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The Perception and Attitude of Using Herbal Antianxiety and Antidepressant Drugs in Medical Students at Ilam University of Medical Sciences during 2021

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Abstract

Background: According to the more side effects of chemical drugs, it's worthy to let's spend our energy knowing more about medicinal herbs until perception and attitude checking towards the use of herbal antianxiety and antidepressant drugs in medical students of Ilam University of Medical Sciences, Ilam, Iran.

Methods: The present study is a cross-sectional descriptive study. People in the study were 40 medical students at Ilam University of Medical Sciences. The study population was randomly selected from boy and girl medical students. Questionnaires were adjusted based on the partial goals and research questions of design. The questions were designed in three categories of operation, belief, and knowledge about the use of antianxiety and antidepressant herbs.

Results: The results of this study showed that 70% of medical students do not recommend herbs for the treatment of anxiety and depression. And 60% of them prefer to use antianxiety and antidepressant herbs to treat their anxiety and depression. Also, 70% of medical students believe that herbs for anxiety and depression should be prescribed under medical care and 80% of them believe that herbal medicines are effective for anxiety and depression. 65% of medical students have aware that herbs for anxiety and depression are harmless, and 85% of them are aware that medical herbs are effective in treating anxiety and depression. *Hypericum perforatum* L., *Crocus sativus* L., *Rosmarinus officinalis* L., *Matricaria chamomilla* L., *Citrus limon* (L.) Osbeck, *Valeriana officinalis* L., *Lavandula angustifolia* Mill., *Foeniculum vulgare* Mill., Thymbera spicata L., *Echium amoenum* Fisch. & C.A.Mey., *Elissa officinalis* L., *Viola odorata* L., *Satureja khuzistanica* Jamzad and Aloysia aloysioides Loes. & Moldenke are used in both cases of depression and agitation too. Rosemary, Sanibal al-Tayyib, and savory plants are used in anxiety, and lemon, fennel, thyme, and violet performance are used in depression.

Conclusion: In general performance, belief, and attitude of medical students besides the use of anti-anxiety and antidepressant herbs were relatively good, but it's suggested that the relevant authorities pay more attention to this article including the group media and universities.

Introduction

Human has long been accompanied by the phenomena of fear, anxiety, and depression and has always sought to find ways to overcome these problems and alleviate them, and in this way has achieved amazing results, but has not yet achieved complete success [1]. Anxiety is consisting of a Disseminated and ambiguous feeling of fear and anxiety of an unknown source, which affects a person and includes unreliability, inability, and physiological arousal [2]. Although little anxiety can be useful for daily life, more anxiety has serious physical injury, mind, profession, and education [2]. Much and long-term anxiety is usually accompanied by physiological responses such as increased metabolism and cardiovascular function, decreased immunity. Also, there is an important relationship between anxiety and subsequent mortality that indicates the importance of this disorder as an issue in public health and hygiene [3]. Depression is a mood disorder including impatience and running away from inactivity or bloodless and distaste and it can affect person's thoughts, behavior, feelings, happiness, and health [4]. Major depressive disorder is common with a prevalence of about 15% for a lifetime in women is likely to reach 25% [5]. The use of medicinal herbs has a very important place in health and hygiene systems around the world. These plants are consumed in various forms such as fresh, dried, or powdered plants, brewed, boiled, syrups, vegetable oils, and processed essential oils. Medicinal plants in terms of nature and have more proportions with the human body and have wide applications in medicine [6].

Although the use of medicinal plants has been limited by the development of the chemical industry, now, according to the apparent effects of the misuse of chemical drugs for most consumers, the desire to use medicinal plants has increased significantly [7]. Today, the use of medicinal plants has been considered because of easy access and fewer side effects than chemical drugs. Most herbal medicines enter the market without standard tests and public perception is that these medicines are nontoxic and for various reasons are used by many people and cause side effects [8]. Acquaintance the Health benefits of medicinal plants as well as the harms of modern therapies have encouraged people to use medicinal herbs. Many studies have specified special medicinal plants and their effectiveness in the treatment of specific diseases and many articles have been published in this connection [9]. Medicinal plants have long been of special interest to people because of their therapeutic use and have unique, valuable properties and therefore have been highly regarded to this time [10]. Medicinal herbs, chemical and natural products produced from it has a long time ago key role in the prevention and treatment of human diseases. Considering the above and the many side effects of chemical drugs, it's worthy to spend our energy to know more about medicinal plants to examine the knowledge and attitude towards the use of herbal antianxiety and antidepressant drugs in medical students at Ilam University of Medical Sciences.

Methods

The present study is a cross-sectional descriptive study. The subjects were 40 medical students at Ilam University of Medical Sciences. The study population was randomly selected from boy and girl medical students. Questionnaires were regulated based on the specific objectives and research questions of the project. The questions were designed in three categories of performance, belief, and knowledge about the use of antianxiety and antidepressant medicinal herbs. Demographic information of the subjects was also obtained. Answers the sections of knowledge, belief, and practice (Table 1) reported as percentages thus Medicinal herbs used for anxiety and depression were also obtained.

Questions		Yes	No
Function	Have you ever advised anyone to use herbal remedies to treat anxiety and depression? Have you ever been treated with herbal remedies for anxiety and depression? Have you stopped taking herbal remedies for anxiety and depression? Do you prefer to use herbal medicines for anxiety and depression in the treatment of your anxiety and depression?		
Belief	Do you think the use of herbal medicines for anxiety and depression should be under the supervision of a doctor? Do you think the use of medicines herbs for anxiety and depression is only for Iran? Do you believe in herbal remedies for anxiety and depression? Do you believe that herbal remedies for anxiety and depression should be obtained from a pharmacy?		
Knowledge	Do you know any herbal medicines or herbs that can be used as an antianxiety and antidepressant? If yes, please mention the type of disease and the name of the plant? Please name some medicinal plants that are used as antianxiety and antidepressants. Are herbal remedies for anxiety and depression safe? Do you think herbal medicines are effective against anxiety and depression?		

Table 1: Questionnaire of knowledge, belief, and practice about herbal medicines for antianxiety and antidepressant

Results

According to the results, 65% of the participants in the study were men and 35% were women.

Sex	Percent
Men	65%
Women	35%

Table 2: Percentage of the gender of participants in the study

After analyzing the data of the questionnaire, the results of the percentage of performance, belief, and knowledge

of medical students about the use of herbal antianxiety and antidepressant drugs have been determined in Tables 3-5.

Operation	Yes	No
Have you ever advised anyone to use herbal remedies to treat anxiety and depression?	30%	70%
Have you ever been treated with herbal remedies for anxiety and depression?	35%	65%
Have you stopped taking herbal remedies for anxiety and depression?	30%	70%
Do you prefer to use herbal medicines (herbs) to treat anxiety and depression in your anxiety and depression?	60%	40%

Table 3: Percentage of medical students' performance compared to the use of herbal antianxiety and antidepressant drugs

The results of this study showed (Table 3) that 70% of medical students do not recommend herbs to anyone for the treatment of anxiety and depression. Most of them (65%) have not been treated with herbal medicines and 70% of them have not stopped taking the medicines and 60% of them have preferred to use herbal medicines (medicinal herbs) for anxiety and depression.

Belief	Yes	No
Do you think the use of herbal medicines (herbs) for anxiety and depression should be under the supervision of a doctor?	70%	30%
Do you think the use of herbal medicines (herbs) for anxiety and depression is only for Iran?	25%	75%
Do you believe in herbal remedies for anxiety and depression?	80%	20%
Do you believe that herbal remedies for anxiety and depression should be obtained from a pharmacy?	55%	45%

Table 4: Percentage of medical students' belief in the use of herbal anti-anxiety and anti-depressant drugs.

Also, 70% of medical students believe that herbal medicines (medicinal herbs) for anxiety and depression should be under the supervision of a physician. 75% of medical students believe that the use of herbal medicines for anxiety and depression is only for Iran and 80% of them believe that herbal medicines for anxiety and depression are effective. Almost half of the students believe that herbal medicines for anxiety and depression must be preparation from pharmacies, and the other half do not believe in this (Table 4).

Knowledge	Yes	No
Do you know any herbal medicines or herbs that can be used as an antianxiety and antidepressant?	75%	25%
Are herbal remedies for anxiety and depression safe?	65%	35%
Do you think herbal medicines are effective against anxiety and depression?	85%	15%

Table 5: Percentage of medical students' knowledge about the use of herbal antianxiety and antidepressant drugs

75% of medical students are aware of the use or name of herbal medicines or herbs that can be used as an antianxiety and antidepressant. 65% of them have aware that herbal medicines for anxiety and depression are safe, and 85% have aware that herbal medicines are effective in treating anxiety and depression (Table 5).

St. John's wort, saffron, chamomile, lavender, borage, lemon balm, and lemon are used in both cases of anxiety and depression. Rosemary, valerian, and savory are used in cases of anxiety, and lemon, fennel, thyme, and fragrant violet are used in cases of depression (Table 6).

Scientific name	Family Name	Persian name	Antianxiety	Antidepressant
Hypericum perforatum L.	Hypericaceae	St. John's wort	■	■
Crocus sativus L.	Iridaceae	Saffron flower	■	■
Rosmarinus officinalis L.	Lamiaceae	Rosemary	■	-
Matricaria chamomilla L.	Asteraceae	Chamomile	■	■
Citrus limon (L.) Osbeck	Rutaceae	Lemon	-	■
Valeriana officinalis L.	Caprifoliaceae	Valerian	■	-
Lavandula angustifolia Mil L.	Lamiaceae	Lavender	■	■
Foeniculum vulgare Mil L.	Apiaceae	Fennel	-	■
Thymbra spicata L.	Lamiaceae	Thyme	-	■
Echium amoenum Fisch. & C.A.Mey.	Boraginaceae	Borage	■	■
Elissa officinalis L.	Violaceae	Lamiaceae	■	■
Viola odorata L.	Lamiaceae	Lamiaceae	-	■
Satureja khuzistanica Jamzad	Verbenaceae	Savory	■	-
Aloysia aloysioides Loes. & Moldenke	Violaceae	Lemon Beebrush	■	■

Table 6: List of medicinal herbs used in anxiety and depression by medical students of Ilam University of Medical Sciences

Discussion

The results of our study identified medicinal plants such as *Hypericum perforatum* L., *Crocus sativus* L., *Rosmarinus officinalis* L., *Matricaria chamomilla* L., *Citrus limon* (L.) Osbeck, *Valeriana officinalis* L., *Lavandula angustifolia* Mill., *Foeniculum vulgare* Mill. , *Thymbra spicata* L., *Echium amoenum* Fisch. & C.A.Mey., *Elissa officinalis* L., *Viola odorata* L., *Satureja khuzistanica* Jamzad and Aloysia aloysioides Loes. & Moldenke are used in cases of anxiety and depression in Ilam.

It has been determined that the most important compounds of *Hypericum perforatum* L include hypericin and cis-p-menth-3-en-1,2-diol [11]. It has been determined that safranal and crostin are among the most important compounds of *Crocus sativus* L [12]. In phytochemical studies, it has been determined that the most important compounds of *Rosmarinus officinalis* L include alpha-pinene, 1- and 8-cineole, verbanone, and camphor [13]. In phytochemical studies, it has been determined that one of the most important compounds of *Matricaria chamomilla* includes alphabisabolol [14]. The results of a study revealed that one of the most important compounds of *Citrus limon* plant includes protein [15]. The results of a study revealed that the most important compounds of *Valeriana officinalis* L include phenolic compounds [16]. It has also been identified medicinal plants such as *Foeniculum vulgare*

Mill., *Thymbra spicata* L., *Echium amoenum* Fisch. & C.A.Mey., *Elissa officinalis* L., *Viola odorata* L., *Satureja khuzistanica* Jamzad and Aloysia aloysioides are rich in phenolic, flavonoid and antioxidant compounds [17-22]. Although the use of medicinal herbs has been limited by the development of the chemical industry but recently in all the world, special attention has been created to these resources for the treatment of diseases. For this purpose, its worthy of more tries should be made to introduce the benefits of medicinal plants to the people. The goal of this study was to determine the level of knowledge, belief, and practice of medical students at Ilam University of Medical Sciences about the use of medicinal herbs and to try to identify the existing problem and suggest measures to correct this situation. Among the factors affecting attitude and awareness is lack of academic education and insufficient research [23]. Lack of access to accurate information is another factor affecting knowledge about the use of herbal medicines [24]. The transmission of traditional medicine information is a mixture of inheritor experiences from one generation to another which despite the advanced methods of communication is still quoted in the same old ways of course with thousands of mistakes [25]. Today, the use of medicinal herbs in developed countries is increasing rapidly [26]. The number of traditional healers in the United States and China is 90 thousand and 560 thousand respectively [27]. This is one of the reasons for the good attitude and belief and awareness of the community about the use of medicinal plants. The results of a study showed that 52.2% of the statistical population of the Sanandaj medical community have a positive attitude towards prescribing herbal medicines. 81.4% of them prescribe at least one item of herbal medicine [28]. The results of studies conducted in France and Denmark showed that physicians in these countries showed that 31 and 12 prescriptions of their prescriptions contain at least one herbal medicine [29].

People in Abhar city (northwest of Iran) use Conium maculatum for migraine pain and headache, *Grammosciadium platycarpum* as a muscle relaxer, Cota tinctoria and *Descurainia sophia* as sedatives, *Herniaria hirsute* and *Lotus corniculatu* as antidepressant, *Lamium amplexicaule* L. as an analgesic, Mentha longifolia for headache [30]. *Hypericum perforatum* L., Origanum vulgare, Ballota nigra, Rosa canina, Papaver orientale & *Lotus corniculatus*, *Asperula odorata* are used to treat pain, migraine, nerve weakness, insomnia stress in Arasbaran region, northern Iran, respectively [31]. *Heracleum persicum*, *Kelussia odoratissima* and *Pimpinella anisum* are used as sedatives, *Sinaps nigra* L. and *Stachys lavandulifolia* as appetite stimulants, *Cynodon dactylon* as hypnotics and *Crataegus curvisepal* as anti-anxiety and stress drug in Khuzestan, south of Iran [32]. *Allium akaka Gmelin* is used as an appetite stimulant, *Echium italicum* L. and *Hypericum scabrum* L. as a sedative in Ilam, Iran [33]. People of Sistan region, located in the south-east of Iran, use *Datura innoxia* Mill. and *Solanum nigrum* for their sedative property, Mentha longifolia as appetite stimulant, Portulaca oleracea to treat migraine [34]. Medicinal plants are used as effective medicinal products in the treatment of all kinds of diseases, especially nervous and mental diseases, and they have a therapeutic effect [35-40].

According to the average knowledge about the use of antianxiety and antidepressant drugs in medical students, the establishment of educational and research centers in the field of herbs to increase awareness of herbs or herbal medicines is recommended.

Competing Interest

The authors declare that there is no conflict of interest.

Author Contributions

Samira Shokri: Data analysis
Kourosh Saki: Monitoring of research
Yeganeh mazaheri and Samira Shokri: Drafting
Gholamreza Jahed khaniki: Manuscript scanning
Samira Shokri: Data evaluation

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