



The Awareness and Attitudes of the Public toward Complementary and Alternative Treatments

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: Complementary and alternative medicine (CAM) is flourishing very fast and the usage of CAM in health care is quickly evolving. The behavior and attitude of the patients towards herbal medicines represents an important concern for policy makers and for regulators.

Objective: The aim of this study is to evaluate the pattern of natural products use among the public and the Attitudes towards natural health products in Al-kharj

Methodology: This is a cross-sectional study design. A questionnaire was prepared using Google drive tool and used to evaluate the pattern of natural products use among the public and the attitudes towards natural health products in Al-kharj governorate. The survey was filled by 442 participants.

Results: Most respondents used a natural health product in the past (only 319 of 442 have been

used natural product), the most used products were Vitamins/Minerals (85.57%). Additionally, about 50 % of the respondents agreed that the natural health products are safe because they are made from natural ingredients. The majority of the respondents reported that there isn't enough information on natural health product labels to help them understand the Products. The majority reported that the family and friends were recommended and provided them with the information regarding the use of the natural health product (71.78%).

Conclusion: The present study showed that the use of herbal medicine is a common practice. The legislation is recommended to arrange the using of natural health products. The study results would surely require an active role for the Ministry of Health and Saudi Food and Drug Authority (SFDA) to insure enough information regard the risks and benefits of NHPs.

Keywords: Public; use; attitudes; natural products.

1. INTRODUCTION

Complementary and alternative medicine (CAM) is flourishing very fast and the usage of CAM in health care is quickly evolving [1]. About 80% of the people across the world use herbal medicines for primary healthcare purpose [2]. CAM has been defined as a group of various medical and health care systems, products and practices, that aren't currently considered to be component of conventional medicine [3]. Complementary and alternative medicine (CAM) can include acupuncture, aromatherapy, homeopathy, meditation, naturopathy, nutritional therapy, yoga and herbalism [4].

The behavior and attitude of the patients towards herbal medicines is a concern for policy makers and for regulators. With increased attitude towards herbal medicines, there is a corresponding increase in the production and selling of these medicines. There is a considerable knowledge shortage in the field of herbal medicines. Yet, many patients have a strong feeling that most of the natural medicines are effective and safe [5].

To ensure the rational use of CAM, the World Health Organization encourages integration of these medicines into national health care systems [6]. This integration of CAM in primary care services was reported in many previous studies from the United States, Iran, Germany, Australia and Italy [7-11].

The increase in the prevalence of chronic illnesses and the changes in lifestyle lead to the raise of using CAM, more specifically herbal medicine [12-13]. Previous studies stated that the use of herbal medicine was found to be highest among people in China (40%), USA (17.90%) and Europe (18.8%) [14-16].

A previous study found that 43.2-76.0% of Kuwaiti individuals used herbal medicine [17]. Moreover, in Riyadh city, many studies have shown that the use of traditional medicine is common [18-26]. There are limited studies regarding the knowledge, attitude and use of natural product in Al-kharj governorate. Therefore, the aim of this study was to evaluate the pattern of natural products use among the public and to study the attitudes towards natural products in Al-kharj governorate.

2. METHODOLOGY

This is a cross-sectional study. An online questionnaire (Google forms) was distributed among the public in Alkharj city to evaluate the pattern of natural product use among the public and the attitudes towards that in Al-kharj governorate.

A questionnaire was adapted from a previous study [17]. The questionnaire was validated by the professionals at the disciplines of Clinical Pharmacy and at the disciplines of Pharmacognosy. The survey was filled by 442 participants.

The survey comprised of 4 parts. The first part includes questions related to the demographic and characteristics of the participants; the second part includes questions regarding the pattern of using natural products and the unwanted side effects experienced from using natural products; the third part includes questions regarding the attitudes towards natural products; the fourth part includes questions about information requirements and participants' interest with different types of information on natural health products.

After the end of survey filling using google online survey the data were collected and analyzed

using Excel software and represented as frequencies and percentages. In some questions, the participants can choose more than one answer; therefore, the sum total of percentages does not always total 100%.

3. RESULTS AND DISCUSSION

A total of 442 respondents have filled the online survey and the results are presented in 5 tables. The first table represents the demographic data of the respondent and Table 2 show the pattern of use of natural products.

Table 3 presents the unwanted side effects experience of natural products and Table 4 presents the attitude towards natural products and the natural health products information requirement.

The participants' interest with different types of information on natural product is presented in Table 5.

The age of most of the participants ranged between 20-39 years (79.86 %). Only 1.13 % said that their personal health is fair and 12.89% reported that they have a chronic disease.

The results revealed that the majority of the participants (319 participants) used a natural health product which is similar to what have been reported in previous studies. In Al Akeel et al., [27] study they have found that 88.4 % of the respondents used traditional recipes and Ashfaque R. Memon et al. [28] study who reported that 94.6 % of the participants used herbal medicine before.

Out of the participants, 25.39% said that they are using natural health product daily. Ohemu et al reported that only 0.4 % of the respondents use traditional medicine daily [29]. The most used natural products were vitamins and minerals (used by 273 respondents), this result is in contrast of Abdelmoneim Awad et al. [17] who reports that the most commonly used NHPs

Table 1. Demographic and other Characteristics of the participants

Variables	N (%)
Gender	
Male	151 (34.16 %)
Female	291 (65.83 %)
Age	
10-19	77 (17.42%)
20-39	353 (79.86 %)
More than 39	12 (2.71 %)
Marital Status	
Single	349 (78.96%)
Married	87 (19.68%)
Divorced	6 (1.35%)
Educational level	
University	329 (74.43%)
Diploma	25 (5.65%)
Secondary school	80 (18.10%)
Intermediate school	5 (1.13%)
Primary School	2 (0.45%)
Uneducated	1 (0.22%)
Personal Health	
Excellent	337 (76.24%)
Good	100 (22.62%)
Fair	5 (1.13%)
Do you suffer any chronic disease?	
Yes	57 (12.89%)
No	385 (87.10%)
If yes, which of the following chronic diseases do you have? (out of 57 patients)	
Hypertension	7 (12.28%)
Diabetes	6 (10.52%)
Asthma	26 (45.61%)
Others	26 (45.61%)

Table 2. Pattern of use of natural health products

Variables	N (%)
Have you ever used a natural health product?	
Yes	319 (72.17 %)
No	123 (27.82 %)
If yes, which one of the following best describe your use of a natural health product? (out of 319)	
Daily	81 (25.39%)
Weekly	44 (13.79%)
Monthly	25 (7.83%)
Only during certain season	169 (52.97%)
Which natural health product have you used? (out of 319)	
Vitamins/Minerals	273 (85.57%)
Herbal remedies	171(53.60%)
Traditional medicines	123 (38.55%)
Probiotics	7 (2.19%)
Amino acids and essential fatty acids	17 (5.32%)
Why did you decide to use a natural health product? (out of 319)	
To help promote and maintain health	239 (74.92%)
To prevent illness/ build immune system	93 (29.15%)
To treat specific disease/ symptom	135 (42.31%)
To supplement what I'm lacking in my diet	174 (54.54%)
To increase my energy levels	94 (29.46%)
Others	8 (2.50%)
What is the source from which you obtained the natural health product? (out of 319)	
Pharmacy	254 (79.62%)
Health products store	155 (48.58%)
Supermarket	16 (5.01%)
Family member/Friend	96 (30.09%)
Others	18 (5.64%)
Who recommended and provided you with the information regarding the use of the natural health product you had taken? (out of 319)	
Family member/Friend	229 (71.78%)
Medical Doctor	113 (35.42%)
Pharmacist	70 (21.94%)
Dietitian	35 (10.97%)
Mass Media (TV/Radio/Newspaper)	80 (25.07%)
Others	27 (8.46%)
If you have never used a natural health product, what is the main reason? (out of 123 participants)	
I do not believe in the efficacy of the natural health product	19 (15.44%)
I am healthy and no need for its use	51 (41.46%)
I don't know enough information available about NHPs	38 (30.89%)
Natural health products are expensive for me to use	14 (11.38%)
Others	1 (0.81%)

among respondents were found to be herbal remedies. Additionally, most the participants used NHPs to promote and maintain their health as reported by 239 respondents which is in agreement with the results that reported from Canada and South Australia [30,31].

Although the source from which the public obtained the natural product was pharmacies

(79.62%) followed by Health products store (48.58%). The majority reported that the family and friends were their major information resource for natural product (71.78%). About (26.47%) of the respondents reported that they developed adverse effects caused by natural health products the same results was found by Abdelmoneim Awad et al. [17] who reported that few (17.9%) of those who used NHPs indicate that they have experienced certain associated

side effects. Nausea (44.44%) and Diarrhea (27.35%) were the most common adverse effects they developed. Unfortunately, 62.39% of them reported the unwanted side effect or reaction to their family or their friend and not to health care professionals.

Table 3. Unwanted side effects experience of natural health products

Variables	N (%)
Have you ever experienced an unwanted side effect or reaction when using a natural health product?	
Yes	117 (26.47%)
No	325 (73.52%)
What type of unwanted side effect or reaction did you experience? (out of 117 participants)	
Nausea	52 (44.44%)
Vomiting	10 (8.54%)
Diarrhea	32 (27.35%)
Constipation	25 (21.36%)
Nervousness/Anxiety	18 (15.38%)
Dizziness	30 (25.64%)
Skin rash	14 (11.96%)
Others	9 (7.69%)
Did you report this unwanted side effect or reaction of the natural health product to any health care professional? (out of 117)	
Yes	41 (35.04%)
No	76 (64.95%)
Who did you report unwanted side effect or reaction to? (out of 117)	
Medical doctor	25 (21.36%)
Pharmacist	14 (11.96%)
Health product personnel	5 (4.27%)
Family member/Friend	73 (62.39%)

Table 4. Attitudes towards natural health products (NHPs) and Information Requirements

Statement	Disagree	Neutral	Agree
NHPs can be used to help maintain and promote health	10 (2.26%)	113 (25.56%)	319 (72.17%)
NHPs can be used to treat illness	31 (7.01%)	143 (32.35%)	268 (60.63%)
I think that NHPs are safe because they are made from natural ingredients	75 (16.96%)	146 (33.03%)	221 (50.00%)
I think that NHPs are better for me than conventional medicines	95 (21.49%)	180 (40.72%)	167 (37.78%)
I think that a lot of the health claims made by the manufacturers of NHPs are unproven	46 (10.40%)	206 (46.60%)	190 (42.98%)
The Ministry of Health in Saudi Arabia should regulate the claims made by the manufacturers of NHP	9 (2.03%)	69 (15.61%)	364 (82.35%)
I think that it is important to talk to a medical doctor or pharmacist before using NHPs	26 (5.88%)	77 (17.42%)	339 (76.69%)
There isn't enough information on NHP labels to help me understand the Products	42 (9.50%)	139 (31.44%)	261 (59.04%)
I don't trust the information on the labels of NHPs	84 (19.00%)	208 (47.05%)	150 (33.93%)
I need more information on NHPs	16 (3.61%)	58 (13.12%)	368 (83.25%)
Consumers have enough information to make informed decisions about the NHPs that they buy	122 (27.60%)	160 (36.19%)	160 (36.19%)
Ministry of Health in Saudi Arabia does a good job of informing the public about NHPs	160 (36.19%)	156 (35.29%)	126 (28.50%)

Table 5. Participants' interest with different types of information on natural health products

Types of information	Not interested	Somewhat interested	Very interested
Uses and beneficial effects of NHPs	48 (10.86%)	234 (52.94%)	160 (36.19%)
Potential side effects of NHPs	26 (5.88%)	100 (22.62%)	316 (71.49%)
Possible drug interactions	39 (8.82%)	100 (22.62%)	303 (68.55%)
How to safely use NHPs	15 (3.39%)	61 (13.80)	366 (82.80%)
How to report unwanted side effect or reaction	25 (5.65%)	78 (17.64%)	339 (76.69%)

The majority of the participants agreed that natural health products can be used to maintain and promote health (72.17%). Additionally, 50 % of the respondents agreed that the natural health products are safe because they are made from natural ingredients.

Approximately 59.04% of the participants said that there isn't enough information on NHP labels to help me understand the products and 33.93% of them don't trust the information on the labels of NHPs. Moreover, 83.25 % said that they need more information on NHPs.

The information about the use of different plants that are used traditionally as a natural health product should be supported by experimental data that explore the safety and efficacy of these plants as reported by Abdel-Kader et al study [32]. Furthermore, these products should receive the approval from the Food and Drug administration before their use.

Regarding the source of information, the majority of the respondents trust medical doctors (61.53%) and pharmacists (44.11%) to provide them with accurate information on the natural health products. Furthermore, most of the respondents are interested to get information in the efficacy, side effects and possible drug interactions of these products.

4. CONCLUSION

The present study showed that the use of herbal medicine is a common practice and that the public mainly depend on family members and friend to get information about the natural products. The majority of the people think that natural products are safe and don't cause adverse effects. These results would surely require an active role for the Ministry of Health and Saudi Food and Drug Authority (SFDA) to insure enough information regard the risks and benefits of NHPs.

CONSENT & ETHICAL APPROVAL

As per international standard or university standard guideline Patient's consent and ethical approval has been collected and preserved by the authors.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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