. METHODS

2.1 Study design: This study was a cross-sectional study design.

2.2 Study area: Jazan province covers an area of 11,671 km² and has a population of 1,365,110 at the 2010 census. The region has the highest population density in the Kingdom.

2.3 Study setting and target population:

There are 443 primary health care physicians serving 172 PHC centers in Jazan Region distributed within 14 governorates.).

2.4 Sample size and sampling technique:

All health care providers within the selected PHC center and satisfied with the inclusion criteria were enrolled in the study. The sample size for the research includes all PHC physicians who agreed to participate at the time of conducting the field study, after the exclusion of 20 PHC physicians who participate in the pilot study.

2.5 Data collection Tool: Based on relevant literature, a self-administered questionnaire was constructed by the researcher. It was revised and validated by two experts of Family Medicine in Jazan College of Medicine. The questionnaire is supposed to four parts, as follows:

1. Socio demographic and personal characteristics including age, gender, nationality, highest qualification, years of experience in PHC practice, and attending any workshops or training courses on CAM.
2. Two groups of questions to assess residents' knowledge about CAM. The first group of questions covers 16 modalities of CAM therapy while the second covers 9 CAM medicinal herbs.
3. eleven statements to identify residents' attitude toward CAM. Possible responses are "Agreed"; "Uncertain"; or "Disagree".
4. Three Questions to explore residents' practices related to CAM. Responses were either "Yes"; or "No".

2.6 Scoring system and statistical analysis: Regarding knowledge part, the correct answer was assigned for 1, whereas the incorrect one was assigned for 0, the total of attained knowledge scores was summed up for each physician and the percentage of the total was evaluated, those with knowledge grade above median were considered having sufficient knowledge, while those with knowledge score less than median were considered having insufficient knowledge. The scores for attitude were as follows; 2 for positive, 1 for in-between and 0 for negative, the total scores were calculated for each physician and who's with score above the median were considered with positive attitude and the opposite was considered for negative attitude. Regarding practice questions, 1 was given for yes response and 0 for no response, the total scores were calculated, and good practice was considered when the score was above the median, whereas poor practice was considered when the score was below the median. Data was manually collected in an excel sheet, then analyzed using the Statistical Package for the Social

Sciences (SPSS version 22). Descriptive statistics including frequency and percentage were calculated for qualitative variables, whereas mean and standard deviation were used for quantitative variables. The appropriate tests of significance; chi Square was applied and Pvalues less than 0.05 was considered as statistically significant

2.7 Ethical consideration: Approval was obtained from Research Ethic Committee of Jazan Health Affairs. The researcher fulfilled all the necessary official approvals by the pertinent ethical committee. Potential participants were clearly and briefly informed about the objectives of this study. A covering page has been added to inform primary care physicians about the study and ask them to agree to participate. Participants were assured regarding the full confidentiality of any data collected.

3. RESULT:

The present study included 367 physicians, most of them 222 (60.5%) were males, whereas there were 145 (39.5%) females. 258(70.3%) were nonSaudi, while 109 (29.7%) were Saudi. The range of physicians age was 25- 63 years old with a mean of 36.46 ± 8.07 years and the experience duration of them ranged from 1 month to 30 years with a mean of 6.67 ± 5.37 years. Most physicians 261 (71.1%) had MBBS, followed by those who had master 72(19.6%), doctorate and diploma 18(4.9%) and 15(4.1%) respectively, whereas only 1(0.3%) had fellowship. Regarding knowledge, most physicians 320(87.2%) reported that they didn't attend any lectures, workshops or received training in the use of CAM therapy, while 47(12.8%) only reported attending such lectures.

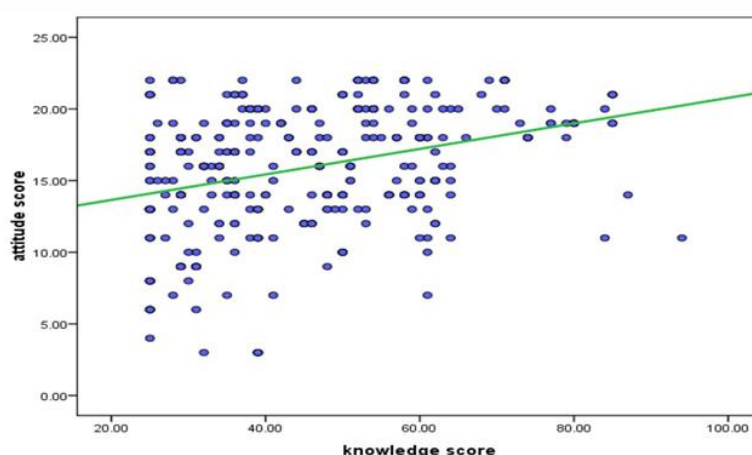
Table 1 summarizes the CAM therapies familiar to physicians. The most unfamiliar modalities to physicians were aromatherapy 286(77.9%) and ozone 285(77.7%) while herbal medicine 121(33%) and dietary supplements 118(32.2%) were limited, other modalities were understood by physicians, but they felt uncomfortable about counseling them to patients, the most common including cauterization 76(20.7%), cupping 72(19.6%) and herbal medicine 68(18.5%), the most common modalities understood by physicians and they felt comfortable to counseling patients were dietary supplements 102(27.8%) and massage 81(22.1%)

Table1: knowledge about CAM modalities among Primary health care physicians in Jazan Province								
CAM therapy	Unfamiliar		Limited		Feel uncomfortable		Feel comfortable	
	N	(%)	N	(%)	N	(%)	N	(%)
Acupuncture	192	52.3	101	27.5	33	9.0	33	9.0
Chiropractic	259	70.6	71	19.3	29	7.9	8	2.2
Massage	134	36.5	106	28.9	46	12.5	81	22.1
Homeopathy	273	74.4	53	14.4	22	6.0	19	5.2
Herbal medicine	134	36.5	121	33.0	68	18.5	44	12.0
Dietary supplements	95	25.9	118	32.2	52	14.2	102	27.8
Cupping	145	39.5	105	28.6	72	19.6	45	12.3
Cauterization	166	45.2	95	25.9	76	20.7	30	8.2
Aromatherapy	286	77.9	43	11.7	28	7.6	10	2.7
Energy therapy	254	69.2	70	19.1	30	8.2	11	3.0
Reflexology	261	71.1	10	2.7	23	6.3	13	3.5
Relaxation	143	39.0	117	31.9	42	11.4	65	17.7

Apitherapy	187	51.0	106	28.9	33	9.0	41	11.2
Hypnotherapy	237	64.6	99	27.0	21	5.7	10	2.7
Ozone	285	77.7	54	14.7	19	5.2	9	2.5

The range of knowledge score was 25-94 and the mean of score estimated was 45.25 ± 15.57 . Age and duration of experience didn't influence the knowledge of physicians (P-value= 0.7& r = -0.02, Pvalue= 0.9 & r = -0.002 respectively). Regarding attitude, the range of attitude score was 3-22 with a mean $\pm$ SD of 15.89 ± 4.25 . Age and duration of experience significantly influenced attitude score (P-value= 0.000& r=0.2, P-value= 0.002& r =0.16 respectively) as well as knowledge score (P-value= 0.000 & r=0.32). The correlation between Knowledge and attitude is shown in Fig-1.

Figure 1: correlation between knowledge & attitude score



In comparing the mean scores of knowledge and attitude according to different variables; there were no significant differences in the mean score of knowledge regarding sex (P-value= 0.1) and nationality (P-value= 0.3), while mean score of knowledge significantly differed with qualification of physicians (P-value= 0.04), the same was found regarding attitude, where sex and nationality didn't influence the attitude mean score (P-value= 0.7, 0.1 respectively), whereas qualification significantly affected attitude mean score (P-value= 0.001).

Regarding practice of physicians, there were 138(37.6%) only reported using CAM for themselves or their families and the most common type used was herbs 55(39.8%), followed by cauterization 50(36.2%). Most physicians 326(88.8%) didn't discuss CAM with their patients and only 3(0.8%) referred patients CAM practitioner.

Table (2): Physician 's practice of CAM among Primary health care physicians in Jazan Province

Practice items	Response	No.	%
Have you ever used CAM for yourself or your family?	Yes	138	37.6
	No	229	62.4
Do you usually discuss CAM with your patients?	Yes	41	11.2
	No	326	88.8
Have you ever referred to a patient to CAM practitioner?	Yes	3	0.8
	No	364	97.2

4. DISCUSSION:

In the present study most participants, 87.2%, mentioned that they didn't attend any lecture or training in the use of CAM therapy, only 12.8% did. A previous study from Riyadh reported that only 0.08% of participants attended 1 or more CAM lectures or received training about CAM (17), this means that physicians in Jazan are more caring about training and lectures about CAM than in Riyadh region. The opposite was reported from Japan, where the number of physicians who attend training or lectures about CAM was increased significantly within 6 years from 29% to 37% (21). Another study from Riyadh (10), showed that 88.9% of health care professionals had some knowledge about CAM and there were 87.5% of physicians who had knowledge and only 29.08% had their knowledge from health educational institutions. A study from Kuwait demonstrated that there was poor knowledge among 78.4% of general practitioners (22). In the current study, the most common modality of cam that was familiar to physicians and they felt comfortable about counseling it to patients were dietary supplements (27.8%), massage (22.1%). These modalities were also more common in Riyadh as it was reported in a study from Riyadh that dietary supplements and massage (34.9%, and 34.4% respectively) were the most common modalities of CAM used (17). Although the current study and the previous one (17) were conducted in different regions, the CAM modalities are the same to be used.

In the present study, there was a positive attitude of physicians toward CAM, where the mean score of attitudes was 15.89, the same was reported by a study from Riyadh region, where there was a positive attitude among physicians toward CAM (17). A study from Kuwait showed that the attitude of general practitioners was supportive for CAM (22). In this study, there was a positive significant correlation between knowledge and attitude (P -value=0.000, r =0.32) and both knowledge and attitude significantly influenced by qualification, however the highest knowledge was found among physicians with doctorate (5), whereas the highest attitude was found among those with diploma (19). This can be explained by the fact that physicians with doctorates have read more than physicians with other qualifications, while the physicians who had diploma wanted to explore the CAM effect and use it more than those with doctorates who prefer medical and conventional therapy. Also, attitude was significantly influenced by age and duration of experience, while these factors didn't influence knowledge. A study from Riyadh showed that similar results to ours, where age, sex, nationality and experience didn't influence knowledge, whereas qualification significantly affected the knowledge of participants (P -value=0.004) and those with doctorate and bachelor 's degree were the most knowledgeable (10). In contrast to our results, it was reported that years of experience of general practitioners significantly affected the attitude (22). In our study the practice of physicians was low, where there were only 37.6% of physicians in this study used CAM before for themselves or their families and the most common used modalities were herbs (39.8%) and cauterization (36.2%). Also, 11.2% discussed CAM with their patients and 0.8% only referred patients to CAM practitioners, whereas 97.2% denied that. Higher percentage 51.7% of physicians were reported to use CAM for themselves or their families in a study from Riyadh (17). Like our findings, the high percentage of physicians 85.5% didn't refer any patient to CAM practitioners, whereas higher percent than ours (59.1%) discussed CAM with their patients (17). Other studies reported a different percentage about referral, in US, the referral rate was 44% (23). while it was 93% in Australia (24). A higher percentage of physicians, 80% discussed CAM with their patients as reported by a previous study from Riyadh region (10)

5. CONCLUSION

There was low knowledge and practice of CAM among physicians, however there was a positive attitude toward it. The most common modalities of CAM used were dietary supplements, massage and relaxation.

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