



## Prevalence and patterns of herbal supplement use: A survey analysis of consumer attitude and behaviors

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### Abstract

Herbal supplements, derived from plants and botanicals, offer a natural approach to promoting health and wellness. These supplements can provide essential nutrients, antioxidants, and other beneficial compounds that support overall health. However, their effectiveness and safety can vary widely depending on factors like quality, dosage, and individual interactions. Our study aims to investigate the usage patterns, awareness, and perceptions of herbal supplements among respondents, providing valuable insights into the benefits and risks associated with their use. A survey-based methodology was employed to collect data from respondents, assessing their usage patterns, awareness of potential interactions, and perceived benefits of herbal supplements. The results show that 65% of respondents use herbal supplements, but only 23.6% are aware of potential interactions with medications, and 29.3% are familiar with proper dosage and usage instructions. Despite these concerns, 40.4% of respondents reported benefiting from herbal supplements, highlighting the need for targeted education and awareness initiatives to promote responsible and informed use. By addressing this knowledge gap, we can harness the potential benefits of herbal supplements while minimizing risks and ensuring optimal health outcomes.

**Keywords:** Herbal supplements, usage patterns, consumer awareness, perceived benefits, health risks

### Introduction

Herbal Medicines-trusted Source are botanical items made from plants that individuals can use to treat and prevent ailments. Herbal medications or supplements are natural substances derived from plant leaves, bark, roots, seeds, or flowers that can be used to treat medical conditions. They may provide therapeutic benefits when used as a supplemental medicine. Herbal medications contain active components derived from natural plants. Their use extends back thousands of years, well before the invention of mainstream medicine. Herbal supplements come in several forms. They can be dried, chopped, powdered, or packaged in capsule or liquid form. Despite the prevalence of conventional medicine (CM) in modern American medical practice, which relies on medications, surgery, and radiation, alternatives and competitive therapeutic practices classified as complementary and alternative medicine (CAM) is developing and getting more popular. Complementary medicine is a non-mainstream strategy that is used in conjunction with CM, whereas alternative medicine is when the non-mainstream approach is utilized instead of CM. Supplements made especially for internal consumption are called herbal remedies. Plant derivatives are used in the manufacture of several prescription and over-the-counter pharmaceuticals. They differ from herbal supplements in that they contain FDA-approved, purified components. However, the FDA does not regulate the production of herbal supplements. As a result, preparations can range in consistency and contain either a fraction or the entire plant. Herbal supplements are typically supplied in solid form (capsules, pills, tablets, and lozenges), although they are also available in liquid and powder form. By definition, 'traditional' use of herbal medicines implies significant historical use, and this is certainly true for many items marketed as 'traditional herbal medicines'. In many underdeveloped nations, a considerable proportion of the

population relies on traditional practitioners and their arsenal of medicinal herbs to address their healthcare needs. Although modern medicine coexists with such ancient practices, herbal remedies have frequently retained their popularity for historical and cultural reasons. Manufacturers have never been obliged to provide the clinical evidence base required of prescription drugs because traditionally they have been regulated more as foods, despite being marketed for remedial purposes in dose form similar to medicines. In recent years, however, increased usage has led to calls for tighter regulation of botanical products sold within the European Union. As a result, many manufacturers failed to provide consumers with sufficient information to make informed decisions. In Italy, for example, most such products are classed as food supplements whilst Portugal leans towards categorizing products as Traditional Herbal Medicinal Products, in many other countries herbal supplements would be labeled differently. The same botanical ingredients therefore often end up being used in products classed as food supplements in one state and medicines another.

### Benefits of Herbal Supplements

Ayurveda, Siddhartha, Unanimity, or traditional Chinese medicine, medicinal herbs have long played an important part due to their incredible therapeutic and healing powers. Mother Nature has provided us with a richness of herbs, which are now widely used in teas, beauty products, and medicines. These all-natural herbs, leaves, roots, and fruits are high in vitamins, minerals, nutrients, and antioxidants, and owing to scientific breakthroughs, all of this deliciousness can now be found in supplements. Herbal supplements, also known as phyto-medicines, are manufactured from plant seeds, berries, roots, leaves, bark, or flowers and used medicinally. These supplements are widely valued for their excellent healing properties and low negative effects.

**Ingredients in Herbal Supplements**

Observed palmetto garlic Echinacea bilabial ginseng Dark Ginseng Cohos Hawthorne Feverfew Golden seal All-over St. John’s wort, milk thistle, and turmeric Licorice root, peppermint oil, and sunflower Valerian Garlic, linseed, fenugreek and lemongrass may help lower cholesterol. Garlic is useful for people with mildly elevated blood pressure. Fenugreek can help control blood sugar and insulin activity (as can linseed, flax seed and cinnamon). Garlic, onions, chives, leeks, mint, basil, oregano, sage and many other herbs can help protect against cancer. Herbs are rich in antioxidants, especially cloves, cinnamon, sage, oregano and thyme. Fresh herbs often contain higher antioxidant levels compared to processed or dried herbs. If you are using herbs in order to harness their health-promoting aspects first and foremost, aim to add your fresh herbs at the end of cooking or as you serve to preserve these properties. Cooking with herbs You are only limited by your imagination with it comes to using herbs in the kitchen – they can be added to virtually any recipe. Try adding herbs to: Stews and casseroles Soups, Breads, Mustards, Marinades, Butters, Sauces, Salad dressings Stocks, Vinegar, Vinaigrette, Yogurt Custards, Desserts, Drinks.

**Examples of Herbal Supplements**

Ginseng is a medicinal plant whose roots are usually steeped to make a tea or dried to make a powder It’s frequently utilized in traditional Chinese medicine to reduce inflammation and boost immunity, brain function, and energy levels. Several varieties exist, but the two most popular are the Asian and American types —Pan-ax ginseng and Pan-ax quinine folios, respectively. American ginseng is thought to cultivate relaxation, while Asian ginseng is considered more stimulating. Although ginseng has been used for centuries, modern research supporting its efficacy is lacking.

Ginkgo bilabial, also known simply as ginkgo, is an herbal medicine derived from the maidenhair tree. Native to China, ginkgo has been used in traditional Chinese medicine for thousands of years and remains a top-selling herbal supplement today. It contains a variety of potent antioxidants that are thought to provide several benefits the seeds and leaves are traditionally used to make teas and tinctures, but most modern applications use leaf extract.

Elderberry is an ancient herbal medicine typically made from the cooked fruit of the Ambuscades nigga plant. It has long been used to relieve headaches, nerve pain, toothaches, colds, viral infections, and constipation. Today, it’s primarily marketed as a treatment for symptoms associated with the few and common cold. Elderberry is available as a syrup or lozenge, although there’s no standard dosage. Some people prefer to make their own syrup or tea by cooking elderberries with other ingredients, such as honey and ginger.

**Methodology**

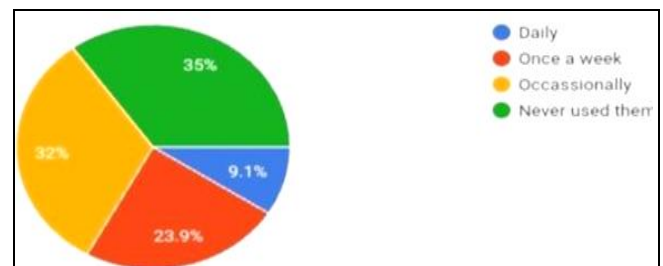
This study employed a quantitative research design, utilizing a survey approach to collect data from 300 participants in an urban area. A total of 300 participants were recruited for this study through a convenience sampling method, where participants were selected based on their availability and willingness to participate. The sample was drawn from an urban area, providing a representation of the urban population's characteristics. Data was collected

through a structured survey questionnaire, which was administered to each participant. The questionnaire consisted of closed-ended questions designed to gather information about the participants' usage of herbal supplements. Data collection process was closely monitored to minimize errors and ensure that the data collected was accurate and consistent. The findings of this study will contribute to the existing body of knowledge on herbal supplements and inform healthcare professionals, policymakers, and the general public.

**Results and Discussion**

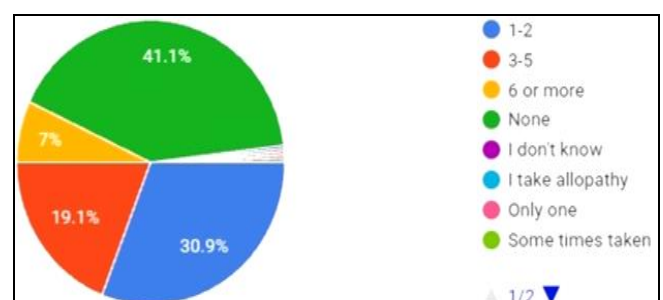
The use of herbal supplements has become increasingly popular in recent years, with millions of people worldwide turning to these natural products to promote health, prevent disease, and manage chronic conditions. Herbal supplements, derived from plants, herbs, and other botanicals, offer a perceived natural and safe alternative to conventional medications. However, despite their widespread use, there is a growing concern about the lack of awareness regarding potential interactions with medications, proper dosage, and usage instructions. This knowledge gap poses significant risks to consumers' health, highlighting the need for education and awareness initiatives to promote responsible and informed use of herbal supplements.

**1. How often do you use herbal supplements?**



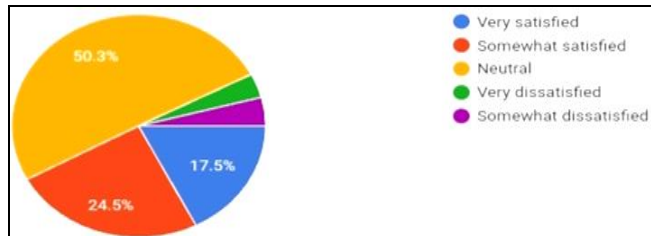
The above results are showing the frequency of herbal supplement usage varies among respondents, with 32% using them occasionally, 23.9% using them once a week, 35% never using them, and 9.1% using them daily. This indicates that while a significant proportion of respondents (67%) use herbal supplements to some extent, a substantial portion (35%) do not use them at all. The daily users (9.1%) likely rely on herbal supplements for specific health concerns or as part of their regular health routine, while occasional and weekly users may use them more sporadically or as a preventive measure.

**2. How many types of herbal supplements you take in a week?**

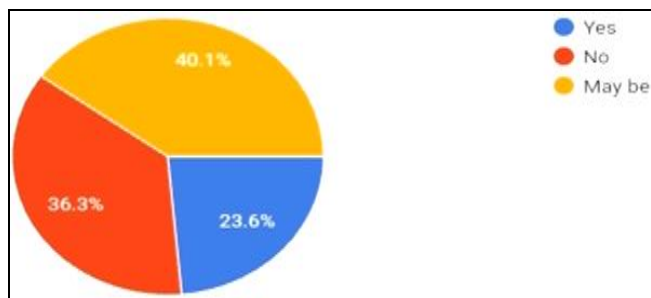


The above data shows the variety of herbal supplements taken by respondents in a week. 41.1% of respondents take no herbal supplements, while 30.9% take 1-2 types, 19.1% take 3-5 types, and 7% take 6 or more types. This suggests that nearly half of the respondents do not take any herbal supplements, while around 30% take a limited variety (1-2 types), and a smaller proportion (26.1%) take a wider range (3 or more types).

**3. How satisfied are you with the current frequency of your herbal supplement usage?**

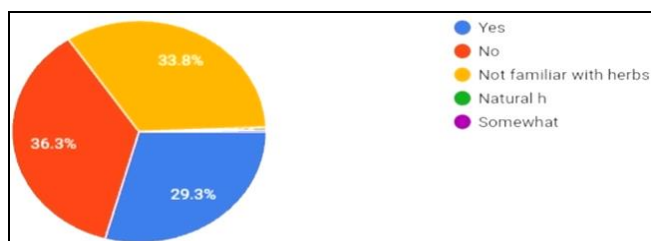


**4. Are you aware of any potential interactions between herbal supplements and your current medications?**



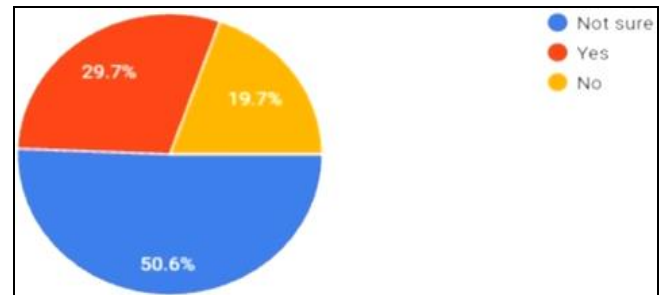
The given results show that 23.6% of respondents are aware of potential interactions between herbal supplements and their current medications, while 36.3% are not aware of any potential interactions. A significant proportion (40.1%) are uncertain, indicating they "may be" aware of potential interactions. This highlights the need for increased awareness and education about potential herb-drug interactions to ensure safe and effective use of herbal supplements.

**5. Are you familiar with the proper dosage and usage instructions for herbal supplements?**



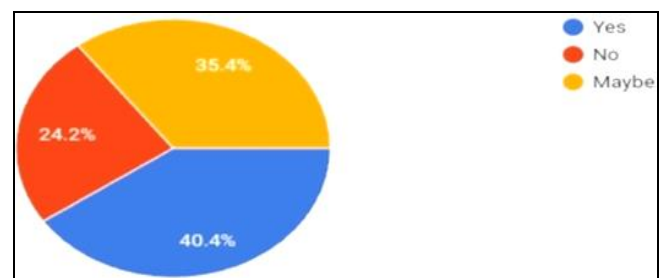
The collected data shows that only 29.3% of respondents are familiar with the proper dosage and usage instructions for herbal supplements. In contrast, 36.3% are not familiar with the proper usage, and 33.9% are not familiar with herbs at all. This suggests a significant knowledge gap regarding the safe and effective use of herbal supplements, highlighting the need for education and guidance to ensure informed decision-making.

**6. Do you prefer to use herbal medicine for treatment of chronic disease rather than conventional drugs?**



The pie chart shows that 29.7% of respondents prefer to use herbal medicine for the treatment of chronic diseases rather than conventional drugs, indicating a significant interest in alternative therapies. However, 19.7% of respondents prefer conventional drugs; while a substantial proportion (50.6%) are undecided or unsure, suggesting a need for more information and education about the effectiveness and safety of herbal medicine for chronic disease management.

**7. Did the use of herbal supplements benefit your health?**



The data shows that 40.4% of respondents reported that the use of herbal supplements benefited their health, indicating a perceived positive impact. However, 24.2% reported no benefit, while 35.4% were uncertain, stating that the supplements "may be" beneficial. This suggests that while some respondents experienced positive outcomes, others were either unaffected or unsure about the effectiveness of herbal supplements for their health.

The survey on herbal supplements usage among urban population results provide valuable insights into the usage and perceptions of herbal supplements among respondents. A significant proportion, that is 65% people use herbal supplements, with 32% using them occasionally, 23.9% once a week, and 9.1% daily. However, there is a notable lack of awareness about potential interactions with medications, with only 23.6% of respondents reporting being aware of these interactions. Furthermore, only 29.3% of respondents are familiar with proper dosage and usage instructions for herbal supplements. Despite these knowledge gaps, 40.4% of respondents reported benefiting from herbal supplements, and 29.7% prefer them for chronic disease treatment. Overall, the results highlight the need for education and guidance to ensure informed decision-making about herbal supplement use and to maximize their potential benefits while minimizing risks.

**Conclusion**

In conclusion, the survey results underscore the widespread use of herbal supplements among respondents, with a significant proportion incorporating them into their health

regimens. However, the findings also reveal a concerning lack of awareness about potential interactions with medications and proper dosage and usage instructions. This knowledge gap poses significant risks to respondents' health, as unintended interactions or incorrect usage can lead to adverse effects or diminished efficacy. Despite these concerns, a substantial proportion of respondents reported benefiting from herbal supplements and preferring them for chronic disease treatment. This suggests that herbal supplements can play a valuable role in health management when used judiciously and with proper guidance. Therefore, it is imperative to address the knowledge gap through targeted education and awareness initiatives, empowering respondents to make informed decisions about herbal supplement use. By promoting responsible and informed use, we can harness the potential benefits of herbal supplements while minimizing risks and ensuring optimal health outcomes. Ultimately, a comprehensive approach that combines education, awareness, and responsible use can help respondents reap the rewards of herbal supplements while safeguarding their health and well-being.

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