

HERBAL MEDICINE USE: KNOWLEDGE AND ATTITUDE IN PATIENTS AT TERTIARY CARE LEVEL IN NORTHERN BORDER REGION OF KINGDOM OF SAUDI ARABIA

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ABSTRACT

Background: Herbal medicines are being widely used and likely to cause side effects and interactions with allopathic drugs. **Objective:** To assess knowledge, attitude and use of herbal medicines among patients in the Northern Border Area of Saudi Arabia. **Methodology:** A cross sectional study was carried out among 445 patients attending outpatient departments of tertiary care health units in Arar city of Saudi Arabia from 1st November 2015 to 31st March 2016. Besides demographic data, information regarding knowledge, attitude and use of herbal medicines was obtained using predesigned questionnaire. Response to various questions was analyzed with SPSS program version 16. Data was further analyzed by using chi-square test. **Results:** A significant percentage of patients were familiar with herbal medicine use (93.7 %). Male patients has more knowledge of herbal medicines than females (P = 0.024). High proportion of patients were personally using herbs (93.6 %), mostly in relatively lower income families. Almost 90% Physicians don't ask history of herbal medicines consumption. Only 5% of patients were taking herbal medicine prescribed by Hakeem (Authorized Physician). Persons (parents and grandparents) were prescribing herbal medicines. **Conclusion:** The residents of Saudi Arabia (Northern Region, Arar) have shown high usage of herbal medicine, additionally its awareness was high.

Keywords: Herbal medicines, Knowledge, Attitude, Practice

INTRODUCTION

Herbal medicine use is increasing day by day, many of the Asians are found to be depending on it.¹ Herbal supplementations have become famous in west as well accounting about 50% of population use.² Chronically sick patients like CVDs (cardiovascular diseases), DM, and cancer are the most users of alternative medicine.^{3,4} Infertility and female gender increases the chances of using complimentary medicine.⁵⁻⁷ Probably the popularity of herbs is due to the concept of being natural drugs and having no side effects.⁸ Satisfaction, cultural and religious belief are among the other factors influencing the use of herbal drugs.⁹ Alternative medicine is now being used by well-educated adults of well-disciplined communities without bringing into the knowledge of physicians.^{10,11} There are greater chances of drug-drug interaction between the allopathic and herbal components if taken up by the same patient. This fact invites to collect evidence based data about usage, awareness and attitude about the herbal medicines. A good proportion of the Middle east population is reported to experience harmful effects from such herbal remedies.¹² Limited studies were carried out on health professionals in KSA pertaining use of herbal drugs.^{13,14} Patient

specific searches were conducted on infertile couples in Riyadh and Makkah (KSA) for the similar purpose.^{15,16} Current survey study was based on use, attitude and knowledge about herbal products among patients in four hospitals of the Arar region attending their OPDs (Out Patient Departments).

METHODOLOGY

This was a cross sectional study conducted by using a questionnaire on randomly selected study subjects. Questionnaire was developed prior to start of study. The intention was to gather the patient awareness in respect of use, attitude and knowledge about the herbal medicines. Out Patient Departments were selected from the hospitals of tertiary care level from Arar city of kingdom of Saudi Arabia. Hospitals were (1) King Abdul Aziz bin Mossad Hospital (2) Cardiac Center and (3) Central Hospital. The survey was conducted from 1st November, 2015 to 31st March, 2016. Monkey and Fluid Surveys were used to assess the sample size through internet online service.^{17,18} Interviews were managed from 445 participating patients after getting consent for study. Purpose and possible benefits of the current survey were also infromed to participants verbally. Ethical approval was sought from hospital ethical committee. **Statistical Analysis:** Percentage, mean, S.D and

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range were measured from available data. SPSS 16 was the version used for analysis of obtained data.

RESULTS

The mean age study subjects was 35±6 years. Male and female patients was 49% and 51% respectively being 63% married and 27% unmarried. Response rate was (83.6%) most of the participants were from Medical OPD (27.2%) while Cardiac, Diabetes, Surgery, ENT and others were 24.5%, 15.5%, 13.3%, 10.6% and 8.9% respectively. Urban participants were 83% while 17% were from the rural region. Regarding knowledge and use 93.7 % of the patients were having awareness while 96% of the study population agreed their medicinal values with comments agree and strongly agree 69.7% and 26.7% respectively. (Table I) 61% of the subjects were of opinion that herbs are free from adverse effects. 74% of the population was agreeing to combine allopathic and herbal drugs together. (Table II)

Table I: Patient's knowledge and attitude towards herbal medicines. (n=445)

Question	N (%)
Do you know about some herbs with medicinal usage?	
○ Yes	417 (93.7%)
○ No	28 (6.3%)
Do you think herbal drugs have some value in treating diseases?	
○ Strongly Agree	310 (69.7%)
○ Agree	119 (26.7%)
○ Disagree	9 (2%)
○ Strongly disagree	2 (0.4%)
○ Don't know	5 (1.1%)
Do you think herbal drugs are free of side effects?	
○ Strongly Agree	155 (34.8%)
○ Agree	117 (26.3%)
○ Disagree	146 (32.8%)
○ Strongly disagree	15 (3.4%)
○ Don't know	12 (2.7%)
Do you think combining herbal drugs with allopathic drugs will be useful in treating diseases?	
○ Strongly Agree	180 (40.4)
○ Agree	150 (33.7)
○ Disagree	64 (14.4)
○ Strongly disagree	22 (4.9)
○ Don't know	29 (6.5)

Male subjects were more familiar with herbs as compared to females. (P=0.024) Married subjects

were considering herbal remedies safer in comparison to unmarried. (P=0.001) Males were found using more herbal products in comparison to female. (P=0.043)

94.6 % of the surveyed subjects admitted that they used herbal medicines and had a good experience with that but 5.8% of them complained their bad experience of adverse effects with Table II.

A large number of subjects (>52%) admitted the use of herbal drugs prior the initiation of allopathic drugs. Parents (41%) were recommending the herbal drug use along with the allopathic medicine upon less effective response. 59% did inform their physician about herbal medicine usage but majority 89% of doctors didn't stop them taking such herbal products. Only 5% of patients were taking such medicine under consultation from the certified persons (Hakeems) while others are advised by parents, grandparents, relatives and internet source 43%, 23%, 10% ,19% respectively.

Table II: Patient's personal experience of herbal medicines usage

Question	N (%)
Did you ever use any herbal medicine? (n=445)	
○ Yes	421 (94.6%)
○ No	24 (5.4%)
How is your personal experience of using herbal medicine? (n=421)	
○ Very good	301 (71.5%)
○ Good	104 (24.7%)
○ Fair	16 (3.6%)
○ Bad	0
Did you ever experience any side effect with the use of herbal medicine? (n=421)	
○ Yes	26 (5.8%)
○ No	395 (88.8%)
Have you started allopathic drugs first for your current disease before starting herbal drug? (n=421)	
○ Yes, herbal drug then added when getting less improvement with allopathic drugs	175 (41.6%)
○ No, herbal drug was started earlier	218 (51.8%)
○ No, both therapies were started together	28 (6.6%)
How do your friends and Family react to your use of herbal medicine?	
○ They are encouraging	351 (83.4%)
○ They are discouraging	11 (2.6%)
○ They are not reacting	50 (11.9%)
○ They are getting afraid	9 (2.1%)
Do you inform your doctor about your use of herbal medicine? (n=421)	
○ Yes	249 (59%)
○ No	173 (41%)
When you inform your doctor about your use of herbal drug, what was his response? (n=249)	
○ To continue	223 (89.5%)
○ To stop	26 (10.4%)

DISCUSSION

Herbal drugs are frequently used and popular in Alternative and Complementary medicine and have

more preference for use as compared to other strategies of CAM worldwide as shown by the published evidence in past.¹⁹ The results of our current survey also depict the high level of knowledge (93.7%), usage (94.6 %), of herbs in this region that is in accordance to previous work. Roselle, Pimpinella Anisum, Peppermint, *Salvia fruticosa*, Fenugreek, Asafetida, Nigella sativa and Myrrh are among the commonly used herbs. Hypertension, renal colic, constipation, diabetes, cough, diarrhea and menstrual disturbances were the conditions to be treated by herbal remedies in this Arab region of the globe as suggested by many authors.^{20,21}

Other parts of the world are also focusing on discovering new agents from the herbal medicine like clove has been explored for its numerous uses including the hepato-protective effects.²²

Clear contrast exists between our results and past literature revealing herbal remedies were more commonly used by the female gender.^{19,23} Recent publications show herbs as well as other of alternative medicine are becoming more popular in youngsters now a days.²³ Our results (59%) show some similarity to previous work carried out in Riyadh, KSA which tells that 50% of patients do not inform the health care practitioners about the herbal use.¹⁸

This may result in severe drug interaction and prove harmful and lethal for patients.²³ Often physicians miss to ask for herbal use in their history taking session from patients. Our findings also support this observation showing that 90% of doctors did not recommend stopping herbal medicine despite knowing. This is probably due to the fact that physicians' knowledge regarding herbal and other forms of alternative medicine is not sufficient so they do not comment on herbal medicine usage by their patients.²⁰

Wassie SM et al in an Ethiopian survey reported the incidence of adverse effects in 22.7% herbal users ranging from worsening of comorbidities to fistula formation, bleeding and psychosis.²⁴ A 5% of patients complained side effects. (Feeling of more Acidity, vomiting, itching and cough) in our results that lies in contrast to mentioned research. The increasing use of herbs needs proper rules and regulations under medical act after finalizing the drug developmental steps in animal and human models.

Health departments are supposed to certify professionals for such practice. Well organized

awareness campaigns in public, communities and media are required to be promoted by health services departments. Physicians, health care persons and medical students need to be trained and educated about common types of CAM or alternative medicine including herbs.^{20,23}

CONCLUSION

Peoples of the Arar (Northern Region, Kingdom of Saudi Arabia) are well aware about herbs and their use as medicines is very high. This may result into a situation of drug reactions between allopathic drugs and the herbs resulting into decreased effectiveness of both or increasing the toxicity of either agent or even both.

Conflict of Interest: It is declared that the study was an Academic promotion for student research training and no funding and conflict assist among us.

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