Traditional Healers in Riyadh Region: Reasons and Health Problems for Seeking Their Advice. A Household Survey

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Abstract

Objectives: The objectives were to study sociodemographic characteristics of complementary and alternative medicine (CAM) visitors, rate of their visits, health problems, and reasons for the visits.

Design: This was a cross-sectional study.

Setting: This study was conducted in Riyadh city and its suburbs.

Subjects: The sample size was calculated to be 462 families, selected according to the World Health Organization multistage random cluster sampling technique and was divided into 40 clusters. The 40 clusters were distributed proportionally according to the size of population in the catchment area.

Intervention and outcome measures: A well-structured questionnaire that contains the items that fulfill the research objectives was used to collect the data by trained research assistants.

Results: The study includes 1408 individuals; 61% were female. About 42% of the participants consulted traditional healers (TH) sometime before and 24% within the past 12 months. There were more visits to TH in elderly people (≥ 60 years), females, married, divorced, or widows and illiterate people. Common types of traditional healing included reciting the Holy Quran (62.5%), herb practitioners (43.2%), cautery (12.4%), and cupping (4.4%). Cautery was used more in suburban areas than in the city. The nationalities of the TH were Saudis (86%), Sudanese (3%), Yemenis (1%), Indians (1%), and others (9%). The common medical problems for seeking TH help were abdominal pain, flatulence, low back pain, sadness, depression, and headache. The common reasons for visiting TH were belief of success of CAM (51%), preference of natural materials (29%), and nonresponse to medical treatment (25%). Factors independently associated with consultation of TH were dissatisfaction with physician diagnosis (odds ratio [OR] = 122), failure of medical treatment (OR = 80), success of TH (OR = 79), long waiting time for physicians (OR = 20) and knowledge that some herbs are harmful (OR = 1.4).

Conclusions: In this study, about half of the participants have visited TH. Abdominal pain was the most common presenting health problem. CAM is a reality and it deserves more investigation and appropriate legislation and control.

Introduction

COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) is an umbrella term for numerous diagnostic and therapeutic methods that lie outside orthodox medicine.¹ It includes all practices and ideas self-defined by their users as preventing or treating illnesses or promoting health and well-being. It views health and disease in the context of the human

totality of body, mind, and spirit.² Boundaries within CAM and between CAM and orthodox medicine are not always easy to define.³

In recent years, CAM has gained a lot of popularity and has been the subject of many studies.^{4–7} “CAM” is the term used in developed countries while the term “traditional medicine” is used in developing countries. Up to 80% of the African population relies on traditional medicine (TM), and

Chinese Traditional Medicine accounts for 40% of health care in China.⁶ In the United States, visits to CAM practitioners increased by more than 47% from 1990 to 1997.⁴

The reasons for people resorting to CAM vary widely and include dissatisfaction with Western medicine,⁸ recommendation by a general practitioner, congruency with users values and beliefs toward health and life,⁸⁻¹⁰ and because it helps relieve a condition or injury.⁵

The efficacy and safety of many forms of CAM are under-researched as compared to orthodox medicine.¹ There is evidence for efficacy and safety of certain forms of CAM for certain medical problems: For example, St. John's wort for major depression,¹¹ acupuncture for labor pain management¹² and chronic low back pain,¹³ garlic for treatment of hypercholesterolemia¹⁴ and so forth are evidence-based remedies. Sporadic case reports from Saudi Arabia showed serious complications following treatment given by traditional healers such as hypovolemic shock, grade II coma, blindness, renal impairment, and death.¹⁵ A study from Pakistan reported that 34% of patients with breast cancer were delayed in seeking medical advice due to the use of CAM.¹⁶

It is also known that providers of CAM often lack (significant) medical training and usually are not physicians who have been to a medical school,¹ and it is not surprising that their limited medical knowledge may put patients at risk. In Saudi Arabia (SA), a recent study has shown that most of 120 native healers interviewed were illiterate, 45% used herbs in treatment, 28% used cautery, and 25% were reciting Quran.*

In this* and other studies,^{15,17-22} visits to traditional healers (TH) (CAM practitioners) were not addressed fully and if so, they were not community based.^{5,17-22}

The current study, which is part of a large research project addressing the use of alternative medicine (AM) in Saudi Arabia,⁷ aims to fulfill the following objectives: (1) To identify the sociodemographic characteristics of individuals visiting traditional healers, (2) to estimate the rate of visits to traditional healers, (3) to identify the health problems treated by traditional healers and factors affecting them, and (4) to find the reasons for consulting traditional healers.

Materials and Methods

Study setting and participants

The study was conducted in the Riyadh Region that extends from Zolfi in the North to Wadi Al Dawasser in the South, and from Dawadmi in the West to the Khorais in the East with an estimated population of 3,726,523 persons.²³ The target population consists of 1,902,087 men and 1,824,436 women. Of 275 primary health care (PHC) centers in the region, 57 are located in Riyadh city. Each PHC center has a defined catchment area with a complete registry of its residents.²⁴

Sample size

The sampling unit used in the study was the family, which was defined as a group of individuals living together in a

household. The family usually included the father, mother, offspring, and sometimes grandparents, aunts, and uncles.

On the basis of the findings of two previous studies,^{15,22} that the prevalence rate of utilization of TM was 20%, and accepting a 5% degree of precision at the 95% level of significance, we estimated that we need to enroll 246 families.

TABLE 1. SOCIODEMOGRAPHIC CHARACTERISTICS AND VISITS TO TRADITIONAL HEALERS, RIYADH REGION, SAUDI ARABIA

Characteristic	Number (out of total 1408)	Visit to traditional healers N = 597 (42.4%)	p-value
Age (years)			
<30	560	195 (34.8)	0.0001
30-39	344	161 (46.8)	
40-49	248	117 (47.2)	
50-59	129	66 (51.2)	
≥60	109	52 (47.7)	
Sex			
Male	550	206 (37.5)	0.003
Female	858	391 (45.6)	
Marital status			
Single	371	121 (32.6)	0.00002
Married	897	441 (49.2)	
Widowed	70	38 (54.3)	
Divorced	26	13 (50.0)	
Family size			
<5	264	116 (43.9)	0.024
5-9	740	312 (42.2)	
10-14	324	146 (45.1)	
≥15	62	20 (32.3)	
Occupation			
Housewife	447	230 (51.5)	0.000006
Military	105	47 (44.8)	
Student	215	64 (29.8)	
Employee	194	90 (46.6)	
Merchant	103	40 (38.8)	
Retired	116	42 (36.2)	
Other	53	15 (28.3)	
Residence			
Villa	740	321 (43.4)	0.446
Apartment	215	82 (38.1)	
Floor in villa	197	93 (47.2)	
Traditional house	189	85 (45.0)	
Other	67	26 (38.8)	
Education			
Illiterate	286	133 (46.5)	0.008
Primary	247	103 (41.7)	
Intermediate	202	89 (44.1)	
Secondary	344	130 (37.8)	
Diploma	65	30 (46.2)	
University	264	97 (36.7)	
Ownership of house			
Owned	956	411 (43.0)	0.851
Rented	412	170 (41.3)	
Other	40	16 (40.0)	
Income			
High	131	56 (42.7)	0.214
Moderate	1027	447 (43.5)	
Low	229	87 (38.0)	
Setting			
Urban	1035	433 (41.8)	0.68
Suburban	373	164 (43.9)	
Total	1408	597 (42.4)	

*Al-Aska A, Al-Khwaiter SA, Al-Jualie AA, Mufti MH, Al-Omair A, Al-Baaj T. A report of the result of 120 native healers interviews. Personal communication (unpublished). A project sponsored by King AbdulAziz City for Science and Technology.

Using the World Health Organization (WHO) cluster sampling method²⁵ and a study design effect of 1.5, the sample size was recalculated to be $246 \times 1.5 = 369$ families. We assumed a response rate of 80% and accordingly the final sample size was estimated to be $369 \times 100/80 = 462$ families.

Sample selection

A multistage random cluster sampling technique was employed for the selection of the study population in this cross-sectional study. Selection was based on the WHO method for cluster sampling. The sample size (462 families) was divided into 40 clusters: 30 inside Riyadh city and 10 from the city suburbs. Each cluster was composed of 12 households. The clusters were distributed proportionally according to the size of the population in the catchment area for each center.

Questionnaire

A structured questionnaire was designed to fulfill the study objectives. It consisted of five sections: The first section was concerned with the personal and sociodemographic characteristics of the participants (e.g., age, sex, and education). The second section probed the AM use and its types. The third part inquired about the traditional healers' visits, reasons, and common health problems treated. The fourth section investigated the opinions of participants on AM and modern medicine. The fifth section was on AM use in the treatment of children. The third section of the questionnaire is the source of the data for this article.

The questionnaire design was the outcome of many steps including comprehensive literature review, and a brainstorming workshop. To refine the questionnaire, a pilot study was undertaken to test the reliability of the questionnaire, and was completed by 28 volunteers on two occasions, 2 weeks apart. Cronbach α coefficient of reliability ranged from 0.83 to 0.95 from the least to the most reliable questions.

Data collection

Data were collected during the period from 6.4.2003 to 22.6.2003 and collectors were selected from workers in PHC centers. Each data collection team consisted of 1 man and 2 women. Two (2) workshops were held to train data collectors in the form of small group discussions, role-play exercises, and feedback. Male study subjects were interviewed by male data collectors, and women were interviewed by female data collectors. The filled questionnaires were revised for completeness before leaving the household. A quality assurance

measure to check for accuracy was undertaken by field supervisors.

Statistical analysis

EPI-Info software (Centers for Disease Control and Prevention, Atlanta, GA) was used for data entry and preliminary analysis where data were presented as percentages. For the comparisons, the χ^2 test at 99% level of significance ($p=0.01$) was used. Data were analyzed by the SPSS program (SPSS Inc., Chicago, IL), and the multivariate logistic regression analysis was used to determine the independent factors associated with traditional healers' consultation, by comparing those who consulted traditional healers with those who did not; calculating the adjusted odds ratio (OR) and its 95% confidence intervals (CI), the level of significance in this study was set to be 0.01.

Results

The study sample amounted to 1408 persons; 550 were male (39.1%) and 858 were female (60.9%). About 42% of the study participants consulted traditional healers sometime before, and 23.9% had done so in the previous 12 months.

Visits to traditional healers were more frequent in suburban areas compared to inside Riyadh city, but the difference is not statistically significant. The elderly (≥ 60 years) consulted traditional healers more than younger persons (age 30–39 years; $p=0.0001$) did.

About half of the married, divorced, and widowed consulted a traditional healer, while only one third of singles did so. Illiterate persons consulted a traditional healer (46.5%) more than university graduates did (36.7%). Other factors that were not associated with traditional healers visits were the type of residence, ownership of a house, and income (Table 1).

As to the popularity of different types of traditional medicine (Table 2), 62.5% of the participants reached a Sheikh (Islamic religious man) for reciting the Holy Quran, 42.3% resorted to herb practitioners, 12.4% to cautery, and 4.4% to cupping. Only cautery was significantly more used in suburban areas than in the city ($p < 0.01$).

Participants older than 40 years old consulted traditional healers more than the young did for back pain (12.3% versus 5.3%) ($p < 0.01$).

The illiterate consulted traditional healers more than university graduates for abdominal pain (15.7% versus 11.6%), back pain (14% versus 5.2%), sadness and depression (9.1% versus 3.6%), and headache (11.9% versus 5.2%). However,

TABLE 2. PRACTICES OF TRADITIONAL HEALERS AND PARTICIPANTS RESIDENCE IN RIYADH REGION, SAUDI ARABIA

Type of practice	Riyadh city (out of total 433) (%)	Suburban Riyadh (out of total 164) (%)	Total (out of total 597)(%)	p-value
Sheikh for reciting Quran	267 (61.7)	106 (64.6)	373 (62.5)	0.5
Herb practitioner	200 (46.2)	58 (35.4)	258 (43.2)	0.2
Cautery	38 (8.8)	36 (22.0)	74 (12.4)	0.00001
Cupping	19 (4.4)	7 (4.3)	26 (4.4)	0.95
Sheikh to expel Jinna ^a	13 (3.0)	1 (0.6)	14 (2.3)	0.12
Bonesetter	10 (2.3)	2 (1.2)	12 (2.0)	0.4

^aJinni: perception of a metaphysical creature that has a superpower and can cause harm or benefit to humankind.

TABLE 3. PERCENT DISTRIBUTION OF HEALTH PROBLEMS AMONG PEOPLE WHO CONSULTED TRADITIONAL HEALERS AND SOME SOCIODEMOGRAPHIC CHARACTERISTICS, RIYADH REGION, SAUDI ARABIA

Characteristics	N	Abdominal pain	Gynecological problems	Back pain	Sadness/depression	Headache	Flu and influenza	Diabetes	Others
Age									
≤40	356	11.1	12.7*	5.3*	6.2	6.3	2.4	4.7	3.9
>40	235	13.3	5.7	12.3	8.6	8.6	0.7	3.2	6.2
Gender									
Male	206	7.6	–	4.5	4.2	4.7	1.6	5.6	4.0
Female	391	14.2	17.5	9.0	8.6	8.4	2.1	3.4	4.8
Residence									
Urban	433	26.6	24.9	18.0	16.4	15.2	5.1	10.2	9.7
Suburban	164	21.3	18.3	11.6	11.0	15.9	0.6	9.8	12.8
Educational level									
Illiterate	133	15.7	10.5	14.0*	9.1	11.9	1.0	2.1	6.6
Primary, secondary	322	10.2	10.7	5.7	6.2	5.9	1.5	4.3	3.9
University	127	11.6	10.6	5.2	3.6	5.2	3.6	6.1	4.0

* $p < 0.01$.

only the association between educational level and back pain was found to be statistically significant ($p < 0.01$) (Table 3).

Persons who advised the participants to consult traditional healers included mothers (38.2%), relatives other than siblings (32.3%), friends (27.1%), fathers (18.4%), and siblings (12.2%). More females were advised by their mothers (42.2%, versus 30.6% for males), while more males were advised by their fathers (32.5%) than females (11%).

One third of the participants who consulted traditional healers came to know their locations and names from friends (33.5%), relatives (32.8%), mothers (22.3%), or fathers (16.6%). About 17% of the participant had to travel to see a traditional healer.

The vast majority of traditional healers visited by the study participants were Saudis (85.8%), only 3% were Sudanese, 1.3% were Yemenis, and 1% were Indians. About 6% did not know the nationality of their healers.

The most common reasons for consulting traditional healers were success of AM (51%), preference for natural materials (29%), and nonresponse to medical treatment (25%) (Table 4).

Multivariate logistic regression analysis of the factors associated with consultation of traditional healers showed that the factors independently associated with consultation of traditional healers included dissatisfaction with physician's diagnosis (OR = 122.4, 95% CI = 13.3–1126.9), failure of

medical treatment (OR = 80.38, 95% CI = 14.6–102.8), success of traditional healers (OR = 79.5; 95% CI = 32.6–194.0), long waiting time to be seen by the physician (OR = 20.3, 95% CI = 3.8–108.5), and knowledge that some herbs are harmful (OR = 1.4, 95% CI = 1.1–1.8) (Table 5). The details of this comparison have been published elsewhere.⁷

When asked how to differentiate between good and bad healers, 40% stated that they could not make the difference; 21% mentioned psychologic satisfaction; 16% suggested good reputation; and 14% mentioned the good healing results. Twenty-seven (27) study participants (2%) reported the death of one of their relatives or friends due to AM use.

Discussion

With the increased popularity of AM, the number of its practitioners is increasing. Consultation of traditional healers was common among the participants (42%) in the current study. Earlier studies showed a similar finding as the consultation of AM practitioners in the United States increased by 47% between 1990 and 1997.⁴ Such a high prevalence must be of great concern since most if not all of the healers are not medically qualified* and therefore their practices may not be free of risk. In the present study, 2% of participants reported death as a result of resort to CAM. This finding is in agreement with other local reports.¹⁵ Since both studies did

TABLE 4. REASONS FOR CONSULTATION OF TRADITIONAL HEALERS AND RESIDENCE, RIYADH REGION, SAUDI ARABIA

Reason	Riyadh city 433 no. (%)	Suburban Riyadh 164 no. (%)	Total 597 no. (%)	p-value
Success of alternative medicine	232 (53.6)	72 (43.9)	304 (50.9)	0.035
Preference of natural materials	141 (32.6)	33 (20.1)	174 (29.1)	0.003
Nonresponse to medical treatment	110 (25.4)	39 (23.8)	149 (25.0)	0.68
Dissatisfaction with physician's diagnosis	88 (20.3)	22 (13.4)	110 (18.4)	0.052
Remote appointment for specialist or consultant	91 (21.0)	12 (7.3)	103 (17.3)	0.000008
Long waiting for consultation of physicians	40 (9.2)	3 (1.8)	43 (7.2)	0.002
Expensive drugs	20 (4.6)	10 (6.1)	30 (5.0)	0.46
Distant health facilities	18 (4.2)	9 (5.5)	27 (4.5)	0.49
Expensive fees of physicians	20 (4.6)	9 (5.5)	29 (4.8)	0.66

TABLE 5. MULTIVARIATE LOGISTIC REGRESSION ANALYSIS OF FACTORS ASSOCIATED WITH CONSULTATION OF TRADITIONAL HEALERS, RIYADH REGION, SAUDI ARABIA

<i>Factor</i>	<i>Odds ratio</i>	<i>Confidence interval</i>	<i>p-value</i>
Dissatisfaction of physician diagnosis	122.4	13.3–1126.9	0.000
Failure of medical treatment	80.38	14.6–102.8	0.0001
Success of alternative medicine practitioners	79.5	32.6–194.0	0.0001
Preference of natural materials	33.6	12.4–90.7	0.0001
Prolonged waiting for physician's appointment	20.3	3.8–108.5	0.0000
Marriage	1.71	1.2–2.4	0.002
Knowledge of harmful herbs	1.4	1.1–1.8	0.01

The comparison was done between those consulted the traditional healer and those who did not.

not compare the mortality rate with conventional practice, this finding could be attributed to chance. Also, use of CAM can delay seeking medical advice in some serious conditions, as reported earlier.¹⁶ The AM practices in SA are somewhat different from those of modern practitioners of CAM. Local practitioners do not have training institutes, and most acquire this profession from their parents or grandparents. Not all the practitioners of TM hold a license to practice from the Ministry of Health, which is making a lot of effort to control their practice. Limited types of CAM are licensed to be practiced in Saudi Arabia, and these include acupuncture, chiropractic, naturopathy, and *Tunia* (traditional Chinese treatment).[†] None of these CAM types have been used by the participant in the present study.

In agreement with the earlier findings of Adams et al.,²⁶ consultation with TH in the present study is more prevalent among the elderly than the young and is mostly among housewives, as also noted by others.^{27,28} It is possible that housewives find it easier to reach TH. They do not need time off work and they are looking after children who also tend to need more frequent consultations than healthy adults. These groups usually have a higher prevalence of medical problems.

There was an inverse relationship between educational level and the likelihood of visits to a TH. Educated individuals may have more resources and accessibility to health care services, lower prevalence of disease than illiterate patients, and in addition, they are more aware of hazards of using nonlicensed remedies. This disagrees with the findings of other studies^{29,30} in which visits to CAM practitioners were more prevalent among highly educated individuals. Also, the different types of AM practices in other countries may explain this finding. This difference in consultation rate between the different groups may be utilized in the arrangement of health education programs.

Patients usually reach traditional healers on advice from immediate family members or friends. The findings of the present study showed that women were advised by their mothers (42.2%) more than men (30.6%), and men were advised by their fathers (32.5%) more than women (11%). This reflects one aspect of Saudi culture, which is the close relationship between sons and their fathers and between mother and daughters.

Morbidity pattern among the participants varied widely, with predominance of abdominal pain or flatulence and back

pain. Particularly, participants older than 40 years consult TH more than those who are younger for back pain. This is hardly surprising, because back pain is more common in elderly people. However, the study was not compared with conventional medicine, so this may simply reflect the prevalence of these conditions in the different groups. In females, gynecological problems were most prevalent. The predominance of these and other health problems (Table 3) may suggest inadequate health education programs. The course and nature of these problems may not be explained well to the patients, who continue to look for an alternative cure in traditional medicine. Of course, the most important reasons for consulting TH were poor (inadequate) management by physicians as explained by dissatisfaction with physicians and failure of medical treatment, as is evident by highly statistically significant results. Further studies are needed to explore the treatment modalities for each complaint among TH to see how successful their efforts are in curing patient complaints.

Palinkas et al.³¹ reported that dissatisfaction with physicians and their failure in diagnosis were not a cause for consulting AM practitioners. This is not in line with our findings. There must be good reasons for the popularity of traditional medicine in Saudi society. The present study identified the following reasons: The success of AM, preference for natural materials rather than chemicals, failure of medical treatment, dissatisfaction with physicians' diagnosis, and long waiting time to get an appointment with physician; this confirms earlier findings.⁸ These are important factors in the health belief model that should be of great benefit when designing a health education campaign to explore people's ideas and expectations of the health service and also to address the misguided beliefs about both AM and modern medicine.

Conclusions

One of the important limitations of this study is that we have not compared the CAM visitors to conventional medicine followers. However, some conclusions can be drawn. There is no doubt that TH give a significant contribution to the health care system, but their practice deserves more investigation. It was shown that almost half (42%) of the study participants consulted traditional healers at least once in their life.

The most common ailments treated by TH included abdominal pain and flatulence, gynecological problems, and back pain. Parents were the main source of information

[†]Personal communication with Ministry of Health authorities.

about AM. There is need for legislation and control of practice of AM. Furthermore, liaison with TH is needed because many studies have shown that they like to cooperate with physicians and other health care workers^{2,32} and are also interested in seeking a collaborative approach with modern medicine.³³ However, their work quality should be monitored and controlled by the Ministry of Health. This may eventually lead to a more integrated and safer health care system.

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