



THE EFFECTS OF HERBAL REMEDIES ON DIGESTIVE HEALTH AND GASTROINTESTINAL SYMPTOMS

Moataz Saleh Alhadda^{1*}, Wael Nafea Zaid Alharbi¹, Musleh Muslim Al-Hujaili¹, Ahmed Mohammed Alshwaikan¹, Eid Ghazy Hamdan Alotaibi¹, Sahal Salem Eid Alsehli¹, Majed Obedallah Al Rasheedi¹, Faisal Abdullah Alshilali¹, Abdulaziz Mohammed Alrwethy¹, Yousef Nafea Ali Alfuhaydi¹, Mousa Yahia Sahli¹, Yahia Hadi Kuriri¹, Turki Hadi Fagehi¹, Ahmed Hameed Alsaedi¹, Saeed Rashed Aldossari¹, Hassan Mohammed Al Shehri¹

¹*KSA, ministry of health

***Corresponding Author:** Moataz Saleh Alhadda

*KSA, ministry of health

Abstract

Up to 50% of people in the Western population currently take herbal remedies, often to cure or prevent digestive issues. While the use of these remedies is primarily based on anecdotal or traditional evidence, controlled trials have shown some advantages for ginger in reducing nausea and vomiting, liquorice extracts in treating peptic ulceration, Chinese herbal medicine in managing irritable bowel syndrome, opium derivatives in alleviating diarrhea, and senna, ispaghula, and sterculia in relieving constipation. Herbal remedies include several bioactive chemicals that have both harmful and positive effects. There is a clear necessity for enhanced patient and physician education regarding herbal therapy, as well as the implementation of regulations to ensure the quality of herbal preparations. Additionally, further randomized controlled trials are needed to definitively determine the efficacy and safety of these preparations in treating digestive and other disorders.

Keywords: herbal medicine, gastrointestinal symptoms, digestive disorders, review.

1. Introduction

Alternative and complementary medicine refer to medical ideas and practices that differ from traditional methods. The word "alternative" is used when these methods are utilized instead of conventional ones, while "complementary" is used when they are used in addition to regular treatment. Complementary and alternative medicine is a broad and diverse field that includes a wide variety of diagnostic and therapeutic treatments, as well as complete ideas of health and illness.

The many forms of alternative medicine may be categorized into traditional and complementary categories (Table 1). The conventional category of complementary and alternative medicine include the time-honored techniques of acupuncture, traditional Chinese medicine, and Ayurvedic medicine, together with manipulative osteopathy and chiropractic, as well as herbal and homeopathic medicine. These practices are connected by established customs and are often used as the only alternative therapy for certain illnesses or conditions. The complimentary category consists of contemporary therapies primarily designed to complement or supplement other types of complementary and alternative medicine, as well as scientific medicine.

Traditional	Complementary
Acupuncture	Aromatherapy
Traditional Chinese medicine	Biofeedback
Homeopathy	Detoxification
Herbal medicine	Reflexology
Ayurvedic medicine	Arts therapies
Osteopathy and chiropractice	Nutritional medicine
Hypnotherapy	
Faith healing	

Table 1. Traditional and complementary categories.

All forms of complementary and alternative medicine have the characteristic of being excluded from standard scientific medicine, which means they are not well-represented in research and teaching at universities. Alternative medical methods generally disregard the pathophysiological and pharmacological principles established by contemporary research. Instead, they depend on old traditions and "natural" therapies, which are believed to be less hazardous than traditional pharmaceuticals.

The majority of information on the potential efficacy of alternative and complementary medicine is based on personal accounts or historical records. Despite the scarcity of controlled studies demonstrating the positive benefits of this approach on any specific ailment, more than 30% of the Western population already engages in some type of complementary and alternative medicine. Herbal treatment is the most often used modality in the majority of Western studies.¹⁻³ These results are remarkable considering the scarcity of scientific data on the effectiveness or safety of herbal medicines in almost all the situations they are used.

Medical professionals, including gastroenterologists, must now acknowledge and consider the possible advantages and risks associated with herbal treatments. This paper will begin by providing an overview of the historical foundation for the utilization of herbal remedies. Its objectives are to examine the present usage of these remedies by patients with digestive disorders, assess the evidence supporting their effectiveness in gastroenterological disease, explore the mechanisms through which they may exert their effects, and finally, investigate their potential adverse effects on the gastrointestinal tract and liver. The emphasis will be placed on data gained from research conducted on humans rather than animals.

2. Historical context

Every society has investigated and used plants for their medical properties. The discovery of several medicinal plants inside a Neanderthal burial site in Iraq indicates that herbs may have been used for therapeutic purposes for over 60,000 years.⁴ The earliest documented records are from China, namely during the reign of Emperor Shen Nung, who wrote *Pen Tsao* (The Great Herbal, or Chinese *Materia Medica*) about 3000 BC. This book has undergone several additional editions, and a significant number of the thousand or more medications detailed inside its pages are still being used in China.⁵

The Ebers Papyrus, unearthed in an Egyptian tomb in 1862, originates from 1550 BC and stands as the most ancient extant medical document. The collection has several herbal medicines, such as castor seeds and senna for alleviating constipation, as well as a concoction of cumin, goose fat, and milk for addressing different stomach ailments.⁶ The Mesopotamian tradition is documented on a collection of one thousand clay tablets that date back to the 7th Century BC. Among these records, there are over 200 instances of plant-derived medications being used, including castor oil and senna, which were often used as laxatives.⁶

Theophrastus, a Greek botanist and student of Aristotle, and Dioscorides, a Greek physician in Nero's army, both authored textbooks that detailed the therapeutic use of plants and their derivatives. The suggestions included cinnamon for internal irritation and brambles for diarrhea. Galen, a prominent

physician from 129 to 216 AD, wrote extensively on several topics, including a specific treatise on pharmaceuticals. One of the medications included in his work is *hiera picra*, which gained popularity for its ability to treat constipation. This treatment was produced from a combination of aloes, spices, and herbs.⁶

In the 5th Century AD, the Hindu physician Susruta documented a total of 760 medicinal plants in an Ayurvedic treatise. In the late first century, Arabic medicine flourished and was greatly affected by translations of Galen. During this time, a significant amount of plant-based pharmaceuticals were developed, such as laudanum and senna.⁵ Simultaneously, the Leech Book of Bald, the first extant Saxon medical document, detailed several herbal treatments and their corresponding uses. It is unfortunate that the word 'Wortcunning' used to describe the contents of this book is neither really ancient nor now used as a synonym for herbalism.

The origin and history of herbal therapy are quite varied. Undoubtedly, the fact that it has a trans-cultural origin and has been used for millennia indicates that some components of it are likely to have therapeutic benefits. The extraction of several conventional medications from plants, such as digoxin from foxgloves, aspirin from willow-bark, quinine from cinchona-bark, and morphine from the opium poppy, has made it evident. In addition, pharmaceutical corporations are now involved in comprehensive screening programs to discover and separate therapeutically useful substances from plants.

However, it is important to note that the long-standing usage of a herbal cure for thousands of years does not automatically ensure its effectiveness or safety. The general population's use of herbal remedies lacks substantial backing in terms of both effectiveness and safety evidence derived from clinical research. In the field of gastroenterology, the utilization of particular treatments for symptoms seems to be based on unsupported claims, such as those seen on containers of slippery elm and in cookbooks discussing fenugreek (methi seeds), which suggest that these substances have a soothing effect on inflamed intestines.¹⁰

3. Present Utilization Of Botanical Treatment Among Individuals Suffering From Gastrointestinal And Additional Maladies

Studies conducted on the general population in Western Europe and the USA, using different methods and levels of accuracy, have shown that between 8% and 50% of individuals have used some kind of supplementary treatment.¹¹ In underdeveloped nations, the prevalence of consumption is considerably more extensive.¹² Accurate and systematic telephone surveys done in the United States revealed that the use of complementary and alternative medicine increased from 34% in 1990 to 42% in 1997.¹ In 1997, herbal medicine was the most often utilized kind of treatment, with a significant rise of 380% compared to 7 years before. The primary motivation for using alternative or complementary treatments is often to alleviate chronic musculoskeletal ailments that have not been effectively treated with mainstream therapy. However, herbalists prefer to focus more on treating conditions such as dermatitis, headache, and menstruation issues.¹¹ The average user in the UK is a woman between the ages of 35 and 60, belonging to a reasonably affluent socio-economic category.¹¹ According to the 1990 and 1997 US surveys, around 10% of the use of complementary and alternative medicine was for issues related to the digestive system. Among these cases, relaxation techniques and herbal therapy were the most frequently used treatments.¹

Multiple studies have explicitly examined the use of alternative and complementary medicines, such as herbal remedies, by individuals with gastrointestinal issues. In one study, 9% of patients with digestive difficulties sought advice from alternative practitioners for their symptoms. In another poll, 51% of patients with gastrointestinal illnesses had experimented with various forms of complementary and alternative medicine.¹³ and ¹⁴. Complementary and alternative medicine for digestive issues seems to have a higher level of popularity in North America compared to Europe. However, the industry's expansion in Europe is likely to be quicker at now. Herbal medicines are the most often used kind of supplementary and alternative medicine.¹⁵ to ¹⁷ The use of this treatment is especially prevalent among patients diagnosed with irritable bowel syndrome and inflammatory

bowel disease. This might be attributed to the persistent and resistant character of these conditions, as well as psychological issues. 16, 17, 19

4. Summary

There is a pressing want for more scientific evaluation of the possible advantages and risks associated with the extensive variety of herbal treatments already accessible. Herbal preparations intended for therapeutic use should be subject to licensing by an independent national authority to enhance their quality and safety, and to verify the effectiveness of their claims via randomized controlled studies. It is important for the general population, as well as pharmacists, general practitioners, and hospital physicians, to be fully informed about the potential hazards of using herbal treatments, either alone or in conjunction with other herbal or conventional medications. Integrating a brief course on alternative and complementary treatment into the medical school curriculum would facilitate the accomplishment of this objective. Finally, any doubts or reservations about herbal treatment should be tempered by a sense of hopefulness. The pharmaceutical industry should continue its thorough examination of plants from across the globe to discover novel therapeutic agents for treating presently resistant diseases, as seen from the historical progress of conventional medication research.

References

1. Eisenberg DM, Davis RB, Ettner SL, *et al.* Trends in alternative medicine use in the United States. 1990–97: results of a follow-up national survey. *J Am Med Assoc* 1998; **280**: 1569–75.
2. Angell M & Kassirer JP. Alternative medicine—the risks of untested and unregulated remedies. *N Engl J Med* 1998; **339**: 839–41.
3. Vickers A & Zollman C. ABC of complementary medicine: herbal medicine. *Br Med J* 1999; **319**: 1050–3.
4. Solecki RS. Shanidar IV, a neanderthal flower burial in northern Iraq. *Science* 1975; **190**: 880–1.
5. Guthrie DA. History of Medicine. London: Thomas Nelson and Sons Ltd, 1945.
6. Porter R. The Greatest Benefit to Mankind. A Medical History of Humanity from Antiquity to the Present. London: Harpers Collins, 1997.
7. Singer C. Greek Biology. Studies of History and Method of Science, Vol. 2. Oxford: Clarendon Press, 1921: 56–56.
8. Gunther R. The Greek Herbal of Dioscorides. New York: Hafner Publishers Co, 1934.
9. Cockayne T. Leechdoms, Wortcunning and Starcraft of Early England. London: HMSO, 1864.
10. Jaffrey MA. Taste of India. London: Pan Books, 1985.
11. Zollman C & Vickers A. ABC of complementary medicine. Users and practitioners of complementary medicine. *Br Med J* 1999; **319**: 836–8.
12. Bodeker G. Lessons on integration from the developing world's experience. *Br Med J* 2001; **322**: 164–7.
13. Sutherland LR & Verhoef MJ. Why do patients seek a second opinion or alternative medicine? *J Clin Gastroenterol* 1994; **19**: 194–7.
14. Rawsthorne P, Shanahan F, Cronin NC, *et al.* An international survey of the use and attitudes regarding alternative medicine by patients with inflammatory bowel disease. *Am J Gastroenterol* 1999; **94**: 1298–303.
15. Moody GA, Eaden JA, Bhakta P, Sher K, Mayberry JF. The role of complementary medicine in European and Asian patients with inflammatory bowel disease. *Public Health* 1998; **112**: 269–71.
16. Hilsden RJ, Scott CM, Verhoef MJ. Complementary medicine use by patients with inflammatory bowel disease [see comments]. *Am J Gastroenterol* 1998; **93**: 697–701.
17. Langmead L, Chitnis M, Rampton DS. Complementary therapies in GI patients: who uses them and why? *Gut* 2000; **46**(Suppl. II): A22–A22.
18. Smart HL, Mayberry JF, Atkinson M. Alternative medicine consultations and remedies in patients with the irritable bowel syndrome. *Gut* 1986; **27**: 826–8.

19. Moser G, Tillinger W, Sachs G, *et al.* Relationship between the use of unconventional therapies and disease-related concerns: a study of patients with inflammatory bowel disease. *J Psychosom Res* 1996; **40**: 503–9.