KAP STUDY

Saudi women's complementary alternative medicine practice and attitudes in superficial injuries first aids

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Abstract

Objective: To detect Saudi women's complementary and alternative medicine (CAM) practice and attitudes in superficial injuries first aids.

Methods: A cross-sectional descriptive study included 500 women from Princess Nourah bint Abdul Rahman University, Riyadh, Saudi Arabia. Pre-designed questionnaire was used to collect their socio-demographic characteristics, complementary and alternative medicine practice and attitude in superficial injuries first aids.

Results: Most of the participants were young unmarried women coming from middle regions. Burn and superficial cuts represented the commonest superficial injuries. Honey and medical herbs; myrrh were the commonly used CAM. Most participants agreed that CAM is available. Half of participants believed that CAM is safe that could be used without medical consultation.

Conclusion: There is increased interest and positive attitudes toward CAM use among Saudi women, yet they are not aware about its interactions and side effects.

Keywords: Complementary, Alternative medicine, Honey, Medical herbs, Attitude, Safety, Efficacy, female, Saudi Arabia

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Introduction

Complementary and alternative medicine (CAM) is defined by the World Health Organization (WHO) as 'the health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being'.[1]

Eighty percent of Asian and African populations rely on CAM for their primary health-care needs. It might be based on their historical, societal norms or cultural traditions, rather than on scientific evidence.[2]

A superficial injury is an injury that affects skin only without affecting the underlying muscles or organs. It includes bruises, lacerations, cuts and abrasions. It heals in a short duration by primary healing provided infection does not occur.[3]

Due to the rise in wound care financial burden, complementary products are becoming popular to overcome this obstacle.[2] Moreover, Al-Daihan et al. (2013) studied the antibacterial activity of four medicinal plants that are used as herbal treatment by Saudi community. They found that Z. officinale and C. longa could facilitate rapid wound healing due to its antibacterial activity.[4]

Previous studies have investigated CAM use among Saudi population in managing their chronic health problems. Al-Faris et al (2008) concluded that failure of pharmacological therapy was the most important determinant of alternative medicine use.[5] In addition, Al-Rowais (2002) who studied the prevalence of the herbal medicine use among diabetics, concluded that 17% of the participants used herbal medicine.[6] However, this study aimed to determine the characteristics and attitudes of women using CAM in managing superficial injuries for themselves and their family members especially children. The collected data would guide the planning of effective strategies to raise CAM awareness among general population especially females; who are providing the majority of informal care to their families.

Subjects and Methods

Princess Nourah bint Abdulrahman's International Review Board approved this cross-sectional observational study (H-01-R-059). Research assistants met and interviewed women along selected areas within Princess Nourah bint Abdulrahman University (PNU) for women, Riyadh, Saudi Arabia at pre-determined time periods. To select meeting sites, all possible locations leading to recreational center in middle of the university were selected. At each site, interviews were conducted on two week days for three months. Primary inclusion criteria were the ability and

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willingness of females to participate. There were no specific exclusion criteria.

The minimal needed convenient sample, was taken from 65,000 Saudi female attending PNU,[7] was calculated using n4Studies programme; estimating a finite population proportion;[8] with the following assumptions: standard deviation (σ=1.96), level of significance 5% (α=0.05), level of precision (d=0.2), prevalence rate of CAM usage in previous study was about 30%.[9] The minimal needed sample size was 367 participants and it was increased to five hundred to increase the results' confidence.

The data was collected using a pre-designed paper-and-pencil questionnaire.[9,10]

Variables for assessing socio-demographic characteristics included age (in years), level of education (primary, high, college, postgraduate), major (medical versus non-medical), home residence (north, south, east, west, middle), social status (single, married, widow/divorced) and monthly family income. In addition to describing the study sample, these variables were used as covariates in multivariate comparison analyses.

The following data; sources of CAM information, pattern of topical CAM practices in managing superficial injuries, and participant's attitudes toward topical CAM; were also collected.

Personal attitudes toward using CAM in managing superficial injuries were rated using 3-level Likert scale with 1= disagree to 3 agree. Cronbach alpha was 0.87 for the tested attitudes.

The questionnaire was pilot tested and then modified to ensure that questions were comprehensible and clear. Before the survey, the trained data collectors explained the study objectives and distributed the consent sheet together with the questionnaire to all females. Females who agreed to participate in the study signed the consent form and filled the questionnaire. Data collectors immediately checked for completeness and any potential errors. The participant was asked to fill in the items with missing data and /or to correct errors if any.

All data were collected and analyzed using SPSS version 15 (SPSS Inc., Chicago, IL, USA). P-value less than 0.05 was considered statistically significant. The results were further verified using multiple logistic regression to control for covariates.

Results

There were 500 participants with age ranging from 21 to 30 years; average age was 27 ±9.6 years. They were divided into CAM users 228 (45.6%) and CAM non-users 272 (54.4%). A greater portion of CAM users were young single females coming from middle regions of Saudi Arabia with relatively poor socioeconomic conditions, and attained non-medical college education. A significant difference between the two groups was observed in all studied socio-demographic characteristics (p-value<0.05) Table 1.

Nearly seventy percent of the all participants had heard about CAM from family member or friend 345 (69%) followed by media and internet 90 (18%), and academic courses 65 (13%)

Table-1: Participants by socio-demographic characteristics.

Characteristics	Total n=500	CAM users n=28 (45.6%) n (%)	CAM non-users n=272 (54.4%) n (%)	*p*-value
Age group (years)				
≤20	147	49(33.3)	98(66.7)	0.000#
21-30	209	92(44)	117(56)	
31-40	100	61(61)	39(39)	
≥41	44	26(59.1)	18(40.9)	
Saudi region of origin				
North	43	17(39.5)	26(60.5)	0.015#
South	117	68(58)	49(42)	
East	30	13(43.3)	17(56.7)	
West	40	12(30)	28(70)	
Middle	270	118(43.7)	152(56.3)	
Marital Status*				
Single	313	119(38)	194(62)	0.000#
Married	166	93(56)	73(44)	
Widow/Divorced	21	16(76.2)	5(23.8)	
Family Income				
High	168	64(38)	104(62)	0.004#
Middle	107	48(45)	59(55)	
Low	225	116(51.8)	109(48.2)	
Level of Education				
College and above	378	157(41.5)	221(58.5)	0.001#
High school	114	65(57)	49(43)	
Primary school	8	6(75)	2(25)	
Major				
Medical	145	54(37)	92(63)	0.008#
Non-medical	354	174(49.2)	180(50.8)	

*The multivariate analysis indicated that the only confirmed factor, that was significantly associated with the use of CAM, was the marital status of the female (Odds Ratio, OR: .771 with 95% Confidence Interval, CI, .596-.997); # *p*- value is significant.

Table-2: Attitudes of adult Saudi women toward topical CAM in treating superficial injuries among all participants.

Statement	Agree n (%)	Don't know n (%)	Disagree% n (%)	*p*-value
CAM is better for treatment than conventional medicine	114(22.8)	213(42.6)	173(34.6)	0.000*
CAM can be used safely with other prescribed medications	277(55.4)	183(36.6	40(8)	0.05*
CAM is safe	214(42.8)	241(48.2)	45(9)	0.003*
CAM is available	346(69.5)	112(22.5)	40(8)	0.001*
CAM is cheap	221(44.4)	151(30.3)	126(25.3)	0.032*
CAM can be used without consulting a medical practitioner	248(49.6)	155(31)	97(19.4)	0.012*
The available researches encourage CAM usage	112(22.4)	237(47.4)	151(30.2)	0.01*
Public campaigns encourage CAM usage	322(64.4)	149 (29.8)	29(5.8)	0.026*
Cultural traditions increase CAM usage	231(46.2)	158(31.6)	111(22.2)	0.000*

* *p*-value is significant

Among the CAM users (228), 189 participants (82.8%) used CAM many times in caring superficial injuries; whether with or without other medical treatment.

Regarding type of the wound and the most common used CAM, 171(75%) participants used honey to treat burns, 103 participants (45%) used myrrh to manage superficial cuts and insects' stings, while cold water and olive oil were used to treat bruises by 89 (39%) and 75 participants respectively.

Regarding their motivations for CAM use, many reasons were chosen as follow: 189 (83%) participants reported CAM ability in pain relief, 171(75%) reducing wound healing complications, 136 (59.6%) skin softening, and 128 (56.1%) fasten healing rate.

Participants had a positive attitude toward CAM because of its availability 346 (69.5%), increasing public awareness through campaigns 322 (64.4%), its effectiveness 114 (22.4%) and scientific researchers are effectively encourage CAM usage 112 (22.2%). Almost half of participants 248 (49.6%) believed that CAM is safe that can be used with other medications without medical consultation Table 2.

Discussion

The CAM self-therapy in managing health related problems has been on the rise. The individual decision is highly affected by the lay press to try over-the-counter remedies.[10]

Both genders use CAM, however, women have positive attitude towards trying and frequently using CAM.[11,12] They are more conscious of their health and are more open-minded.[13] This study investigated Saudi women's characteristics and attitude towards topical CAM in superficial injuries.

In this study, the rate of CAM use among women was in agreement with studies done by Akyol et al.[11] and Guven et al.[12] However, AL-Alami et al. (2017)found that the majority of CAM users were female who represent 27% of the participants.[14] The lower rate of CAM use could reflect individual awareness about CAM potential side effects and interactions.[10]

CAM use was significantly higher among young single woman coming from middle regions of Saudi Arabia with relatively poor socioeconomic conditions, and attained non-medical college education. With growing age, CAM usage is amplified due to increase in health related problems.[9,15] However, adolescents might decide to opt for treatments that fall outside the boundary of mainstream medicine to develop skills to make the transition to adulthood.[13]

The majority of individuals with low socioeconomic level depicted difficulties in visiting physicians[9] and consumed the available environmental sources.[12] Moreover, family support of using CAM is rooted in personal beliefs regarding effectiveness and traditional health approaches.[16] Wootton and Sparber suggested a bimodal CAM usage, in which higher-income families use disposable CAM products as a supplement standard health care and lower-income families use traditional healing as a substitute for conventional care.[17]

Half of the participants had their knowledge from close related contacts, i.e., family members and friends. This explored the influence of people around women on their CAM use decision as they provided assistance in informing about success of treatment for health problems.[16] This is in agreement with the results of a study done by Adusumilli et al (2004). They studied the prevalence of herbal medicine use in surgical patients.[10]

Honey was most frequently used CAM in this study. The

results are in consistent with Al-Faris et al.[5] and Elolemy and Albedah[9] who stated that CAM use is related to habits, beliefs and religious background among Saudi population. In addition the medical herbs, including myrrh and krameria, were also used.[10,11]

CAM preference is influenced by factors like public interest, difference in participants' culture, knowledge, socioeconomic level, CAM availability and health related problems.[16]

In our study, presence of burn is a contributor for the use of honey, while presence of superficial cuts is a contributor for using myrrh. Honey headed the Saudi CAM list and is known as the best natural dressing. It reduces inflammation, controls infection and relieves pain with soothing action.[18] Myrrh has been used as a traditional remedy in Arab countries (e.g. Saudi Arabia) for long time. Early Muslim scholars reported its many medicinal uses.[4] Myrrh has been used to treat wounds and ulcers due to its antioxidant, anti-inflammatory and analgesic properties.[19]

Saudi women also perceived that CAM has pain-relieving effects and reduce wound complications, which is similar to results from Al-Daihan et al. and Bakhotmah et al.[4,18]

Saudi women sample having positive attitude towards CAM in superficial injuries first aids, comprehended that CAM is safe, and could be used with other prescribed medications without medical consultation. Unfortunately, this belief could lead to unsuspected interactions with prescribed medications. For instance, honey causes moderate slowing of blood clotting, which could increase the chances of bruising and bleeding if it is taken with non-steroidal anti-inflammatory drugs.[20]

Our study has some limitations. For instance, our sample type was convenience sampling of female present in Princess Nourahbint Abdulrahman University. There might have been a bias towards CAM listed with underreporting of those not listed. However, this questionnaire has been hypothesized on the most available CAM methods in Saudi Arabia.[4,5,18]

Conclusion

CAM use in managing superficial injuries is highly accepted among Saudi women due to its availability and safety when used with other medications.

Recommendation

Therefore, we would like to recommend that every medical file should reflect the individual's CAM use with reporting its effects and training programmes should be planned to raise awareness among medical staffs and general population.

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Conflict of Interest: None.

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