

The Study of the Five Best Medicinal Herbs

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دراسة استبائية لأفضل خمسة أعشاب طبية

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المخلص

هدفت هذه الدراسة إلى تحديد أفضل خمس أعشاب طبية واستخداماتها العلاجية. أجريت الدراسة في الفترة ما بين 2 أكتوبر الي 30 ديسمبر 2024. تم اختيار 35 عينة عشوائياً لتحديد أهمية الأعشاب الطبية واستخداماتها. أظهرت نتائج الدراسة الحالية أن استخدام الأدوية العشبية في علاج الأمراض يمثل 63٪ من الإجمالي، مقارنة باستخدام الطب الحديث بنسبة 40٪. وبالتالي، فإن هذا يوفر أملاً لاستخدام الأعشاب الطبية في العلاج. كما نجد أن المرضى أقل وعياً بالآثار الجانبية للأدوية الطبيعية مقارنة بالآثار الجانبية الكيميائية بنسبة 43٪. كما تؤكد الدراسات أيضاً إمكانية استخدام الأعشاب لعلاج بعض الأمراض بنسبة 38٪، ومدى اهتمام المواطنين الليبيين باستخدام الأعشاب للعلاج بنسبة 54٪، وجدوة العلاج بالأدوية العشبية مقارنة بالطب الحديث بنسبة 60٪. والتعرف على أهمية العلاج بالأعشاب الطبيعية في علاج بعض الأمراض، وبيان الآثار الجانبية القليلة للطب العشبي مقارنة بالآثار الجانبية للطب الكيميائي، والتأكيد على فكرة أن الطب الطبيعي هو أساس الطب الكيميائي، وأن آثاره الجانبية قليلة.

الكلمات المفتاحية: أعشاب طبية، التداوي، الحديث، الكيماوي، الامراض.

Abstract

This Study aimed to identify the top five medicinal herbs and their corresponding therapeutic uses. The study was conducted between 2 October To 30 December, 2024. A total of 35 samples were randomly selected to determine the importance of medicinal herbs and their uses. The results of the current study showed that the use of herbal medicine in treating diseases accounted for 63% of the total, compared to the use of modern medicine at 40%. Therefore, this provides hope for the use of medicinal herbs in treatment. We also find that patients are less aware of the side effects of natural medicines compared to those of chemical medicines, at 43%. Studies also confirm the possibility of using herbs to treat certain diseases at 38%, the extent of Libyan citizens' interest in using herbs for treatment at 54%, and the feasibility of treatment with herbal medicine compared to modern medicine at 60%. And to recognize the

importance of treatment with natural herbs in treating some diseases, and to demonstrate the few side effects of herbal medicine compared to the side effects of chemical medicine and to emphasize the idea that natural medicine is the basis of chemical medicine, and that it has few side effects.

Keywords: herbs, medicinal, recognize, modern, chemical, diseases.

Introduction :

Medicinal plants have been discovered since prehistoric times. Hundreds of chemical compounds with proven or potential biological activity have been synthesized from plants. However, the large number of diverse chemical compounds found in a single plant renders the use of the entire plant ineffective, as it prevents the evaluation of the activities of these compounds, which are also found in many other plants, in scientific research.

The world is now witnessing a growing interest in the use of medicinal herbs. Medicinal plants hold promise for a bright future, with over half a million species, of which only a small number have been studied or utilized in recent years. As modern methods advance, the idea of recognizing the various active compounds within each plant and their chemical surroundings is progressing, which enhances their potential to lead in the pharmaceutical sector .

Research Problem :

- Reliance on medicinal plants to treat many diseases
- Use of medicinal plants in the pharmaceutical industry

The Importance of Research :

- Explaining the importance of medicinal plants in treating many diseases and the importance of these plants in the manufacture of medicines.
- Medicinal plants are defined as plants that possess medicinal benefits and properties capable of healing the human and animal bodies, as well as treating diseases.
- Medicinal plants have been used as a primary treatment for various diseases in many cultures around the world, particularly in Africa and developing countries, where 80% of the world's population still relies on them as traditional medicine to treat numerous diseases.
- Medicinal plants have a wide range of biological characteristics that must be explored, recognized, and recorded to ensure safe usage and provide direction on their application. Certain potent medicinal plants can have adverse effects on both humans and animals, and they may also be toxic, potentially harming essential organs [1].
- Making Medicines from Herbs and Medicinal Plants:
- Medicines are made from herbs and medicinal plants in a variety of ways. Some are easy and simple to make at home, while others require medical knowledge and special tools [1] .

Including:

1. Medicinal Herb Juice : Here, the plants and herbs are fresh and not dried. They are cut or crushed, and the juice is extracted and stored in sealed containers away from air in a cool place.
2. Medicinal Herb Syrup : Made by cooking the extracted juice above. This syrup is boiled until it thickens, then cooled.

3. Medicinal Herb Oils : Essential oils can be obtained through various methods, with steam distillation being the most significant. In this process, steam aids in breaking down the plant materials, allowing the essential oils to be released and gathered in a different container.

The five most important medicinal herbs are:

1. Ginger
2. Thyme
3. Chamomile
4. Turmeric
5. Cloves [1]

Ginger :

A tropical plant species from the Zingiberaceae family, it has a strong, pungent taste. Its roots contain volatile oils and another group called aryl alkanes, which includes :

- Gingerol, a medicinal compound responsible for ginger's hot taste.
- Shogaol, a spicy substance that aids in fat digestion [2].

Types of Ginger

There are many types of ginger.

- Yellow ginger
- Green ginger
- White ginger
- Blue ginger

Some of them are divided according to their growing region as follows:

- Local ginger (rasen)
- Persian ginger
- Shami ginger
- Persian ginger
- Indian ginger
- Malaysian ginger [3]

Benefits of Ginger :

The ginger from which we derive its therapeutic benefits is dried ginger soaked in cold water for 9 to 12 hours.

1. Gingerol, which prevents oxidation in the body, prevents menstrual pain in women, and reduces joint pain.
2. Dizziness, nausea, and vomiting, whether caused by high altitudes, seasickness, or post-surgical conditions, are more effectively treated with vitamin B6, particularly in pregnant women experiencing morning sickness.
3. It contributes to the treatment of respiratory infections. Ginger has long been known to play a role in treating respiratory problems, such as nasal and sinus infections (nasal drip), It can also serve as a mouthwash to combat bad breath. Furthermore, it can be utilized as ear drops to alleviate pain.
4. It prevents cancer by acting as an antioxidant and anti-inflammatory agent, which can help reduce the risk of colon cancer.

5. Ginger oil treats split ends, promotes weak hair growth, strengthens hair follicles, and acts as a skin cleanser, giving the skin a radiant and fresh appearance.
6. It treats stomach ailments, acidity, ulcers, colon infections, and disorders, and expels gas.
7. It improves brain function. This characteristic of fresh ginger is linked to its rich supply of B vitamins, which are crucial for brain wellness. [4]

Ginger side effects:

The side effects of ginger are limited to exceeding a daily dose of 5 grams, which can lead to heartburn, cramps, and stomach pain. It also stimulates the gallbladder, so those with gallstones should avoid it.

Chamomile :

Chamomile is a cluster of daisy-related plants that is part of the Asteraceae family. It is an annual plant with yellow flowers surrounded by white flowers. Chamomile has been a staple plant used in medicine for thousands of years

Types of Chamomile :

- Roman Chamomile
- German Chamomile
- Yugoslav Chamomile
- Hungarian Chamomile
- Russian Chamomile
- Czechoslovak Chamomile [5]

Benefits of Chamomile :

Studies suggest that chamomile flowers or chamomile tea may be beneficial in treating certain diseases or symptoms. These benefits include:

- Relieving stress and insomnia
- Muscle relaxation by consuming chamomile tea or applying chamomile oil during massage .
- It plays a role in treating menstrual pain and lower back pain .
- It is used as a mouthwash to treat mouth ulcers caused by cancer drugs .
- Treating children's diarrhea
- It has a role in reducing vomiting and nausea.
- Treating infant colic.
- Relieving heartburn and stomach upset.
- Preventing and relieving haemorrhoid pain.
- Relieving skin inflammation and irritation.
- Treating diaper rash.
- Accelerating wound healing.

Chamomile side effects :

Chamomile is not toxic, but excessive consumption may lead to vomiting and drowsiness [6].

Turmeric

Turmeric is a perennial herbaceous plant from the Asteraceae family. it is used in the manufacture of cosmetics, food colorings, and flavors. Its plant content provides it with high nutritional value .

Turmeric root is widely used in the pharmaceutical industry and has both health and nutritional benefits [7].

Curcumin is a substance used in medicine.

Benefits of Curcumin:

- It is an antioxidant, anti-inflammatory, and toxic to cancer cells. It is an excellent anti-inflammatory, antifungal, antiviral, and antibacterial.
- • It controls blood sugar levels and avoids abrupt insulin spikes, making it an antidiabetic. Note that it can cause hypoglycemia in diabetics .
- It reduces fluorophore toxicity by cleansing the pineal gland.
- Turmeric is known for its benefits for the liver, as it cleanses the liver of toxins by stimulating bile production.
- It also performs the self-destructive function of small fat cells.

Benefits of Curcumin for teeth:

- Because Curcumin has antiviral and antibacterial properties, it helps treat mouth and gum infections, whitens teeth, and treats bad breath. This is why it is used in toothpastes, often mixed with coconut oil.
- Additionally, it lowers the risk of brain illnesses and enhances brain function .

Side effects of Curcumin:

Whether taken orally, topically, or as a mouthwash, turmeric is usually regarded as safe . However, it is contraindicated for:

- Those with gallstones, due to their oxalate content.
- Patients suffering from bleeding disorders, due to its increased blood flow [8] .

Thyme :

A common wild plant with a distinctive aroma, it belongs to the genus Glycyrrhiza, which is part of the Licoriceaceae family , Usually found in rocky and mountainous regions, this perennial plant has many branches . Thyme contains many compounds that make it a multi-important plant, such as thymol oil and oregano .

Types of thyme:

- Lemon thyme (or hybrid).
- Caraway thyme.
- Creeping thyme.
- Wild thyme.
- Common thyme (or common).

Benefits of thyme:

- For the colon and stomach: It reduces bloating, gas, and colon cramps.
- Benefits of thyme for hair: Thyme improves hair growth by improving blood circulation in the scalp and ensuring that hair follicles receive proper nutrition when used as a rinse.
- Benefits of thyme for fatigue and anxiety: Thanks to the presence of vitamin B6, which has a powerful effect on certain neurotransmitters in the brain directly linked to stress and anxiety hormones, it has an excellent calming effect.
- Respiratory system: Thyme is used with honey to treat bronchitis, asthma, nasal congestion, colds, influenza, sinusitis, and seasonal allergies.

Benefits of thyme oil:

- Thyme oil has significant benefits due to its content of two substances, thymol and carvacrol. Thus, thyme becomes one of the most powerful antifungal and antibacterial agents, cleansing the entire digestive system, including the stomach and intestines.
- A powerful bacteria killer, it is used to treat acne.

Side effects of thyme:

- Thyme is generally safe, but excessive use can cause nausea and heartburn. It should be tested for topical use and should be used with caution during the first three months of pregnancy [9]

Clove :

The clove tree(*Syzygium aromaticum*) belongs to the Myrtaceae family. The height of this tropical evergreen tree ranges from 8 to 12 meters. It features a straight trunk with silvery-grey bark that fractures with age, and a dense, pyramidal crown. Its glossy, oval leaves, up to 13 cm long, are dark green with distinct veins. They release a strong, fragrant scent when crushed.

The flowers are clustered in terminal panicles, each small, pinkish-white, with four petals. They bloom twice a year, but the buds (cloves) are picked before they open and have been used as a popular spice in global cuisine and for medicinal purposes for thousands of years.

Originally from Indonesia's Maluku Islands (previously the Spice Islands), this tree is now grown in other tropical countries like Madagascar, Zanzibar, India, and Sri Lanka .

Benefits of cloves as an antioxidant:

In addition to containing many important vitamins and minerals, cloves are rich in antioxidants, which help prevent the development of chronic diseases. Additionally, they contain vitamin C, which the body uses as an antioxidant. They also contain eugenol, which acts as a natural antioxidant.

Benefits of cloves in protecting against cancer:

This is due to the presence of eugenol in cloves, which effectively promotes the death of cancer cells and is toxic to cancer cells.

As an antibacterial:

- It can kill the bacteria known as *E. coli*, a strain of bacteria that can cause cramps, diarrhoea, and fatigue.

Harmful effects of cloves:

High doses of cloves may cause stomach upset. High doses of clove oil may cause tissue erosion [10].

Results:

Herbal medicine is used to treat some diseases , According to recent research, herbal remedies have less adverse effects than chemical ones.

Patients, in general, and particularly Arab patients, are interested in herbal medicine, given the Arab region's richness in medicinal herbs and its long history of use in treating various diseases. Herbal medicine is the basis for many contemporary medications and is used in conjunction with conventional therapy.

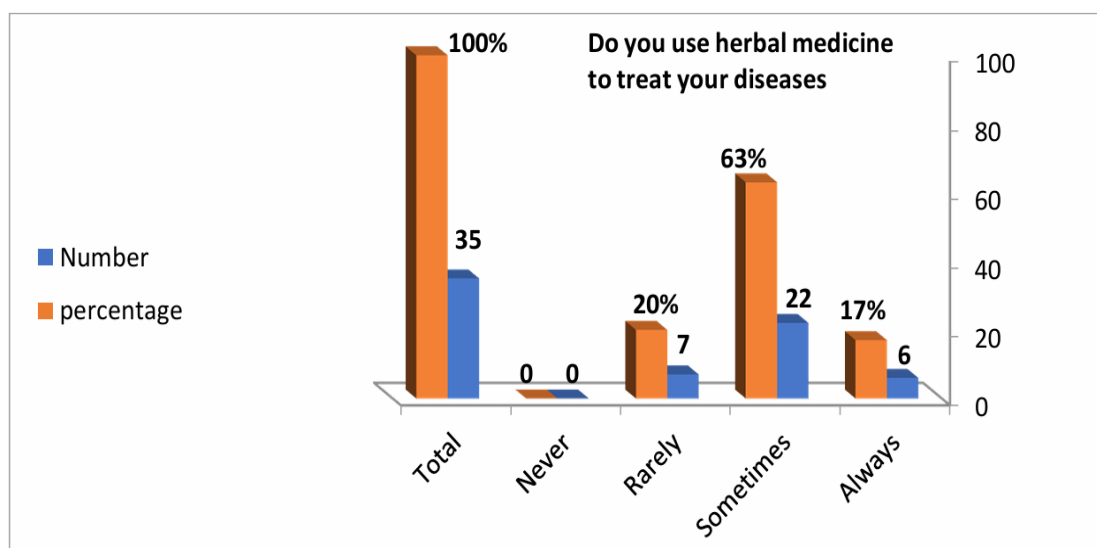


Figure (1) shows the frequency distribution of the use of herbal medicine in treating diseases.

We found that the highest result among the results was the use of herbs in treating diseases, which accounted for 63%.

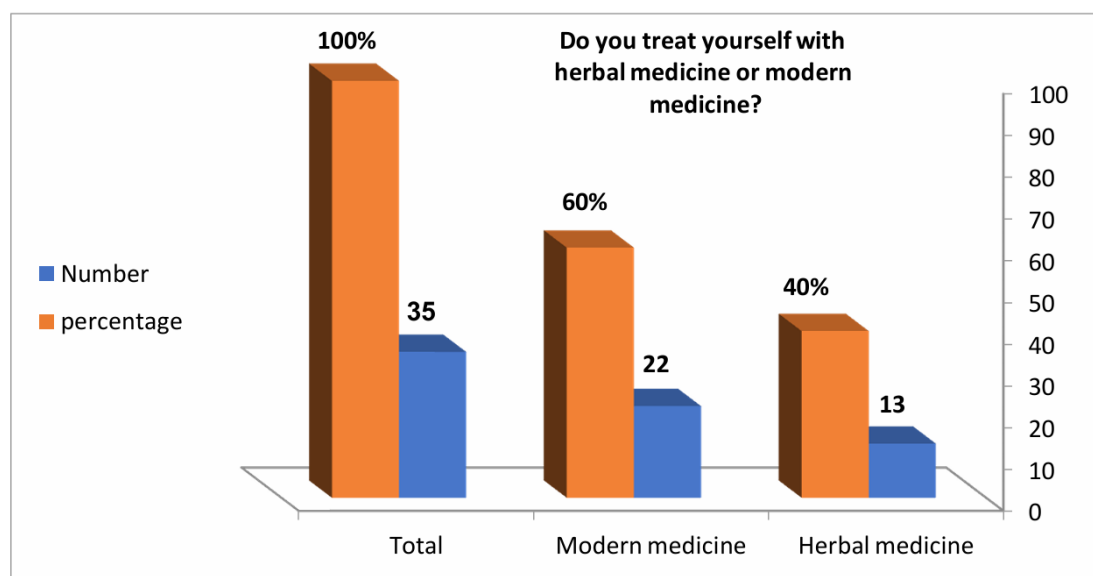


Figure (2) shows the frequency distribution of the extent of use of herbal medicine compared to modern medicine.

The option (use of herbal medicine) received a percentage of 40% compared to 60% for modern medicine, which gives hope for the use of medicinal herbs in the treatments used.

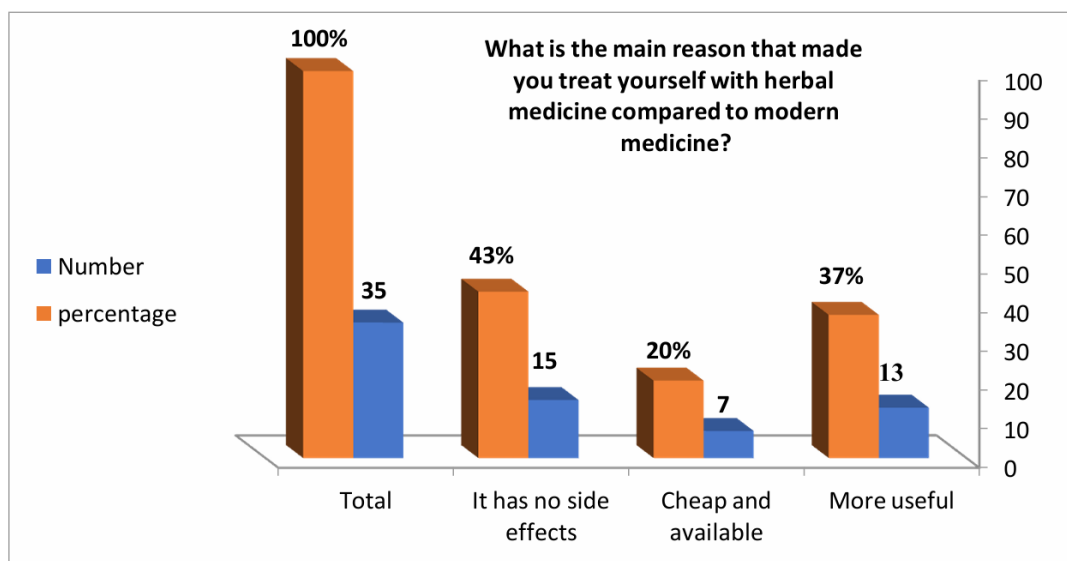


Figure (3) illustrates the frequency distribution of the use of herbal medicine as an alternative to modern medicine.

We find from the results that the patient's awareness of the lack of side effects of natural medicine compared to chemical medicine was the highest percentage, 43%.

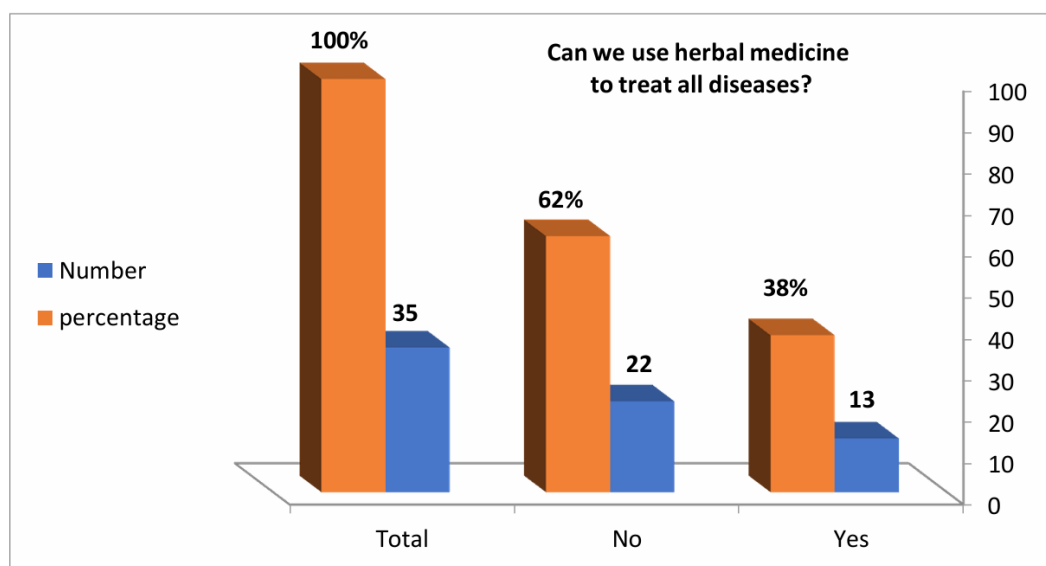


Figure (4) illustrates the potential use of herbal medicine in treating various diseases.

Comparing the use of natural medicine with chemical medicine, a rational result confirmed previous studies indicating the possibility of using herbs to treat certain diseases, with a percentage of 38% .

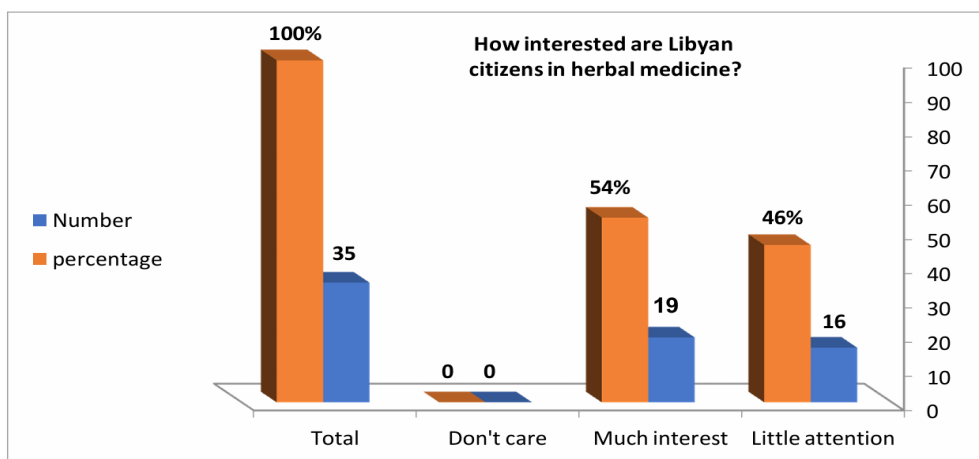
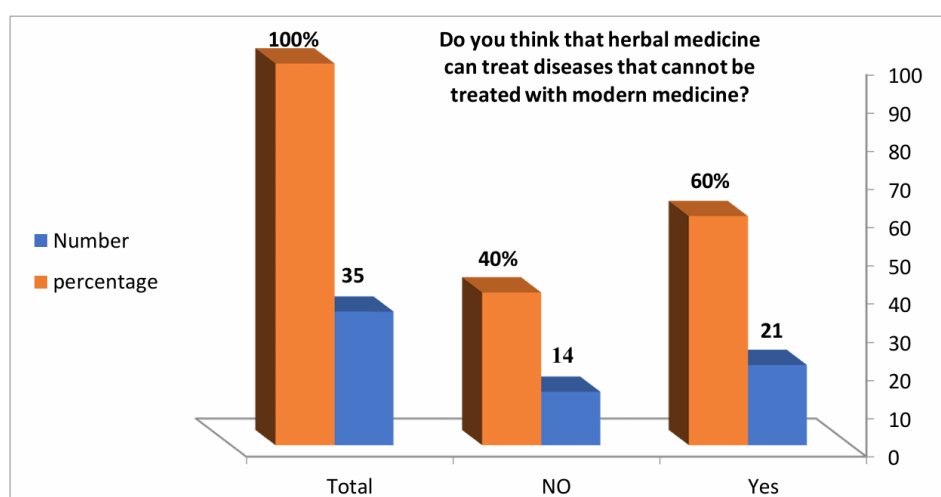


Figure (5) shows the frequency distribution of the extent of Libyan citizens' interest in using herbs for treatment, with a percentage of 54% indicating their interest.



Figure(6) illustrates the potential of herbal medicine to address conditions that modern medicine cannot treat.

The response to this statistic was 60% in favor, which confirms the importance of using and the success of medicinal herbs in treating many diseases.

Conclusion:

Natural remedies, particularly medicinal plants, have been used and continue to be used to treat illnesses and ailments that affect humans. They are also considered a raw material in modern medicine, with new plants being consumed each year in various forms, including infusions, powders, and other preparations. Medicinal and aromatic plants currently occupy a prominent position and receive great attention in many producing countries. Medicinal plants are considered a source of active ingredients used in the preparation of medicines, either in the form of extracts or as raw materials for the production of certain chemical compounds, which constitute the core of the chemical synthesis of some important pharmaceutical substances. Therefore, medicinal and aromatic plants are considered among the most important strategic materials in the pharmaceutical industry. And thus we come to the end of the research paper (The Five Best Medicinal Herbs), in which we focused on medicinal herbs, their benefits, the

importance of treating with them, and the details that distinguish thyme, chamomile, ginger, turmeric, and cloves.

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