



Consumer behavior of herbal medicine products among some Agriculture college students

Kwestan Faris Anwar, Chro Mofaq Muhyadin

College of college of Agriculture Engineering Sciences, Field Crops Department
Supervised by : Dr.Ali Mala Khedir Galalae, Assist. Lecture Arian M. Abdullah

Introduction

The flowers discovered in the tomb of Shanidar IV of the Neanderthals have powerful medicinal properties. Based on the results, it is more likely that this possibility was the driving force behind choosing plants for burial instead of an aesthetic one. Furthermore, Flowers may have been used for therapeutic purposes during Neanderthal era. (Abbott, 2014; Lietava, 1992).

Medicinal plants are used for therapeutic and disease prevention purposes, but can pose risks depending on the conditions of consumption. thus, Plants are important sources of medicine for thousands of years and are the most important source of life saving drugs for majority of the worlds' population , while, Herbal medicine is a traditional practice of using plants for medicinal purposes.(Keykubat, 2016;Petrovska, 2012).

Iraq has 3300 species of plants, many of which are edible and endemic, making it a treasure. additionally, Wild herbs from Iraq are used for medicinal purposes, flavor, nutritional value, and variety.

The study aims to identify ethnobotanical use, reason for consumption, and students' beliefs and knowledge of its effects among agricultural engineering students.

Material and Methods

135 individuals were identified from the study area. Among them were students of a third stage (all departments) and a fourth stage that included departments (field crops, plant protection, food technology and Animal resources), the data collected from these individuals reflects the entire community. Finally, a question was developed with the students (face-to-face questionnaire) to determine their view on the use of traditional folk remedies and the promotion of the preservation of botanical diversity and indigenous knowledge. In addition, the criteria for selecting individuals was a face-to-face interview; All interviews were conducted in English with explanations and explanations in Kurdish (or according to the participant's language). The questionnaires were distributed randomly to the participants without their knowledge of herbal medicine and the traditional health care system.

Data edited and coded to get ready for analysis, and the data was entered into the computer using software programs such as EXCEL and Statistical Packages for Social Sciences (SPSS) was used by the researcher to analyses the data.

Results and Discussion

People should be educated on the proper use and dose of medicinal plants, and made aware that they are permeable resources, especially for younger generations.

Table. 1a . Socio-demographic characteristics of respondents (n=135)

Variables	Descriptions	Frequencies	%
Gender of respondents	Male	49	36.3
	Female	86	63.7
Marital status of respondents	Divorced	2	1.5
	Married	10	7.4
	Single	123	91.1
	Arab	1	0.740
Nationalism	Kurd	130	96.29
	Turkmen	4	2.962
Undergraduate stages(Classes)	Third class	94	69.6
	Fourth class	41	30.4
Total		135	100

Table 2. Use and growing of medicinal and aromatic plants

Variables	Description	Frequency	Percent
Do you propagate (growing) the native medicinal plants in your garden?	No	73	54.1
	Yes	62	45.9
Have you ever use traditional herbal medicines before?	Yes	62	45.9
	No	73	54.1
Total		135	100

Table. 3 How have you learned to use medicinal plants?

Variables	Frequency	Percent
By book/magazine	21	15.6
By family member	34	25.2
friends	13	9.6
Internet	49	36.3
Media	18	13.3
Total	135	100.0

Table. 4 Do you agree with medical quality drugs in KRG?

Descriptions	Frequency	Percent
No	51	37.8
To some extend	39	28.9
Yes	45	33.3
Total	135	100.0

Table 5. Which of the following methods do you prefer, when you get ill (sick)?

Variables	Frequency	Percent
First Herbalist and then Hospital	6	4.4
Herbalist	8	5.9
Hospital and then Herbalist	10	7.4
Hospital	111	82.2
Total	135	100.0

Sample of questionnaire.

QUESTIONNAIRE FORMAT FOR ETHNOMEDICBOTANICAL STUDY
Dear Sir / Madam
We are currently a BSc. Final class from Salahaddin University-Erbil, College of Agriculture Engineering Sciences, Department of Field crops and Medicinal Plants.
My research is about (Changing Consumer behaviour of Herbal Medicine Products). Participation in this interview is voluntary, and data confidentiality of participant is taken into account thus, names are not expected to be mentioned. I highly appreciate your time and value your information for this research. This questionnaire takes 15-20 minutes of your precious time. If you feel uncomfortable or wish to skip a question, kindly inform me.
Kind regards
Kwestan Faris Anwar and Chro Mofaq Muhyadin
Part One: Background Information
Gender: Male Female
Age: _____
Education level: Second class Third class Fourth class
Marital Status: Married Single Divorced
Department: Horticulture Dept. Forestry Dept. Plant Protection Dept. Soil & Water Science Dept. Animal Resources Dept. Field Crops and Medicinal Plants Dept. Food Technology Dept. Fish Resources and Aquatic Animals Dept.
Monthly income (QOD) less than 100,000 101,000-200,000 201,000-300,000 301,000-400,000 401,000-500,000 more than 501,000
Religion: Islam Christian Yezidi Others
Nationality: Kurd Arab Yezidi Turkmen Christian Others
The place of your living (location): Village _____ District _____ Town _____
Part Two:
1. Please answer the following by (Yes) or (No) by tick (✓)
Question: Do you have a social insurance? Yes No
2. Do you propagate (growing) the native medicinal plants in your garden? Yes No
3. Do you have the native herbal plants in your garden? Yes No
4. Have you ever used traditional medicine before? Yes No
5. Do you suggest to your friends to use medicinal plants? Yes No
6. Have you ever noticed any healthy problem because of using the medicinal plants? Yes No
7. Do you use medicinal plants for medicine or food purposes?
 Medicine Food both of them
8. If you use medicinal products, how long have you used?
 Once a day Once a week Once a month Only once
9. How have you learned to use medicinal plants?
 By family member By book/magazine Media Friends Internet
10. Does your financial situation effect on your choice of healthcare provider?
 YES to some extend NO
11. Do you satisfy with KRG health system?
 YES to some extend NO
12. Do you agree with medical quality in KRG?
 YES to some extend NO
13. For how many years you have used medicinal plants, years
14. How do you assess the level of using medicinal plants in Kurdistan Region?
 Very low Low Average High Very high
15. Which of the local medicinal plants do you use more; mention the name of plants (not more than 5 plants)?
16. Which of the following methods do you prefer, when you get ill (sick)?
Place: _____ Reason: _____
When you get ill (having an ailment), do you take medical drugs at first or you take advantage of (plants) herbs?
 Hospital I feel safe physicians For Expert
 I'll order to be inspected in a wide scale Because I have social security

Conclusion

Herbal products are becoming increasingly popular due to their health benefits, but there is a risk of adverse effects due to lack of research. Research should be conducted with the goal of minimizing error, and medicinal herbs have a lot of options and flexibility for fighting disease.

In addition, scientific information regarding dose, efficacy and contraindications should be provided to consumers. To accomplish this, global harmonization of regulations is required to govern ethical herbal medicine production and marketing. If there is sufficient scientific proof of a herb's value, such law should enable it to be utilized correctly to promote its use in order to accomplish these advantages for the promotion of public health and sickness treatment (Ekor, 2014; Wachtel-Galor and Benzie, 2011).

The aim of the research was to identify and document medicine plants, socio-economic aspects of plant resources, and to find out and approximate students' knowledge about their knowledge towards medicinal plants. For this purpose, interviews were conducted with students in different departments and stages of their studies in the College of Agriculture.

The results of the study showed that many of the students believed in going to the hospital instead of going to the herbalist and were also less interested in recording and preserving ethnic folklore and medicinal plants.

References

- 1) Abed, A.H., Abdulwahid, D.A. and Jassim, H.A., (2021). National health systems response to COVID-19 outbreak, Iraq an example. The Medical Journal of Basrah University, 39(1): 1-6.
- 2) Hossain, S.M., Al-Dahir, S., Majeed, Y., Rahi, A., Sabaratnam, V., Al-Mulla, T., Hossain, O., Aldahir, A., Norton, R. and Lami, F., (2022). Evaluation of dedicated COVID-19 hospitals in the pandemic response in Iraq: pandemic preparation within a recovering healthcare infrastructure. BMJ global health, 7(Suppl 3), p.e008715: 1-7.
- 3) Karabak, S., (2017). Economic and socio-cultural importance of edible wild species. Anadolu Ege Tarımsal Araştırma Enstitüsü Dergisi, 27(2): 26-38.
- 4) Sezen, Işık; Demircan, Neslihan; Karaoğlan, Esen Sezen., (2018). Biodiversity and Urban Gardens: Medicinal and Aromatic Plants That Can Used In Erzurum (Turkey) Urban Gardens. Mimarlık Bilimleri ve Uygulamaları Dergisi (MBUD), 3.2: 81-88.