

Attitude and practice of Yemeni physicians toward the integration of herbal medicines into patient care practice

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Research Article

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Abstract

Objectives

The aim of this study was to explore the attitude and practice of Yemeni physicians toward the integration of herbal medicines into patient care practice and the factors affecting the attitude and practice.

Methods

A cross-sectional study was conducted over a period of four months, from January 2019 to April 2019, among physicians in Sana'a, Yemen.

Results

A total of 25 physicians were interviewed. There were males, and the mean age was 39.84 ± 6.95 years. The finding of this study showed that the study physicians used herbal medicine on a daily and weekly basis for many reasons. The findings of this study show that the attitude of 56 % was positive towards the integration of herbal medicines. Furthermore, they recommended herbal medicines to their patients. The attitude and practice were influenced by many factors, such as the severity of the disease/condition, evidence-based/rationality of using herbal medicines, and experience/personal use.

Conclusion

Herbal medicine use was common among physicians in Yemen. More than half of this study participants had a positive attitude towards integrated herbal medicines, and they recommended herbal medicines to their patients.

Background

Traditional Medicine (TM), including herbal medicines, is one of the primary sources of health care in developing and developed countries [1,2]. Integration of herbal medicines to conventional medicines as a part of the health care system or by health care professionals [3]. There are many factors that could affect the integration of herbal medicines by healthcare professionals, such as scientific, cultural, educational, and legal factors [3]. People in Yemen as well as other developing and developed countries, use herbal medicines for their diseases/conditions for many reasons, regardless of their safety issues [1, 4-23]. A study conducted by Aziz, 2004 with the aim to identify factors which predict the recommendation of herbal medicines by physicians, reported that 19% of physicians recommended herbal medicines to patients, and the factors affecting their recommendations were: general interest, interest in receiving training, race and a higher level of medical training [13]. However, physicians can integrate herbal medicines into their practice in order to achieve the desired outcomes of treating their patients, relief their symptoms, decreasing the length of hospitalization, decrease the cost of therapy, but at the same time, they should take in their consideration the potentially related problems of herbal medicines such as

interactions, herbal adverse reactions, herbal contraindications, counterfeit & adulterations of herbal medicines/products and other related problems which could increase their morbidity, mortality, admission to the hospitals, increase the length of hospitalization, increase the cost of therapy as well as affecting their quality of life [1,4-14]. There is a lack of studies about the attitude and practice of physicians toward the integration of herbal medicines into patient care practice. Therefore, the aim of this study was to explore the attitude and practice of Yemeni physicians toward the integration of herbal medicines into patient care practice and the factors affecting the attitude and practice.

Methods

Study design

A cross-sectional study was conducted over a period of four months, from January 2019 to April 2019, among physicians in Sana'a, Yemen.

Definitions used in this study

Herbal medicine

World Health Organization (WHO), 2002 defined herbal medicine as "Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products. In some countries, herbal medicines may contain, by tradition, natural organic or inorganic active ingredients that are not of plant origin (e.g. animal and mineral materials) [5].

Traditional use of herbal medicines

"refers to the long historical use of these medicines. Their use is well established and widely acknowledged to be safe and effective, and may be accepted by national authorities" [5].

Integration of herbal medicines into patient care practice

Prescribe or recommend using herbal medicines besides other pharmacological interventions.

Study tools and interview process

A tool was developed by the authors and validated by three university lecturers, then distributed to five physicians for additional validation; the final form consists of four parts as follows: part one included quantitative questions related to the demographic characteristics of respondents, qualifications and experience. Part two included quantitative questions related to herbal use, prescribing practice and education. Part three: consisted of a qualitative interview with a representative sample of physicians to explore the attitude and practice toward the integration of herbal medicines into patient care practice in Yemen and the factors affecting the attitude and practice. Part four: consisted of a focus group interview with six physicians to explore the attitude toward the integration of herbal medicines into patient care

practice in Yemen. Convenience sampling was used to enrol physicians in the study until no new data were obtained and saturation was reached after 25 interviews.

Ethical approval

This research was approved by MoH and Azal University for Human Development as part of the Complementary, Alternative and Integrative Medicines in Yemen project. Furthermore, written consent was also taken from the respondents. Questions related to personal information were avoided.

Statistical analysis

Data were entered and analyzed using SPSS version 21 (SPSS Statistics for Windows, version 21.0, IBM Corp., USA). The qualitative part was manually analyzed then summarized all transcripts.

Results

A total of 25 physicians were interviewed. There were males, and the mean age was 39.84 ± 6.95 years. The characteristics of the study sample are presented in **Table 1**.

Table 2 shows the herbal medicines use

[Insert table 1 here]

[Insert table 2 here]

Attitude practice towards integration of herbal medicines

In the individual interviews/focus groups, interview questions were asked about the attitude towards the integration of herbal medicines into the patient care process. Analysis of the interviews showed that 14 physicians' attitude was positive towards herbal medicines integration, and they believed that herbal medicines were/will contribute effectively to the outcome of treating their patients. The physicians were asked whether they would recommend the integration of herbal medicines into the Yemeni health care system. Analysis of the interviews showed that: 14 physicians were recommending the integration; 11 physicians preferred not to integrate herbal medicines into the health care system in Yemen.

Integration of herbal medicines practice

In the individual interviews/focus groups, interview questions were asked about the practice of integrating herbal medicines into the patient care process. Analysis of the interviews showed that 14 physicians integrated herbal medicines and recommended herbal medicines to their patients. The physicians were asked about the factors/reasons affecting their decision to recommend/not recommend herbal medicines to their patients. Analysis of the interviews showed that: the severity of the disease/condition, evidence-based/rationality of using herbal medicines, experience/personal use and

attitude towards herbal medicines were the most common factors affecting physicians' decisions on the integration/recommendation of herbal medicines use.

Discussion

There are very few studies worldwide about the attitude and practice of physicians towards integrating herbal medicines into their patient care practice. However, this study's aim was to explore the attitude and practice of Yemeni physicians toward the integration of herbal medicines into patient care practice and the factors affecting the attitude and practice. The finding of this study showed that the study physicians were used herbal medicine on a daily and weekly basis for many reasons, and this is could due to the traditional use of herbal medicine in Yemen; herbal medicine is part of Yemeni culture since ancient times and people using herbal medicines on daily bases for many reasons [8]. The finding of this study showed that the most common herbal medicines used by physicians were: Khat, capsicum, mint and mixed herbs (100%) and other herbs, and this could be due to the traditional/social use of these herbs in Yemen. The findings of this study show that the attitude of 56 % was positive towards the integration of herbal medicines. Furthermore, they recommended herbal medicines to their patients. The attitude and practice were influenced by many factors, such as the severity of the disease/condition, evidence-based/rationality of using herbal medicines, and experience/personal use; evidence-based practice is the key to improving medication safety practices, which contributes effectively to: achieve the therapy desired outcomes; decrease the admission to the emergency departments/hospitals; decrease the length of hospital stay; decrease the cost of illness; improve the quality of patient's life; improve the satisfaction towards the health care system [24].

Conclusion

Herbal medicine use was common among physicians in Yemen. More than half of this study's participants had a positive attitude towards integrated herbal medicines, and they recommended herbal medicines to their patients.

Declarations

Conflict of interest

There is no conflict of interest

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Tables

Table 1. Sociodemographic characteristics

Variable	Frequency (%)
Gender	
Male	25 (100 %)
Qualifications	
Bachelor	2 (8 %)
Higher	23 (92 %)
Graduation country	
Yemen	24 (96 %)
Others	1 (4%)
Workplace	
Hospital	12 (48%)
Clinic	13 (52%)
Rank	
General practitioner	4 (16%)
Specialist	9 (36%)
Consultant	12 (48%)
Experience	
10 years or more	11 (44%)
Less than 10 years	14 (56 %)
Age	
Mean ± (SD)	39.84 ± 6.95
Experience	
Mean ± (SD)	13.16 ± 7.67

Table 2. Herbal medicines use related questions

Variable	Frequency (%)
Herbal medicines use during the last six months	
Yes	25 (100 %)
No	0 (00 %)
Number of herbal medicines during the last six months	
Two to five	25 (100 %)
Mean ± (SD)	3.40 ± 0.645
Frequency of using medicines	
Daily	12 (48%)
Weekly	13 (52%)
What was (were) your reason(s) of herbal medicines use?	
1. Experience	25 (100 %)
2.. Personal convenience	25 (100 %)
3. Cost of herbal medicines	4 (16%)
4. Knowledge about symptoms and medications	25 (100 %)
5. Efficacy of herbal medicines	16 (64%)
6. Safety of herbal medicines	14 (56 %)
For which of the following complaint(s)/conditions did you use herbal medicines?	
Gastric symptoms (Diarrhea/constipation/ indigestion)	
ENT	
Respiratory symptoms	14 (56 %)
Pain (Muscles, others)	11 (44%)
Fatigue	12 (48%)
Tonic	11 (44%)
	16 (64%)
	25 (100 %)

Type of herbal medicines used during the last six months?

1. Khat (<i>Catha edulis</i>)	
2. Garlic	25 (100 %)
3. Black seeds	9 (36%)
4. Cumin	12 (48%)
5. Fennel seeds	4 (16%)
6. Anise	9 (36%)
7. Mint	9 (36%)
8. Capsicum (Green chili, red chili, powder chili)	25 (100 %)
9. Fenugreek	14 (56 %)
10. Ginseng	11 (44%)
11. Thyme	5 (20%)
12. Mixed herbs (With/without honey)	2 (8 %)
	23 (92 %)

Sources of obtaining herbal medicines

Herbal shops	
Pharmacy	23 (92 %)
Others	5 (20%)
	23 (92 %)

Sources of information on herbal medicines

Experience	23 (92 %)
Books	14 (56 %)
Internet	12 (48%)
Media/advertisements	9 (36%)