

## Herbal For Anxiety In Psychology Case: Bibliometric Analysis

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### ABSTRAK

This research aims to carry out an in-depth analysis of the effects of herbs on anxiety in psychological cases. In order to address the complex character of anxiety disorders, there is a link between herbal therapies for anxiety in psychological cases and the integration of psychological and herbal viewpoints. Herbal treatments provide supplementary options for modifying neurobiological mechanisms underpinning symptom presentation, whereas psychological therapies focus on the cognitive, emotional, and behavioural elements of anxiety. Bibliometric analysis was done using VOSviewer software, and data was taken from the Scopus database. Data was taken by searching for keywords that were appropriate to this research, namely "herbal," "anxiety," and "psychology." Herbal remedies are a viable means of supplementing psychological therapy and fostering overall well-being while reducing anxiety in psychological problems. In psychological circumstances, the link between herbal therapies for anxiety entails integrating herbal and psychological viewpoints to address the intricate interaction of behavioural, affective, cognitive, and neurobiological components that underlie anxiety disorders. Healthcare professionals should stay up to date on the growing body of research supporting herbal therapies and participate in collaborative decision-making with patients on available treatments, taking into account each patient's unique preferences, values, and cultural beliefs. The research's methodological approach, which combines bibliometric analysis with data retrieved from the Scopus database, offers a methodical and objective way to compile the body of knowledge on herbal remedies for anxiety in psychiatric problems.

**Keywords:** Herbal, Anxiety, Psychology, Bibliometric

### INTRODUCTION

One of the most common mental health issues in the world, anxiety disorders have a substantial negative influence on people's quality of life, productivity, and ability to function in society. The World Health Organization (WHO) estimates that 264 million people worldwide suffer from anxiety disorders, making it a significant public health concern. While medication and psychotherapy are two of the many therapeutic techniques that have historically been used to reduce anxiety symptoms, there is rising interest in complementary therapies, including herbal medicines. A range of crippling ailments known as anxiety disorders are marked by excessive concern, dread, and

physiological arousal. These problems frequently cause severe discomfort and hinder day-to-day functioning (Alshehri et al., 2023).

Several subcategories of anxiety disorders are recognised by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), including panic disorder, social anxiety disorder (SAD), generalised anxiety disorder (GAD), and specific phobias. When taken as a whole, these illnesses represent one of the most common groups of mental health diseases worldwide. Anxiety disorders are common, which highlights their significant effects on people as individuals, families, and society. Research suggests that comorbid problems such as depression, substance addiction, and other mental disorders are more common among people with anxiety disorders, which increases the overall burden of illness. Additionally, anxiety disorders have a significant financial impact on healthcare systems and society at large due to their links to impairments in interpersonal relationships, vocational functioning, and overall quality of life (Xiong et al., 2022).

Psychotherapy and medication are often used in conventional treatments for anxiety disorders. In particular, cognitive-behavioural therapy (CBT), which addresses maladaptive thought patterns and behaviours, has shown effectiveness in assisting people in managing their feelings of anxiety. Furthermore, antidepressant drugs like benzodiazepines and selective serotonin reuptake inhibitors (SSRIs) are frequently administered to treat anxiety symptoms. Although many people find these therapies successful, they do have certain drawbacks. Adverse consequences from pharmacological therapies for anxiety disorders include drowsiness, cognitive impairment, and the possibility of dependency or withdrawal. Moreover, some people might not receive enough symptom alleviation or could choose different strategies that are consistent with their own values and beliefs (Garakani et al., 2020).

As a result, research into complementary and alternative anxiety therapies, such as herbal medicines, is gaining traction. For millennia, herbal remedies have been used for their alleged medical benefits, which include the ability to reduce anxiety, in a variety of civilisations. Traditionally, plants like passionflower (*Passiflora incarnata*), chamomile (*Matricaria chamomilla*), and lavender (*Lavandula angustifolia*) have been used to induce calm and reduce anxiety symptoms. Although there is currently conflicting scientific data about the effectiveness of these herbs, early research and anecdotal evidence point to possible advantages for certain people (Fonseca et al., 2020).

The growing acceptance of herbal treatments for anxiety emphasises the necessity of thorough scientific review in order to guide evidence-based treatment. Researching herbal therapies has several difficulties, too, such as the need to standardise preparations, variations in the bioactive components, and methodological constraints in study design. Despite these obstacles, a significant corpus of research is being done on the benefits of herbs for anxiety, necessitating a thorough review to summarise what is known and pinpoint areas in need of further study.

This research seeks to provide a comprehensive overview of the scholarly literature on the effects of herbs on the psychological conditions of anxiousness. Bibliometric analysis provides insights into important authors, research trends, critical concepts, and knowledge gaps by statistically examining publications in a particular

field or subject. This study intends to inform clinical practice, research goals, and policy considerations relating to herbal therapies for anxiety by summarising and analyzing available evidence. The attention to herbal medicines for anxiety is justified by the possibility that they might be more easily accessed, less expensive, and have fewer side effects than pharmaceutical treatments.

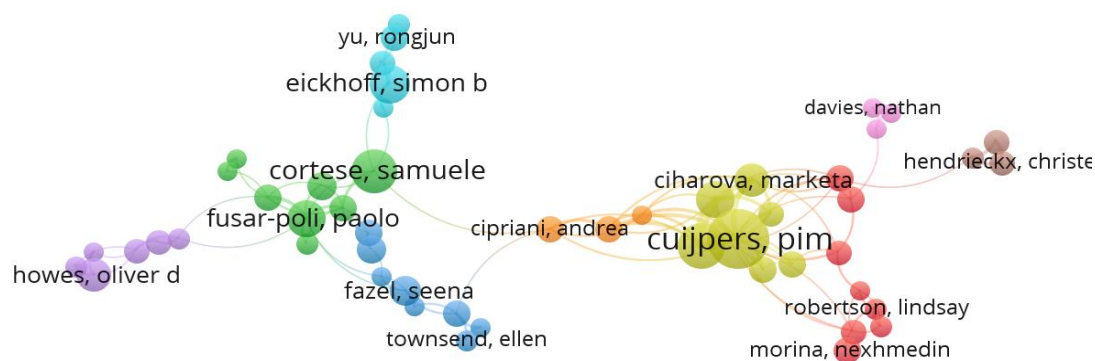
## RESEARCHED METHODS

This research uses the Bibliometric analysis method. Bibliometric analysis for a variety of reasons, such as to identify new trends in the performance of articles and journals, patterns of collaboration, and research components, as well as to investigate the intellectual framework of a particular field in the body of existing literature (Verma & Gustafsson, 2020). The primary data used in bibliometric analysis is typically large (thousands, even thousands) and objective (number of publications and citations, occurrences of keywords, themes). However, interpretations of the data frequently depend on both objective (performance analysis, for example) and subjective (thematic analysis) assessments that are developed through well-informed techniques and procedures. Put differently, bibliometric analysis helps make sense of massive amounts of unstructured data in a rigorous manner, which is helpful for mapping and interpreting the cumulative scientific knowledge and evolutionary subtleties of well-established areas (Donthu et al., 2021).

Therefore, well-executed bibliometric studies can lay the groundwork for advancing a field in fresh and significant ways by giving scholars the ability to (1) obtain a comprehensive overview, (2) identify knowledge gaps, (3) derive fresh ideas for research, and (4) position their intended contribution to the field (Donthu et al., 2021). Bibliometric analysis was carried out using VOSviewer software with data taken from the Scopus database. Data was taken by searching for keywords that were appropriate to this research, namely "herbal", "anxiety", and "psychology".

## RESULTS AND DISCUSSIONS

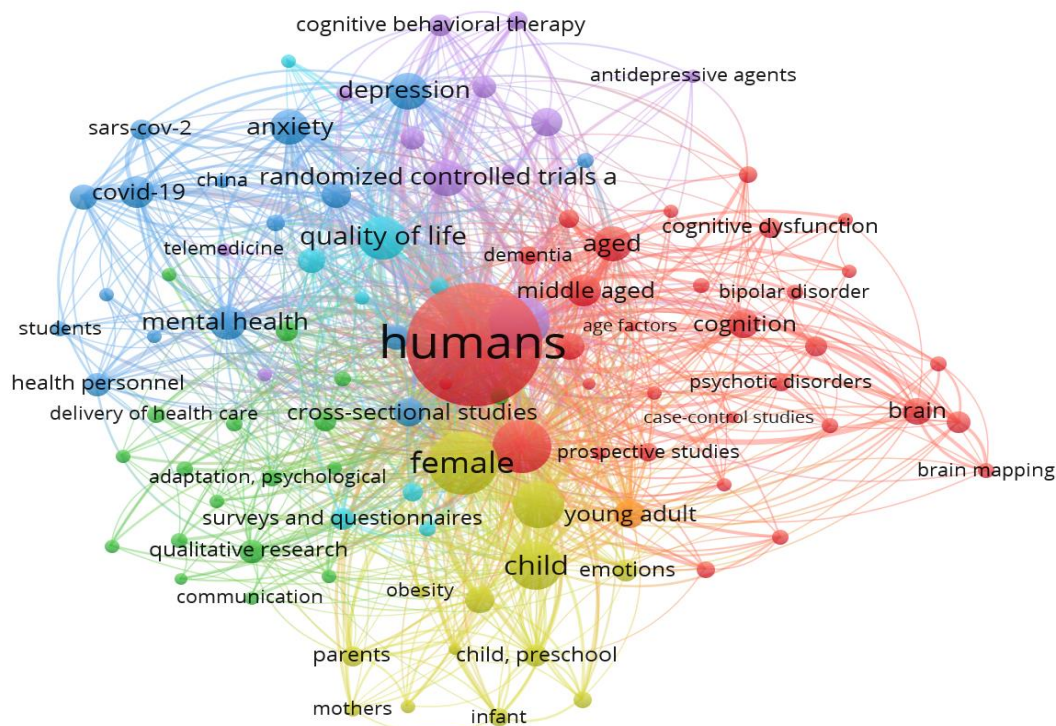
Data analysis was carried out using Vos Viewer software. Journals from the Scopus database were collected, and this research filtered the journals into 100 journals, which were used for data analysis. The following are the results of the data analysis.



**Figure 1. Journal Author Analysis**

Based on the results of the analysis, it can be seen that the author names most

frequently found in this research data are Cuijpers and Pim, then Costese and Samuele, Fusar-Poli and Poulou, Howes and Oliver, and Eickhoff and Simon.



**Figure 2. Keyword Analysis In Journals**

Based on the results of the analysis, it can be seen that the keywords that often appear in this analysis are humans, child, female, mental health, anxiety, depression, quality of life, cognition, middle aged, young adult, bipolar disorder, cognitive dysfunction, brain, psychology. This shows that herbs have an influence on anxiety.

A number of important conclusions about the state of the study on herbal treatments for anxiety in psychological problems are revealed by the analysis's results. The ramifications of the found author patterns and popular keywords will be thoroughly discussed, providing insight into the implications for future paths in research and clinical practice.

The examination identifies a number of well-known writers who have made substantial contributions to the body of knowledge on herbal treatments for anxiety in psychiatric situations. Prominent personalities in this field of study include Cuijpers and Pim, Costese and Samuele, Fusar-Poli and Poulou, Howes and Oliver, and Eickhoff and Simon. The variety of viewpoints and methodological philosophies that these writers probably represent adds to the depth and scope of the academic conversation.

The eminence of these writers highlights the multidisciplinary character of studies on herbal remedies for anxiety, encompassing domains like pharmacology, psychology, psychiatry, and neuroscience. Their contributions may include a variety of study formats, such as mechanistic studies, systematic reviews, and clinical trials, providing a thorough understanding of the impact of herbs on psychological health. Co-authorship patterns indicate that these writers collaborate, which may promote methodological rigour, creativity in research methodology, and idea sharing.

Additionally, the creation of evidence-based recommendations and best

practices for incorporating herbal treatments into clinical care for people with anxiety disorders may benefit from their combined experience.

### **Herbal for Anxiety In Psychology Case**

The pharmacological characteristics of botanical substances, individual variations in treatment response, and the interaction between psychological and physiological processes are only a few of the variables that might impact the complex and varied consequences of herbal therapies for anxiety in psychology patients. This conversation examines how herbal medicines may affect anxiety symptoms in the context of clinical psychology and treatment. Herbal treatments that modulate neurotransmitter systems and neuroendocrine pathways, such as lavender, chamomile, and passionflower, include bioactive components that have anxiolytic effects. These plants may function as GABA receptor agonists or modulators, enhancing inhibitory neurotransmission and lowering anxiety-related neuronal hyperactivity. Furthermore, herbal medicines with adaptogenic qualities, such as *Rhodiola rosea* and *ashwagandha*, may improve resistance to stress and lessen its physiological effects (Wróbel-Biedrawa & Podolak, 2024).

In addition to their pharmacological effects, herbal remedies for anxiety may provide psychological advantages, including lowered stress levels, enhanced mood, and relaxation. Aromatherapy, which uses essential oils from herbs like bergamot and lavender, has been demonstrated to promote sensations of peace and relaxation. This suggests that aromatherapy may be used in conjunction with psychotherapy therapies that attempt to promote emotional regulation and lessen anxiety-related cognitive distortions.

Additionally, the ceremonial nature of preparing and consuming herbal remedies may strengthen psychological support and placebo effects, improving treatment adherence and perceived efficacy. Psychological therapies for anxiety, including acceptance and commitment therapy (ACT), mindfulness-based approaches, and cognitive-behavioural therapy (CBT), can use herbal remedies. For instance, the supplementary use of anxiolytic herbs may be beneficial for those undergoing exposure therapy for certain phobias in order to reduce anticipatory anxiety and promote habituation to feared stimuli. In a similar vein, herbal teas or supplements combined with mindfulness exercises can improve awareness of the present moment and make it easier to accept uncomfortable thoughts and feelings (Marais et al., 2020).

Aromatherapy is one herb that can help reduce anxiety. Aromatherapy is a body care and alternative medicine technique that primarily use fragrant plant essences. There are other ways to use aromatherapy treatment, but the most popular one is inhalation, which involves inserting cotton wool with six drops of aromatherapy on it and holding it in front of the nose at a distance of two centimeters for four minutes. Aromatherapy releases a number of molecules into the atmosphere during the inhaling process in the form of chemically-laden water vapor. The body will absorb the steam through the nose and lungs, and it will then enter the bloodstream and limbic system of the brain. The limbic system is in charge of the body's integration system, emotional expression, learning, memory, and emotional regulation, as well as physical stimulation that helps to relax it (Peday, Y., & Watini, 2022).

*Mentha piperita* L. One fragrant plant in the Lamiaceae family is peppermint.

This plant is frequently utilized in medicinal applications, flavorings, and fragrances. A component found in peppermint called menthol enhances scent perception and lowers corticotropin-releasing hormone, which in turn lowers adrenal gland output of cortisol and lessens anxiety (Hamzeh, Safari-Faramani, & Khatony, 2020). Family Asteraceae includes *Matricaria Chamomilla* L (*Chamomilla recutita* (L) Rauschert). Due to its calming properties and ability to alleviate anxiety, chamomile flower essential oil can be quite useful in aromatherapy. When older adults with anxiety are given essential oils, their anxiety levels diminish. The elderly were given chamomile essential oil for seven days and fifteen minutes, and the results of the Wilcoxon test indicated a substantial change between the pre- and post-treatment periods (Selvita Berlian Desta, 2020).

The family Annonaceae includes the *cananga Odorata* (Lam), often known as ylang ylang flower. Linalool and (E)-Caryophyllene, the components of ylang ylang essential oil, have the ability to lessen anxiety. One of them is worry about how old people and patients would sleep the night before having a tooth out. When older patients with anxiety disorders use essential oils, their sleep quality improves and their anxiety levels decline. When responders who suffered from anxiety were given ylang ylang essential oil, there was a noticeable difference between the two times. Similar results were seen in patients' anxiety levels before to tooth extraction; those who inhaled ylang-ylang essential oil reported feeling less anxious (Amelia & Rubiyanto, 2020).

*Citrus aurantium*, sometimes referred to as bitter orange, is a member of the citrus genus and family Rutaceae. In addition to flavonoids and psynerin, which have anti-depressant properties, bitter orange includes limonene, linalool, linalyl acetate, geranyl acetate, geraniol, nerol, and neryl acetate, all of which have sedative and anti-anxiety effects (Kamalifard, Khalili, Namadian, Herizchi, & Ranjbar, 2017). According to research by (Abdollahi & Mobadery, 2020), patients with type 2 diabetes mellitus may experience a reduction in anxiety when they inhale eight drops of bitter orange essential oil, dribble it over cotton wool, and wear it on their shirt collar. According to the treatment's outcomes, anxiety levels significantly decreased both before and after bitter orange essential oil was administered.

*Cymbopogon citratus* (DC.) The essential oil of the lemongrass plant is one of the most significant essential oil kinds and is used extensively worldwide. It is a member of the Poaceae family (Kuate, 2017). Citronellal, citronellol, and geraniol are the primary ingredients in lemongrass oil. The calming and hypnotic properties of the lemongrass plant help lessen depressive symptoms, which are brought on by weariness and stress, and enhance the quality of sleep. The plant known as rosemary, or *Rosemarinus officinalis* L., is a member of the Lamiaceae family. The primary constituents of rosemary aromatherapy oil are 1,8-cineole,  $\alpha$ -pinene, camphor, and  $\beta$ -pinene. You may use the rosemary herb as an addition to cuisine or as a tea.

In addition, it may be applied to aromatherapy. (Peday, Y., & Watini, 2022) studied how aromatherapy containing rosemary might lower preschoolers' anxiety levels brought on by hospital stays. Anxiety levels decreased both before and after the children received therapy.

## CONCLUSION

In summary, herbal remedies are a viable means of supplementing psychological therapy and fostering overall well-being while reducing anxiety in psychological problems. Clinicians can provide individualized treatment plans that address the complex character of anxiety disorders and maximize therapy results for patients seeking relief from anxiety symptoms by fusing pharmacological and psychological viewpoints. In psychological circumstances, the link between herbal therapies for anxiety entails integrating herbal and psychological viewpoints to address the intricate interaction of behavioral, affective, cognitive, and neurobiological components that underlie anxiety disorders. Clinicians may provide complete treatment methods that support symptom reduction, resilience, and general psychological well-being by integrating evidence-based strategies from both areas.

## REFERENCES

- Abdollahi, Fariba, & Mobadery, Tofigh. (2020). The effect of aromatherapy with bitter orange (*Citrus aurantium*) extract on anxiety and fatigue in type 2 diabetic patients. *Advances in Integrative Medicine*, 7(1), 3–7.
- Alshehri, Abdullah, Alshehri, Badr, Alghadir, Omar, Basamh, Abdullah, Alzeer, Meshari, Alshehri, Mohammed, & Nasr, Sameh. (2023). The prevalence of depressive and anxiety symptoms among first-year and fifth-year medical students during the COVID-19 pandemic: a cross-sectional study. *BMC Medical Education*, 23(1), 411.
- Amelia, Danna, & Rubiyanto, Dwiwarso. (2020). Perbandingan Minyak Atsiri Bunga Kenanga (*Cananga odorat*) Segar dan Kenanga Layu. *INDONESIAN JOURNAL OF CHEMICAL RESEARCH*, 16–23.
- Donthu, Naveen, Kumar, Satish, Mukherjee, Debmalaya, Pandey, Nitesh, & Lim, Weng Marc. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296.
- Fonseca, Lyca R. da, Rodrigues, Rafaele de A., Ramos, Aline de S., da Cruz, Jefferson D., Ferreira, José Luiz P., Silva, Jefferson Rocha de A., & Amaral, Ana Claudia F. (2020). Herbal medicinal products from *Passiflora* for anxiety: An unexploited potential. *The Scientific World Journal*, 2020.
- Garakani, Amir, Murrough, James W., Freire, Rafael C., Thom, Robyn P., Larkin, Kaitlyn, Buono, Frank D., & Iosifescu, Dan V. (2020). Pharmacotherapy of anxiety disorders: current and emerging treatment options. *Frontiers in Psychiatry*, 11, 595584.
- Hamzeh, Sahar, Safari-Faramani, Roya, & Khatony, Alireza. (2020). Effects of aromatherapy with lavender and peppermint essential oils on the sleep quality of cancer patients: a randomized controlled trial. *Evidence-Based Complementary and Alternative Medicine*, 2020.
- Kamalifard, Mahin, Khalili, Azizeh Farshbaf, Namadian, Mahsa, Herizchi, Sepideh, & Ranjbar, Yunes. (2017). Comparison of the effect of lavender and bitter orange on depression in menopausal women: a triple-blind randomized controlled trial. *Int J Womens Health Reprod Sci*, 5(3), 224–230.
- Kuete, Victor. (2017). *Medicinal spices and vegetables from Africa: therapeutic*

- potential against metabolic, inflammatory, infectious and systemic diseases.* Academic Press.
- Marais, Gabriel A. B., Lantheaume, Sophie, Fiault, Robin, & Shankland, Rebecca. (2020). Mindfulness-based programs improve psychological flexibility, mental health, well-being, and time management in academics. *European Journal of Investigation in Health, Psychology and Education*, 10(4), 1035–1050.
- Peday, Y., & Watini, S. (2022). No Title Implementasi Media TV Sekolah sebagai Pembelajaran Daring di TK Pertiwi VI Manokwari. *JlIP*, 5(3), 6.
- Selvita Berlian Desta, Selvita. (2020). *Pengaruh Aromaterapi Chamomile Terhadap Tingkat Kecemasan Lansia Di Desa Wonokerso*. Universitas Kusuma Husada Surakarta.
- Verma, Surabhi, & Gustafsson, Anders. (2020). Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach. *Journal of Business Research*, 118, 253–261.
- Wróbel-Biedrawa, Dagmara, & Podolak, Irma. (2024). Anti-Neuroinflammatory Effects of Adaptogens: A Mini-Review. *Molecules*, 29(4), 866.
- Xiong, Peng, Liu, Min, Liu, Bo, & Hall, Brian J. (2022). Trends in the incidence and DALYs of anxiety disorders at the global, regional, and national levels: Estimates from the Global Burden of Disease Study 2019. *Journal of Affective Disorders*, 297, 83–93.

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