

Herbal Treatment, Usage Frequency, Types and Preferences in Tikrit city, Iraq

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Abstract

Alternative treatment usage is increasing around the world although treatment methods are becoming more modern and more drugs are made available. A cross sectional study was conducted to determine the incidence of treatment with herbs as an alternative treatment method in Tikrit city and the reasons for its usage. in a sample (number =1268) in the age group (20 – 50) years. duration of the study extended from the January 1, 2011 to December 31, 2011. In Tikrit there were 15 herbal stores ,and 35 pharmacies deal with herbal treatment such as nettle, St. John's wort, rosemary, garden sage and hawthorn, oleander and thyme. The study was carried out with a questionnaire to persons who had received preliminary information. After the subjects were informed of the study, the analysis of medicinal plants by the participants. Nine hundred sixt two(75.9%) of those participating in the study reported that they had used a herbal medication at least once. The main health problems leading to the usage of herbal medication for their treatment was hair loss - hair care, hemorrhoids, skin care, peptic ulcer - gastritis and infertility. The main reason for interest in herbal treatments was "hoping to find a herbal medicine which could help treat their condition". People living in Tikrit city has a high rate of alternative medicine usage and regular studies are required to show changes over time.

العلاج بالإعشاب تعدد استعمالاته، أنواعه، والمفضل منه في مدينة تكريت، العراق

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المستخلص

استعمال العلاج البديل يتزايد حول العالم بالرغم من ان طرق العلاج أصبحت أكثر حداثة وتوفر العديد من الأدوية المصنعة. الدراسة المقطعية هذه أجريت لتحديد نسبة العلاج بالإعشاب، طرق العلاج البديل في مدينة تكريت وأسباب استعمالاته. العينة (عددها=1268) للفترة العمرية (20-50) سنة. مدة الدراسة امتدت من الأول من كانون الثاني 2011 الى نهاية كانون الأول 2011. في مدينة تكريت هناك 15 معشب طبي و 35 صيدلية يتعاملون بطب الاعشاب كالأقراص، حشيشه الملك، إكليل الجبل، مريمية الحدائق، الزعرور البري، الدفلى، والزعتر. الدراسة أجريت باستعمال الاستبيان سؤل للأشخاص بعد إعطائهم بعض المعلومات البسيطة. تسعمائة واثان وستون (75.9%) من مجموع المشاركين في هذه الدراسة اثبتوا بأنهم استعملوا العلاج البديل مسبقا ما يقارب مرة واحدة. المشكلة الصحية الرئيسية المؤدية إلى استعمال العلاج البديل كانت تساقط الشعر - العناية بالشعر، البواسير، العناية بالبشرة، قرحة المعدة، -التهاب المعدة والعقم. السبب الرئيسي للرجبة في استعمال العلاج بالأعشاب كان "الرجبة بإيجاد دواء عشبي باستطاعته علاج حالاتهم". سكنة مدينة تكريت لديهم معدل عالي لأستعمال العلاج البديل وهناك حاجة لأجراء دراسات أخرى لملاحظة أي تغييرات مع الوقت.

Introduction

Alternative treatment methods have been used for the treatment of disease and to improve health for hundreds of years. Studies on the incidence of alternative treatment usage in the community have shown a constantly increasing rate ^[1]. It is reported that (42.1%) of the U.S. population use alternative treatment methods ^[2]. Another study from the same country has revealed that (33.8%) of the people spend more on alternative treatment methods than they do on conventional treatment methods ^[3]. The rate of using an alternative treatment method at least once is (48%) in Australia, (70%) in Canada, 38% in Belgium, (90%) in Germany and (75%) in France ^[4]. Some local studies in treatment centers, mostly concerned with chronic disease, have shown that alternative treatments were used by a high percentage of the patients. For example, studies on cancer patients have shown alternative treatment usage rates are (41.1%), (50.0%) and (61.0%) ^[5, 6, 7]. Plants were the most commonly used alternative treatment methods in all three studies. Another study with allergic patients has shown that (38.0%) use alternative treatment methods, usually with plants ^[8]. Although modern treatment methods are being developed rapidly and many new drugs are produced, patients seem to use alternative treatment methods at an increasing rate ^[2, 4]. The main reasons for this tendency are: (a) dissatisfaction with the results obtained from health careers and related institutions, (b) discomfort because of the side effects of drugs and other treatment methods, (c) financial cost of the treatment (especially medication) and care services, (d) not having a say in their health status and their treatment and (e) treatment that is technological and not individualized ^[9, 10]. However, not being able to access health care should also be seen as an important factor for the usage of alternative

treatment methods, especially in developing countries. For example, the percentage of those who are not able to access health care and use alternative treatments is about 80% in Africa ^[4]. Another aspect of alternative medicine methods is that they have cultural and traditional properties. Some alternative treatment methods may therefore be kept locally and the usage rates found by studies may be much lower than the actual rate ^[2, 4]. The preferred alternative treatment method changes from country to country. While acupuncture is used commonly across the world ^[4, 11], the most commonly used alternative treatment methods in the U.S.A. and Canada are massage, chiropractic manipulation, vitamin-mineral support and acupuncture ^[3, 12, 13]. There are limited previous studies in Iraq about the herbal medicine usage. This study therefore aimed to determine the rate of herbal medicine usage in Tikrit city and why and how it was used.

Materials & methods

The study is cross section of the descriptive type was carried out from the first of January 2011 to the end of December 2011. A total of 1268 people in the age group (20-50) years, were included in this study, a specific questionnaire was prepared for the data collection. The participants were asked about their demographic characteristics then about their preferred herbal treatment methods, any herbal treatment methods for cancer treatment they knew of or had heard of. The results of participants under 18 were not recorded and not included in the study. MS Access software and SPSS for Windows version 11.0 was used to evaluate the results. The questionnaire are shown in Table 1. Nine hundred sixty two of the (1268) study subjects answered the questionnaire but (306) responded that they had never used herbal treatment methods and did not continue with the other sections. As

a result, the completed questionnaires of 962 subjects were considered valid and included in the study. This shows that (75.9%) of the participants had used a herbal treatment method at least once. Of the 962 participants, 466 (48.4%) of them were female and 496 (51.6%) male with an average age

of 31.3 ± 9.1 (30.6 ± 8.8 for the females and 32.0 ± 9.5 for the males). We had participants from all Tikrit city. Most participants were from center of Tikrit city, Alqadicia, and areas around Tikrit city (17.5%, 13.7% and 10.9% respectively).

Table (1):- The questionnaire.

1. Age: years
2. Sex: Male Female
3. Your province
4. Have you ever used a herbal treatment method? Yes..... No.....
5. Why are you interested in herbal alternative treatment methods?
 - a) For treating a condition in myself or someone I know
 - b) Because I am, or someone I know is, ill at present and I do not believe that the medication used to treat the condition will provide any benefit
 - c) Because I believe I can lead a healthier life by using herbal methods
 - d) Because I do not trust drugs and modern treatment methods
 - e) Because I don't have the financial means or social support to purchase f) Because I am interested in herbal treatment
6. What herbal treatment methods, if any, are used for cancer treatment in your community?

Results

The (962) persons successfully completing the questionnaire also recorded their primary concerns about medical herbs and medical conditions which they look for herbal treatment. Associated or similar conditions or health problems that the participants obtained information on were grouped. The conditions/health problems the participants were most interested in were hair loss and hair care, hemorrhoids, skin care, peptic ulcer, gastritis and infertility (**Table 2**). The participants were most interested in the medicinal plants were nettle, St. John's wort, rosemary, garden sage and hawthorn (**Table 3**). 206 participants answered the question "What herbal treatment methods are used in your community for treatment of cancer?".

The ten plants used most frequently in the community for cancer treatment were (in order of reported frequency) nettle, oleander, thyme, flaxseed, garlic, mint, cabbage, fennel, dog rose and mistletoe. Nettle was reported by (44.9%) of those responding to this question (**Table 4**). The participants were asked why they were interested in herbal treatment methods and the most common answer with (32.6%) was that they hoped it would help the treatment of themselves or someone they knew. Using herbal treatment for financial reasons was the least frequent answer at (3.8%). It was interesting that (26.9%) of the participants stated that they did not have a health problem at the moment and were interested in herbal treatment only because they were curious about the subject (**Table 5**).

Table (2):- The 10 Most Commonly Studied Conditions/Health Problems.

Condition/Health Problem	Number Studied	Percentage Among Diseases Studied
Hair loss and hair care	1245	5.40
Hemorrhoids	265	4.10
Peptic ulcer - gastritis	896	3.88
Skin care	804	3.49
Infertility	522	2.26
Obesity	318	1.38
Rheumatoid disease	280	1.21
Constipation	274	1.18
Insomnia	261	1.13
Cancer	245	1.06

Table (3):- The 10 Medicinal Plants Examined Most Frequently

Medicinal Plant (Latin name)	Common Name	Number of Times Examined	Percentage Among Conditions Examined
Urtica spp (U. Dioica & U. urens)	Nettle	585	4.38
Hypericum perforatum	St. John's wort	265	1.99
Rosmarinus officinalis	Rosemary	243	1.82
Salvia officinalis	Garden sage	202	1.51
Crataegus spp	Hawthorn	195	1.46
Melisa officinalis	Lemon balm	193	1.45
Thymus vulgaris	Thyme	184	1.38
Capparis spinosa	Caper	182	1.36
Matricaria chamomilla	Chamomile	177	1.33
Cinnamomum zeylanicum	Cinnamon	168	1.26

Table (4):- The Top 10 Plants Reported as being used for Cancer Treatment(among 206 participants)

Medical Name (Latin name)	English name	Number	Percentage
Urtica dioica	Nettle	92	44.9
Nerium oleander	Oleander	11	5.7
Thymus vulgaris	Thyme	10	4.9
Linum usitatissimum	Linseed	10	4.6
Allium sativum	Garlic	8	4.3
Mentha spicata	Spearmint	8	4.3
Brassica oleracea	Cabbage	8	4.0
Foeniculum vulgare	Fennel	7	3.8
Rosa canina	Dog rose	7	3.8
Viscum album	Mistletoe	7	3.8

Table (5):- Distribution of the answers to “Why are you interested in herbal alternative treatment methods?”

Answer Options	Number	Percentage
Because I hope it may be useful for the treatment of myself or someone I know	314	32.6
Because I am interested in treatment using only herbs	259	26.9
Because I believe I will be able to lead a healthier life by using herbal methods	209	21.7
Because I did not observe any benefit of the medication I used or modern treatment methods	75	7.8
Because I do not trust drugs and modern treatment methods	69	7.2
Because I do not have sufficient financial means or social support to purchase drugs	36	3.8
Total	962	100.0

Discussion

Of the (1268) questionnaire sent on the study, (962) (75.9%)of the participants reported that they had used a herbal treatment method at least once. the ages of the subjects that were varied widely (18-83 years),participants were present from Tikrit city and the sex distribution was balanced (48.4% males and 51.6% females). The questionnaire had various sections (history, entertainment, general culture, news, etc.) in addition to health and medicinal plants and this also made it possible to obtain information from the general community. We can therefore say that (75.9%) of Iraqi people over18 years of age have used a herbal medication at least once according to this study. When we compare our results with those from other countries, it is seen that the percentage of those who have used a herbal medication at least once in Iraq is higher than the rate of alternative treatment usage in countries such as the U.S.A., Australia, Canada, Belgium and France ^[2, 4]. The studies carried out in the above countries have determined the rate of usage for all alternative treatment methods and this rate is therefore much higher in Iraq. Although studies on the frequency of alternative treatment usage are usually interested in the treatment of chronic disease such as cancer ^[5, 6, 7] and allergies ^[8] results of this study indicate

that the most common condition for which information was obtained over the year for herbal treatment was hair loss and hair care (5.4%). It may therefore be stated that most of the community is interested in using herbal medication for cosmetic reasons. The main reasons for this may be the emphasis placed on herbal /natural additives in advertisements, the high cost of cosmetic applications, and the common interest in cosmetic applications by rich and poor alike. Hemorrhoids were second in the list of the diseases gathering the most interest with (4.1%) and this could be due to a reluctance to be examined. (Table 2) shows that only (1.06%) of the subjects accessed during the year were related to cancer and other associated conditions. The community seems to be using herbal treatments more for cosmetic reasons and for conditions that could generally be prevented with preventive measures than chronic medical conditions that currently have a high mortality. The most accessed health-related subjects, shown in (Table 2), provide information on both herbal treatments and the general condition of the society. The fact that complaints related to peptic ulcer, gastritis and other similar problems were placed third may be an indication of the preference for spicy, hard-to-digest food containing lots of fat in many parts of the country. Health problems such as infection

and high fever and more serious conditions requiring urgent treatment such as myocardial infarction and angina, were not investigated by the participants and this is a positive indication of the community's approach to health-related matters. Nettle was the medicinal plant investigated most often by the participants throughout the year (**Table 3**). Nettle is also prominent worldwide among the medicinal plants: it has been shown to be the alternative treatment method used most often by cancer patients [5,7], it is consumed as food in many parts of the country [14] and it has been used in many parts of the world to treat conditions such as arthritis, anemia, asthma, diabetes mellitus, hypertension, hemorrhoids, heavy menstrual bleeding, gout, neuralgia, prostate hypertrophy and hair loss [15, 16, 17]. Research has also shown that it has an inducing effect on T-lymphocytes [18, 19]. It will be beneficial to investigate all of these properties of nettle in a comprehensive manner, combine scientifically valid information on its efficacy and usage, to convert the plant into medicinal form if appropriate and enable modern medicine to take advantage of its properties. Other plants frequently investigated by the participants during this study were also plants investigated and used widely worldwide (**Table 3**) [15, 16, 17]. The study regarded that the main reason for using medicinal plants would be chronic diseases with a high mortality rate such as cancer and asked participants "What herbal treatment methods, if any, are used in your community for cancer treatment?" (44.9%) of those participants answering this questions stated that nettle was used for cancer treatment in their community. Most plants used for cancer treatment were generally well-known and studied in (**Table 4**). However some participants agree that the myrtle plant was also used for cancer treatment. This plant has generally been studied in relation to diabetes mellitus treatment [20] and the study did not find any note on its anticancerogenic effect on medicine. When the participants were asked why they were interested in herbal treatment methods, (32.6%) answered that they were

hoping they would help the treatment of themselves or someone they knew (**Table 4**). However, other studies have shown discontent with the healthcare service received as the top reason [9, 10]. While financial difficulties were one of the main reasons for preferring alternative treatment methods in previous studies, they were last among the reasons in this study. The option 'I am not ill but I am interested in herbal drugs to live better', not present in previous studies, was selected by more than (20%) of the participants and may indicate that people want to decide how to improve their health. Although it is commonly believed that most current drugs are synthetic in origin, six of the 20 most commonly prescribed drugs in 1996 were natural products and (50%) of these drugs were associated with natural ingredients, showing the importance of herbal products in drug production and usage [20] [21]. Although herbal drugs are investigated extensively, especially for the treatment of cancer, viral disease and infertility, inadequate information is being released due to the intense competition in the drug industry [21]. Although many researches about herbal treatment done in Tikrit University, comprehensive studies on the community usage of drugs and herbal treatment are therefore extremely important and recommended.

Conclusion

Tikrit city has a higher rate of alternative medicine usage compared to other cities where similar studies have been conducted and comprehensive and regular studies are required to show changes over time. Scientific and academic institutions should take the initiative to prepare comprehensive sources of scientific information on the Internet, one of the easiest ways to access information, in the country's own language to prevent the community from obtaining false information on alternative treatment methods and medicinal plants and being misdirected. used most frequently in the community for cancer treatment were (in order of reported frequency) nettle, oleander, thyme, flaxseed, garlic, mint,

cabbage, fennel, dog rose and mistletoe. Nettle was reported by (44.9%) of those responding to this question.

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