

The Extent and Reasons behind Herbal Medicine use among Saudis Herbal Consumers in Jeddah

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ABSTRACT

Background: Herbal remedies became common in both developed and developing countries although it is more prevalent in the latter. It is considered as a natural, acceptable, safe alternative to routine medicines.

Objectives: This study aims to determine the extent and the character of herbal medicine use among Saudis in Jeddah and to identify the reasons behind its use and perceptions about its therapeutic outcome.

Subjects and Methods: This comparative cross sectional study was conducted in randomly selected three primary health care centers in south Jeddah, Saudi Arabia over two consecutive weeks in 2016 by using a self-administered questionnaire. Data analysis was done by Statistical Package for Social Sciences version 16.

Results: Three hundred Saudis participated in the study with mean age (25 ± 11.4) year. 70% of the participants were using herbs in the past with 70% of them having used it for the treatment of acute conditions. A high significant prevalence of herbal use was recognized among the older age group (86.20%), females (87.50%), and people with low educational levels (83.40%). Myrrh (57.10%), ginger (50.40%), and black seeds (42.80%) were the most commonly used herbs by the participants. The most common reasons behind herbal use as a medication were accessibility (50%) and family and friends recommendation (50%).

Conclusion: Herbal medicine use is considered common among Saudi citizens in Jeddah, especially among the older age, females and low educational levels and these groups should be targeted with orientation programs about the effectiveness, benefits and side effects.

Keywords

Herbal medicine; Saudi Arabia; Use; Practice; Outcome; Black seeds.

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INTRODUCTION

Herbal medicines are chemically rich preparations of any plant material^[1]. Herbal medicine (HM) represents the chief source of healthcare for about 80% of the people around the world with a wide prevalence in the developing countries as the population in these countries considers herbs more acceptable, less dangerous and a more natural form of medicine^[2]. Herbal materials might be used for direct consumption or after processing into herbal products which may contain excipients, or inert ingredients, in addition to their active ingredients^[3].

A marked increase in the use of herbal medicines is becoming widely recognized at the universal level in the last decade and this raises many concerns about the safety and quality of herbal products^[4]. In Saudi Arabia, the use of herbal medicines is widespread. Being natural and therefore appearing safe is the motivator behind the wide use of herbal medicines^[5]. The homemade herbal remedies along with the spiritual healing represent the main two forms of traditional medicine in Saudi Arabia and they are widely used across the country, both as a commodity and as part of remedies. In Saudi Arabia herbal remedies can be obtained from herbal remedy shops or from retail outlets^[1].

So, despite the potential for harmful side effects^[6] and interactions with conventional drugs^[7]. People continue to use herbal medicines for many reasons including general health maintenance, treatment of specific disease states for treating chronic conditions *e.g.*, depression, anxiety, headaches, pain and cancer. The use of these natural products are often taken on a self-medication basis, without the advice of pharmacists or physicians^[8].

A study has previously concluded that the safety, quality, and efficacy of HMs and herbal dietary supplements (HDS) (*i.e.*, herbal medicines with added vitamins or minerals) are a result of their active ingredients, but these products can contain other active ingredients that have unexpected consequences^[9]. There are many studies reporting the attitude, awareness and use of herbal medicine among special groups in Saudi Arabia like women^[4], children^[10] and patients with cancer^[11] or in certain areas like Riyadh^[1] but to our knowledge no study was done to characterize herbal use among Jeddah Saudi citizens. Therefore, this study aims to determine the extent and the character of herbal medicine use among Saudis in Jeddah and to identify reasons behind its use and their perception about the therapeutic outcome of these herbs.

SUBJECTS AND METHODS

This comparative cross-sectional study was conducted in randomly selected three primary health care centers in south Jeddah, Saudi Arabia in 2016. A self-administered questionnaire was designed and distributed to targeted Saudi citizens who visited these centers during two consecutive weeks. A verbal consent to participate in the study was obtained from the participants. All participants were encouraged to participate and were informed about

the importance of the study, and were ensured of the anonymity of their responses.

The questionnaire included close-ended questions related to the study objectives categorized under six sections. The first section included questions asking about socio-demographic characteristics of the participants while the second section asked if the participants ever use herbs as a treatment. The third section asked about the conditions in which herbs were used, including acute and chronic conditions. The fourth section asked about the commonly used herbs by the participants and the fifth section asked about the participants awareness of side effects of the herbs used. The last section was about the reasons behind using herbs.

Statistical Analysis

Data analysis was done by Statistical Package for Social Science (SPSS) version 16. The data were collected and entered to the computer. Statistical analysis was done using SPSS (Version 16) (SPSS Inc., Chicago, IL USA). The quantitative data was presented in the form of mean and standard deviation. The qualitative data were presented in the form of number and percentage. Chi-square was used as a test of significance for qualitative data. Significance was considered at *p* value less than 0.05.

RESULTS

Three hundred Saudis participated in the study with mean age 25 years and standard deviation (SD) \pm 11.4 years. Among the 300 participants to this study, 70% (210 participants) were using herbs in the past with 70% of them using it for the purpose of treating acute conditions while 30% used it for treating chronic conditions. Among those who used herbs for treating the acute conditions, 30% used it to treat the common cold and 30% used it to treat cough. On the other hand, 20% of the herbs users used it for treating diabetes (Table 1).

There was a highly significant ($p < 0.001$) prevalence (86.2%) of herbal use among the older age group, while a considerable percentage of younger groups of youth (69%) and middle age (66%) use herbs also. There was a significant ($p < 0.001$) prevalence (87.5%) of use of herbs among females. There was a significant ($p < 0.001$) prevalence (83.4%) of herbal use among those with low educational levels (read & write and primary school), while a considerable percentage of the illiterates (67%) use herbs also (Table 2). According to the participant's responses, myrrh (57.1%) was the most commonly used herb followed by ginger (50.4%) and black seeds (42.8%) (Table 3).

The most common reasons behind the use herbs by the participants as a medication were accessibility (50%), family and friend's recommendation (50%), and saving time and efforts compared to visiting a doctor (47.6%).

TABLE 1.

Prevalence of herbal use among the studied groups (n = 300).

The Disorder Severity	All Patients (n = 75)	Mild OSA (AHI 5-15) (n = 27)
I never used herbs before	90	30.00%
I use herbs	210	70.00%
- I used herbal for treatment of some acute conditions	147	70.00%
• Common cold	63	30.00%
• Influenza	21	10.00%
• Cough	63	30.00%
- I used herbal for treatment of some chronic conditions	63	30.00%
• Diabetes	42	20.00%
• Hypertension	21	10.00%

OSA: Obstructive sleep apnea

TABLE 2.

Distribution of the participants according to herbal use, age, gender and educational status (n = 300).

Variables	Herbs Users N = 210		Not Use Herbs N = 90		Test of Significance Chi-square Test*
	Number (N)	Percentage (%)	Number (N)	Percentage (%)	
Age Groups					
(18-25) N = 116	80	68.96%	36	31.04%	Chi-square 18.24 p < 0.001
(25-35) N = 119	79	66.38%	40	33.62%	
(35-45) N = 7	1	14.28%	6	85.72%	
> 45 N = 58	50	86.20%	8	13.80%	
Gender					
Male N = 185	105	56.75%	80	43.25%	Chi-square 43.24 p < 0.001
Female N = 115	105	91.30%	10	8.70%	
Educational Level					
Illiterate N = 90	60	66.67%	30	33.3%	Chi-square 65.12 p < 0.001
Read & Write or Primary N = 150	125	83.33%	25	16.67%	
Preparatory and Secondary N = 40	10	33.34%	30	66.66%	
Higher Education N = 30	15	50.00%	15	50.00%	

*p < 0.05 is considered significant

TABLE 3.

The commonly used herbs as denoted by the participants (n = 210).

Herbal	Number(N)	Percentage (%)
Myrrh	120	57.14%
Ginger	106	50.47%
Black Seeds	90	42.85%
Anise	15	7.14%
Caraway	13	6.19%
Others	10	4.76%

TABLE 4.
Reasons behind herbal use among the participants who use it (n = 210).

Reason for Use	Number	Percentage (%)
Accessibility	105	50.00%
Recommendation from family and friends	105	50.00%
Saving time and effort compared to visiting a doctor	100	47.61%
Advertising on internet	78	37.14%
Advertising on TV	60	28.57%
Saving money because herbs are of low cost	60	28.57%
Recommendation from a physician	12	5.77%
Advertising in a newspaper	10	4.76%
Herbs have minimal side effects	5 0	2.38%

TABLE 5.
Evaluation of therapeutic outcome of the herbs used by the participants (n = 210).

Therapeutic Outcome	Number (N)	Percentage (%)
Very useful	110	52.4%
Useful	55	26.1%
Not useful	45	21.5%

Advertising on internet (37%) and on TV (28.5%) as well as the low cost of herbs (28.5%) were among a considerable percentage reported by the participants (Table 4).

When asked about the perceived therapeutic outcomes of the herbs they use, about half of the participants found that it was very useful (52.4%) and useful (26.1%) while only 21.5% of them found it was not useful (Table 5).

DISCUSSION

It was reported that in developed countries modern medicine may exist alongside more traditional practices, with HM maintaining its popularity for historical and cultural reasons^[1]. This study aims to determine the extent and the character of herbal use among Saudis in Jeddah and to identify reasons behind its use and their perception about the therapeutic outcome of these herbs.

In this study, 70% of the participants were using herbs in the past. This is consistent with what was reported by El-Mawla *et al.*^[10] when assessing the prevalence of herbal remedies in the treatment of child health problems in Taif City, as they found that 70.3% of the parents had used herbs to treat their children in the past. In a study conducted in Saudi Arabia in 1998, it was reported that 24% of patients attending a health center had used herbal remedies^[12]. This shows the marked increase of herbal use in recent decades in Saudi Arabia. According to this study, it is clearly shown that the herbal use was prevalent among older age and low educational levels and these results were consistent with those previously reported^[1].

In this study, myrrh (57.1%) was the commonly used herb among participants from Jeddah followed by ginger (50.4%) and black seeds (42.8%). It seems black seeds are commonly used not only by healthy Saudis but also used

by the ill. In the oncology department at King Abdulaziz Medical City for National Guards at Riyadh about 35% of adults used black seed as part of their cancer treatment^[11]. On the other hand anise (24.7%) and fenugreek (14.7%) are the most commonly used herbs to treat children in Taif City as reported by their parents^[10].

In this study, 70% of herbs users are utilizing them for treating acute medical conditions like common cold and influenza while 30% of them used it for treating chronic conditions like diabetes and hypertension. It was interesting to find that in another study done in Kuwait about 41% of herb users were utilizing them as prophylactic not therapeutic agents to promote and maintain health and to prevent illness and build immune system^[13]. The most common reasons for use of the herbal product among women aged 20 years and above who attend the Female Primary Health Care Clinic in King Khalid University Hospital, Riyadh were weight reduction and cosmetics 31.4% and 28.7% respectively versus 17.6% using herbs for chronic diseases including diabetes, hypertension and hypercholesterolemia^[4].

Fifty percent of the participants in this study reported that accessibility of herbs was behind its use and this is true as access to herbal medicines is unrestricted and regulations on marketing and distribution of herbal medicines in Saudi Arabia are poor^[4]. It was also observed that 50% of the participants used herbs, in this study, in response to their families and friends' recommendation and unfortunately, none of the participants reported that he or she consulted a physician before using the herbs. This percentage is very high worldwide as around 80% of HM consumers rely on the advice of friends when using such remedies and only 25% consulted their physician prior to the administration of HMs to their children^[14]. In Ajman, United Arab

Emirates also about 30% of the seekers of herbal products did not ask for physician advice prior its use^[15]. Even those who are under other medication described by physicians, they don't consult their physician about herbal use,^[11] reported that only 18% of the adults using herbs as part of their cancer treatment discussed herbal use with their physician prior to use, compared to 68% who discussed it with religious clergy leaders (Sheikhs). Advertising on the internet represents the reason behind herbal use for 37% of herbal users in this study^[4]. Also "the internet search engines and random websites were the main source of information about herbals" for the population in this study.

Only 21.5% of the herbal users in this study found herbal medicine was not useful. The dissatisfaction of the percent of herbal users with their experience with herbal medicine may be attributed to the side effects they might experience during its use. About 18% of herbal remedies consumers in Kuwait have experienced a side effect due to using herbal medicine^[13].

In conclusion, herbal medicine use is common among Saudi citizens in Jeddah, especially among the older age, females and low educational levels and these groups should be targeted with orientation programs about the effectiveness, benefits and side effects of herbs they use.

Conflict of Interest

The authors have no conflict of interest.

Disclosure

None of the authors received any type of commercial support either in forms of compensation or financial for this study. They have no financial interest in any of the products or devices, or drugs mentioned in this article.

Ethical Approval

Obtained.

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مدى وأسباب استخدام الأدوية العشبية بين السعوديين في جدة

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المستخلص.

مقدمة: التداوي بالأعشاب أصبح شائعا في كل من البلدان المتقدمة والنامية، لكنه أكثر انتشارا في الدول النامية، وهو يعتبر بديلا طبيعيا ومقبولا واختيارا آمنا إذا ما قورن بالأدوية الروتينية.

الأهداف: تهدف هذه الدراسة إلى تحديد مدى وطبيعة استخدام الأدوية العشبية بين السعوديين في جدة، ومعرفة الأسباب الكامنة وراء استخدامها والإدراك الفعلي لنتائجها العلاجية.

طريقة البحث: أجريت هذه الدراسة المقطعية في ثلاثة مراكز للرعاية الصحية الأولية تم اختيارها عشوائيا في جنوب جدة المملكة العربية السعودية، لمدة أسبوعين متتاليين في عام ٢٠١٦ باستخدام استبيان ذاتي الإدارة، وقد تم تحليل البيانات بواسطة الحزمة الإحصائية للعلوم الاجتماعية، الإصدار ١٦.

النتائج: شارك ثلاثمائة سعودي في الدراسة متوسط اعمارهم ($25 \pm 11,4$) سنة، ٧٠٪ من المشاركين كانوا يستخدمون الأعشاب في الماضي، منهم ٧٠٪ كانت تستخدم العلاج في الحالات الطارئة، وقد تم معرفة الانتشار الواسع في استخدام الأعشاب بين الفئات العمرية الأكبر سنا (٨٦،٢٪)، والإناث (٨٧،٥٪)، وذوي المستويات التعليمية المنخفضة (٨٣،٤٪)، وكان المر (٥٧،١٪) والزنجبيل (٥٠،٤٪) والحبّة السوداء (٤٢،٨٪) أكثر الأعشاب شيوعا في الاستخدام من قبل المشاركين، وكانت أهم الأسباب وراء استخدام الأعشاب كدواء سهولة الحصول على الأعشاب (٥٠٪)، والتوصية بها من قبل الأسرة والأصدقاء (٥٠٪).

الخلاصة: يعتبر استخدام الأدوية العشبية أمرا شائعا بين المواطنين السعوديين في جدة، خاصة بين كبار السن والإناث، والمستويات التعليمية المنخفضة، ولهذا يجب استهداف هذه المجموعات ببرامج توعوية وتوعوية حول الفعالية والفوائد والآثار الجانبية الناتجة عن استخدام الادوية العشبية.