Awareness, Use, and Attitude towards Herbal Medicines among Saudi Women-Cross Sectional Study

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Abstract: Herbal medicine is commonly used worldwide for treating different health problems and cosmetic purposes. Generally herbs are considered safer than conventional drug therapy. The aims of study were to determine the level of awareness, patterns of use and beliefs regarding the safety of herbal medicines among Saudi Women. A descriptive cross-sectional survey was conducted among female of ≥ 20 years of age attending outpatient clinics at King Khalid University hospital (KKUH), Riyadh using a structured questionnaire. Statistical analysis, were done using SPSS version 15.0 software. A total of 404 women were participated in the study. The mean age was 33 years (ranged from 20 to 70 years). The use of herbal medicines was reported in 71%. Significant increase in use was observed in older and less educated women (P< 0.001). Among the pregnant women participated, 30.7% were using herbal medicines during pregnancy.87.4% of women did not consult their medical doctor before using herbal medicines. 14.4% experienced various complications. Women believed that herbal medicine has no side effects were 47%. Weight reduction and cosmetics were the most common reasons for use with 31.4% and 28.7% respectively. In 77.5%, the use herbal remedies were strongly influenced by experience and recommendations of friends or relatives. To sum up the prevalence of use of herbal remedies by Saudi women is high even during pregnancy. There is a need for effective education to increase the awareness and to ensure their safe use.

1. Introduction

A rapid rise in the global use of herbal medicines over the last years is becoming widely recognized and has led to concerns over the safety and quality of herbal products. Herbal materials are essentially subjected to extraction, fractionation, purification, concentration to produce herbal preparations; they might be used for direct consumption or after processing herbal materials. Herbal products may contain excipients, or inert ingredients, in addition to their active ingredients. [1]

Herbal preparations remedies are used frequently either internally or externally to treat and prevent medical conditions and classified according to their preparations into two main types including 1-Herbal medicinal preparations and 2-Certain preparations in combination of other products such as vitamins, minerals, essential amino acids or fatty acids. [2]

The public interest in using herbal preparations is well identified during the past decades. The use of herbal medicines worldwide and the rapid expansion of the global market is an area of commercial growing interest, the safety and quality of medicinal plants and materials have become a major concern for health authorities, pharmaceutical industries and the general public.

Herbal medicine use has increased dramatically in both the developed and developing world due to its accessibility, affordability as well as its perceived efficacy and safety in treating diseases as compared to allopathic medicine. [3]

In 2012, study was carried out at Civil Hospital and Liaquat National University Hospital, Karachi during April to September identifying that 59.3% of patients used complementary and alternative medicine in which fever as well as cough were the most common two conditions for which the patients used them. [4]

In Saudi Arabia, study of herbal medicine use in a group Taif among children in May, 2013 revealed that 70% of parents used herbs for their children in the past. The most commonly used herbs were; anise (24.7%) and fenugreek (14.7%). [5]

Self-Reported use of complementary and alternative medicine in Ajman, United Arab Emirates in 2013 shows that around one third of the seekers of herbal products without physician advice. [6]
According to a cross sectional study conducted in Kuwait investigating public awareness, patterns of use and attitudes toward natural health products reached up to 41.3% of herbal remedies use to promote and maintain health and to prevent illness and build immune system, about 18% of consumers have experienced a side effect due to using herbal medicine. [7]

Lack of awareness among pregnant women about potential effects of using traditional medicine is one of the most important aspects to investigate the dramatic increase in using alternative medicine reaching up to 50% in Western Ethiopia. [8]

In Saudi Arabia, increasing the proportion of the public tendency to use herbal products is becoming more recognizable considering their safety and affordability compared to pharmaceutical treatment. Therefore, we conducted this study to assess the current use of traditional herbal preparations among women of 20 years of age and above attending primary health care clinics at King Khalid University hospital, Riyadh in 2013, aiming to determine their level of perception and awareness regarding herbal remedies.

Our aim of this study is to evaluate the participants’ knowledge, use and awareness of traditional herbal preparations as well as the commonest herbal products used by Saudi women.

Frequent use of traditional herbal remedies by women regardless of its possible risks in cosmetic or treatment purposes raised our concerns to establish new approach for public awareness. Few studies have addressed the problem of using herbal remedies and not focused on general population especially among women in Saudi Arabia.

Since there are no adequate numbers of studies conducted regarding the use and level of information of herbal medicine preparations and their resources in Riyadh, this paper is focusing on the perception level of using herbal preparations by women.

2. Materials and Methods

A cross sectional study "qualitative – observational" interview based questionnaires was carried out in the primary care clinics at King Khalid university hospital, Riyadh, for women of 20 years of age and above to determine two important variables to be measured; the proportion of use, and information level regarding herbal remedies.

A structured questionnaire was used for the data collection from subject who agreed to participate.

The questionnaire contains the title of the study along with brief introduction and the study objectives on the cover page.

The questionnaire was translated into Arabic. The questionnaire was approved by the IRB, College of medicine, King Saud University.

The questionnaire consisted of different parts including social-demographic data (age, marital status and the educational level); the use and consume of herbal medicines, the attitudes towards the safety of herbal medicines; the purpose of using herbal medicines; the sources of recommendation for the use; the source of information and the type of herbs they use. Microsoft Office Excel was used for data entry and the data was then transferred into SPSS software for descriptive statistics and a chi-squared test were used to analyze the data. All tests were conducted at the \( P < 0.05 \) level of significance. Sample size was estimated to be 382 participants using proportion formula, simple random sampling technique was done along with the pilot study (pretested questionnaires) of 21 forms to estimate the proportion value and to ensure contents clarity and to verify the validity to the participants. Permission was taken from the participants and the participant’s privacy and confidentiality were ensured.

3. Results:

A total of 404 women were participated in the study. The age ranged from 20 to 70 years. The mean age was 33 years with standard deviation of 11. Most survey respondents were married 259 (64.1%), and 119 (29.5%) were single, 26(6.4%) were separated. Saudi participants were 401(99.3%) and 3(0.7%) were non-Saudi. Total number of Riyadh residents were 394 (97.5%) and 10 (2.5%) were from other regions of the country.

The results showed that total number of women who use herbal medicine was about 288(71%) with 134 (33.2%) were using the herbal medicine during the time of the study.

As can be seen from Figure 1, there was a variation in frequency of using herbal medicine among various age groups. Signification increase in the use of herbal medicine was observed in older women \( (P < 0.001) \)

In regard to the level of education, a significant correlation between the level of education and frequency of herbal medicine use was noticed. The data obtained showed a trend of increase of herbal medicine use among less educated women \( (P < 0.001)\) as seen in Figure 2.
Among the women participated in the study, 88 (21.8\%) were pregnant. The pregnant women using herbal remedies were 27(30.7\%). Women who do not consult their medical doctor before using herbal remedies are 235 (58.2\%). However, 51(12.6\%) of women use herbal remedies based on recommendation from their treating physician. Moreover, 43.2\% of pregnant women were using herbal remedies without consultation from their physicians.

145(35.9\%) of women prefer herbal medicine usage over pharmaceutical medicines while 84(20.8\%) stopped medical treatment and started using herbal medicine instead.

Although, 58(14.4\%) of women using herbal medicine experienced various complications.

Women who think that herbal medicine has no harmful side effects are about 190(47\%) and 111(27.5\%) believe that herbal remedies are usually good for health. Half of the participants (50.2\%) think that herbal remedies are healthier and safer than pharmaceutical treatment.

It was also found that women who believe that herbal remedies are important factors to boost the immunity and general health were about 262(64.9\%). Ladies who couldn’t take risk of using medical treatment are more likely to use herbal medicines were about 293(72.5\%).

Herbal remedies were used for different treatments and cosmetics purposes. Weight reduction and cosmetic use were the most common with 31.4\% and 28.7\% respectively. Number of women using herbal medicine for chronic diseases including diabetes, hypertension and hypercholesterolema were about 71(17.6\%) and for skin disorders 60(14.9\%).

Regarding the level of knowledge and awareness, number of women who do not have any information and understanding of herbal medicine or with poor knowledge were 89.4\%. Only 10.6\% reported that they have good background and knowledge about herbal medicine.

The internet search engines and random websites were the main source of information about herbal for participants. In addition, increase in the potential to use herbal remedies is strongly influenced by experiences and recommendations of friends or relatives (77.5\%).

Honey is the most used type (80.2\%) followed by funnel flower (58.7\%). Herbal products sources are varying according to many factors such as availability, quality and cost as well. Most women obtain the herbal remedies from the local herbal shop (59.7\%) and 36.1\% prepare them at home. Only 5\% of participant reported obtaining the packaged herbal products from specialized manufacturers.

4. Discussion:

The aim of our research which was conducted among women aged 20 years and above who attend the Female Primary Health Care Clinic in King Khalid University Hospital is to assess use, knowledge and awareness level toward the herbal medicine. The study showed that around 71\% of participants used herbal medicinal products. Age and education level were two main factors significantly associated with use of herbal medicine. The most common reasons for use are weight reduction and cosmetics. The Majority of the participants' believe that the preparations are natural and therefore safe.

 Herbal medicine products found to be popular among Saudi women, which could be as a result of a widespread belief that they are natural, safe, and more effective than conventional medicine. Half of the participants think that herbal remedies are healthier and safer than pharmaceutical treatment. This finding is consistent with the previous studies from Saudi Arabia and other developing countries. Furthermore, access to herbal medicines is unrestricted and regulations on marketing and distribution of herbal medicines in Saudi Arabia are poor.

Research updates presented in the second gulf conference on complementary medicine usage, the developing countries are as follows: 73\% in Saudi Arabia, 60\% in Uganda, Rwanda 70\%, 75\% of Mali, Tanzania 60\%, and Ethiopia 90\%. In developed countries: Australia 48\%, U.S. 42\%, Canada 70\%, Germany 80\%, and France 49\%. It has been reported that 24\% of patients attending a health center in Saudi Arabia had used herbal remedies. [9]

In another study from Saudi Arabia, the use of herbal products was reported as 17\%–33\% among Saudi diabetics. [10]

In a study assessed the therapeutic use and prevalence of herbal remedies in for children in Taif city, Saudi Arabia, showed that 70.3\% of parents had used herbs as a treatment for their children. [5]

As we see the increasing rate in developing countries, we think the reason for this is due to the lack of awareness of the people about the risk associated with the use of herbs and also due to its cheap price compared to the conventional medicines, and they are accessible to all people of all ages.
Women who do not ask for medical prescription or consultation before herbal remedies use is approximately 58.2%, which considered high. A Study also found that only 8.9% of participants had consulted a physician before the use of herbal products. Our data is consistent with previous studies where more than half of patients who use herbal products do not discuss the use of them with their physician. [11]

Patients often do not consider these products as medicines because of their natural source and the fear of disapproval from the physician. [12, 13]

In our study, it is clearly showed that the older the age the more is the use of herbal medicine. The majority of women who use Herbal Medicine have low educational levels. These results give us a clear relationship between educational level and use of herbal remedies.

In one study from Iran, participant used herbal medicines when recommended by their physician (46.1%), through self-medication (44.9%), or with the advice of family members or friends (9%) [14]

One third of participants of women prefer herbal medicine usage over pharmaceutical medicines and 20.8% replaced the medical treatment with herbal medicine. This is because of the belief that has no harmful side effects and significant number of women thinks that herbal remedies are healthier and safer than pharmaceutical treatment is approximately. 64.9% of women reported that Herbal remedies boost immunity and general health. 58 (14.4%) of women using herbal medicine experienced various complications.

Use of herbal remedies based on friends or relatives and other's experiences and stories was 77.5%. Williamson et al. similarly showed that around 80% of herbal medicine consumers depend on the advice of friends regarding the use. A high percentage of participants used Internet random search as a source of information regarding herbal medicine. In previous study, they found that 91.1% used herbal medicine following their own independent research or following the advice from friends with no medical background. [15, 16]

Herbal medicines are used for several purposes. In our study group, women were using herbal medicine mainly for weight reduction and cosmetic purposes. In a study to assess the use of complementary and alternative medicine by patients with cancer in Saudi Arabia, 85.2% used alternative medicine as a cancer treatment and 10% used it for other reasons, such as symptom control or supportive treatment. [17]

In another study from Saudi Arabia, the use of herbal products by Saudi diabetics was reported to be 17%–33% . [10]

141 (34.9%) women think that Society awareness toward herbal remedies based on their views were reasonable, on the other hand 148 (36.6%) thought it is basically low.
Number of women who don’t have any information and understanding of herbal medicine was about 56 (13.9%) and who describe it as not good not bad were 162 (40.1%) while who think they have very good background were about 43 (10.6%).
Pregnant women who admitted the use of herbal remedies during considered relatively a high percentage.

In regard to pregnancy, 30.7% of pregnant women participated in the study reported the use of herbal medicine during the pregnancy. Few studies on use of herbal medicines during pregnancy have been conducted. These studies showed that more than 10% of pregnant women reported the use of herbal medicine. The use of herbal remedies during pregnancy was positive in 22.3% of patients in Iran[18]. In Nigeria, about 43% of pregnant women were using herbs and many of them strongly believed in safety of herbal medicines use in pregnancy. [15] The most types that is used by women were honey and fennel flower. They are most common known and used all over the Islamic World and have a religious background since they are mentioned in the Holley Qur'an and Hadith Sharif of Prophet Mohammed Peace Be upon Him. In addition, they have approved benefits to the health.

In our research we looked for the awareness for people they are using Herbal medicine, and here we will compare our results with other researches. So, as we know it is commonly used herbs to treat common diseases among large non-industrial societies, and it is often much less than the price of buying modern medicines are expensive.

The World Health Organization (WHO) estimates that 80 percent of the population of some countries in Asia and Africa are currently using herbal medicines for some of the basic health care[19]. In UK there was a research about the use of herbal medicine in people with cancer. The Western herbal medicine and Chinese medicine the most common types of herbal medicine in UK. [20]

The study says that as many as 6 out of every 10 people with cancer (60%) use herbal remedies alongside conventional cancer treatments. There are
many different types of herbal medicines and some of them overlap with foods. Commonly used plants include Echinacea, St John’s wort, green tea and ginger. [21]

5. Conclusion:

The study has revealed that around 70% of Saudi women are using herbal medicines. The older women have lower awareness level regarding herbal remedies than young females and have higher use as well. The higher use of Herbal medicine was among women with low educational levels including illiterate, primary, and intermediate schools certificated. Regarding the marital status, it has been turned out that, married women have the highest use percentage among other women of different statuses such as, single, widow, and divorced women. It is evident that this study has shown significant number of Pregnant ladies who use Herbal Medicine, which in fact appeared to be significant to pay attention to .From the research that has been carried, it can be concluded that the some strategies might be taken for example: educational programs to raise the awareness levels of herbal medicine use among Saudi females as well as some of the required precautions before starting or trying herbal remedies. Focusing on young females in general regardless of their educational levels and old women with low educational levels as they may have co morbidities and herbal medicine may worsen their health with further complications. In addition, releasing some perceptual advertisements time to time to educate the whole population especially females and among the doctors too and how they can deal with such patients and educate them of herbal remedies risks on general health. Furthermore, there should be certified centers of alternative medicine supervised by health care facilities to monitor the sources, quality and safety of herbal medicine.

6. Figures:

Figure1. The Percentages of Women of Various Age Groups who Use Herbal Medicine

Figure2. The Percentages of Women of Various Educational Levels who Use Herbal Medicine

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8. References


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