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Homeopathic treatments in cerebral palsy – Fact or fiction?

Denis ARSOVSKI¹, Natasha CHICHEVSKA-JOVANOVA²**Abstract**

Introduction. Cerebral palsy is a non-progressive neurological disorder that impacts motor and functional development of the affected children. While physiotherapy and pharmacologic interventions remain standard, families explore homeopathy as a complementary option. This review examines the current evidence supporting the use of homeopathy in pediatric cerebral palsy rehabilitation.

Aims. To assess the quality, safety, and reported effects of homeopathic treatments in children with cerebral palsy and determine whether such approaches can be integrated into rehabilitative practice.

Material and method. A systematic literature review was conducted following preferred reporting items for systematic reviews and meta-analysis. Databases searched included PubMed, Scopus, Cochrane, Google Scholar, and ScienceDirect. Eligibility criteria were specified using the PICOS framework, with particular emphasis on pediatric populations diagnosed with cerebral palsy who received either personalized or complex homeopathic interventions. Out of 257 initial records, 46 studies met inclusion criteria for narrative synthesis. Due to methodological heterogeneity, no meta-analysis was performed.

Results. Frequent reports cited improvements in muscle tone, sleep, appetite, emotional regulation, and behavioral outcomes. Common remedies included *Calcarea phosphorica*, *Belladonna*, *Stramonium*, and *Zincum metallicum*. However, most findings originated from case reports and observational studies with limited methodological rigor. Risks include delayed access to evidence-based treatment and variable remedy quality.

Conclusion. While some families and clinicians notice benefits from homeopathy, the current evidence base lacks the rigor necessary to recommend it as proven alternative therapy for cerebral palsy. High-quality randomized controlled trials are urgently needed. Until then, homeopathy should be approached with caution and only within integrative care models under clinical supervision.

Key words: *alternative medicine, cerebral palsy, homeopathy, rehabilitation, physiotherapy.*

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Introduction

Cerebral palsy is a group of permanent, non-progressive neurological disorders that affect movement, muscle tone, and posture, caused by damage to the developing brain either during pregnancy, birth, or shortly thereafter (Sadowska et al., 2020). It represents one of the most common causes of physical disability in childhood, with a global prevalence of approximately 1.6 per 1,000 live births (McIntyre et al., 2022). This condition manifests through a wide range of motor impairments and may be accompanied by sensory, cognitive, communication, and behavioral challenges (Paul et al., 2022). Due to the complex and multifactorial nature, the management of cerebral palsy involves a multidisciplinary approach such as physical therapy, occupational therapy, speech therapy, pharmacological treatment, and, in some cases, surgical interventions (Trabacca et al., 2016). However, in recent years, there has been a growing interest among families and healthcare workers in exploring complementary and alternative medicine as part of the rehabilitation process for children with cerebral palsy (Hurvitz et al., 2003).

One such alternative medicine modality that has stimulated debate is homeopathy - a therapeutic system with the use of highly diluted substances to stimulate the self-healing mechanisms of the body (Jonas et al., 2003). Despite its widespread use in different parts of the world and the informal reports of improvement in children with cerebral palsy, homeopathy remains controversial due to a lack of consistent scientific evidence supporting its efficacy (Dantas, & Rampes, 2000).

Proponents of homeopathy argue that it offers a gentle, personalized, and holistic approach that can help reduce muscle spasticity, improve sleep, improve emotional well-being, and support developmental progress in children with cerebral palsy (Sajedi et al., 2008). On the other hand, critics indicate the methodological weaknesses of many studies, the questionability of the proposed mechanisms of action, and the risk of delaying proven medical treatments in favor of unvalidated alternatives (Ernst, 2002).

Moreover, the placebo effect and parental expectations are often cited as misleading factors in assessing the real impact of homeopathic remedies (Haresnape, 2013). Given the complex needs of children with cerebral palsy and the high emotional and financial pressure placed on families, it is important to evaluate all available treatment options - including homeopathy from the perspective of evidence-based medicine (Markun et al., 2017).

The purpose of this literature review is to examine the existing research on homeopathic treatments for children with cerebral palsy, to assess the quality and outcomes of available studies and explore whether homeopathy can be considered a credible adjunct to conventional treatment, or whether it still lacks scientific legitimacy. This review explores the historical background of homeopathy, its theoretical principles, reported applications in the context of cerebral palsy, and the results of clinical trials and case studies. This paper aims to provide important yet objective evaluation of homeopathy's place in pediatric neurorehabilitation, examining the fundamental question of its scientific validity.

Materials and method

This analysis was conducted using a structured, critical, and transparent process in accordance with the preferred reporting items for systematic reviews and meta-analyses guidelines. The PRISMA showed that from a total of 257 records were identified through electronic databases including PubMed, Scopus, Cochrane, and Google Scholar. After the removal of 34 duplicate records, 223 records remained for title and abstract screening. From these, 171 were excluded for not meeting inclusion criteria, resulting in 52 full-text reports being sought for retrieval. Of these, 6 reports could not be accessed due to limited availability or full-text restrictions. The remaining 46 studies were assessed for eligibility, and all were deemed suitable for inclusion. Figure 1 also shows the relatively high exclusion rate during screening, underscoring the limited availability of rigorous and pertinent research within this specialized area. No studies were eligible for meta-analysis due to heterogeneity in design, outcomes, and methodology; hence, a qualitative synthesis was conducted using all 46 eligible studies (Figure 1).

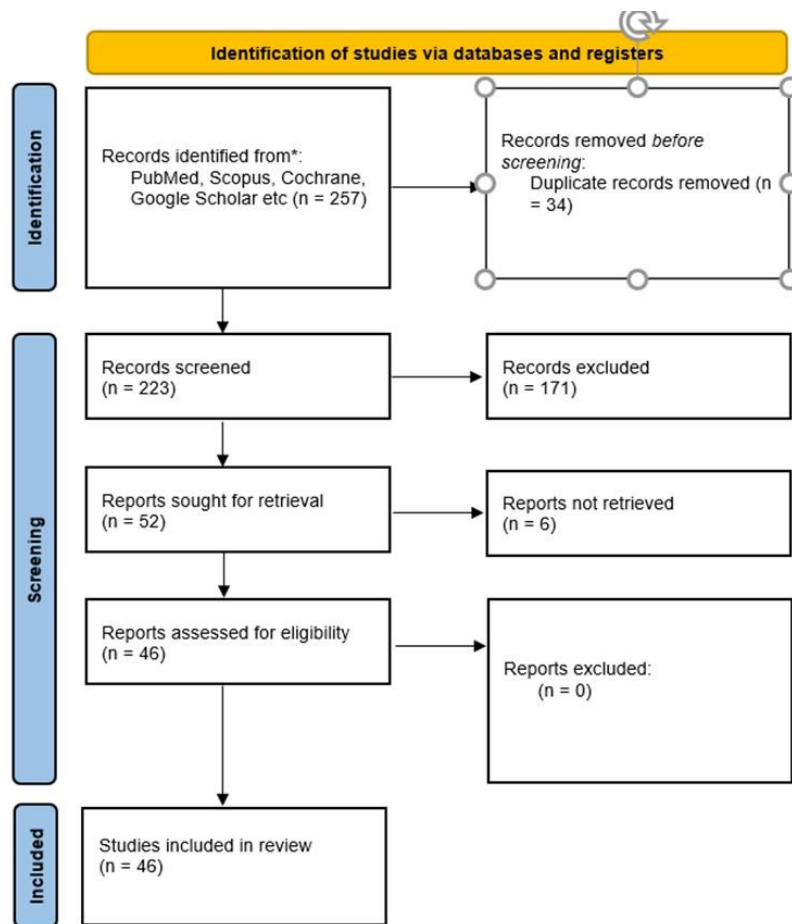


Figure 1. PRISMA guidelines for this research

The methodological approach was further supported by the PICOS framework, allowing for clear definition of inclusion criteria and guiding the review process with clinical relevance (Table 1). Table 1 shows the PICOS criteria that guided the inclusion criteria and structure of this review. The population was clearly defined as children with cerebral palsy under the age of 18, ensuring age-specific clinical relevance. The intervention focused on homeopathy, which included both individualized and complex polypharmacy remedies. Studies comparing these approaches to conventional treatment, placebo, or no treatment were prioritized to allow for an evaluative contrast in efficacy. The selected outcomes were holistic, spanning physical (motor function, tone) and systemic (sleep, appetite, emotional regulation) dimensions. Study designs included in the review were deliberately broad focus on both experimental and observational methodologies.

Table 1. PICOS criteria.

PICOS Element	Definition
P - Population	Children (0–18 years old) diagnosed with cerebral palsy
I - Intervention	Homeopathic treatment (individualized or complex remedies)
C - Comparison	Conventional treatment, placebo, or no treatment
O - Outcomes	Improvement in motor function, tone, sleep, appetite, emotional behavior
S - Study Design	Clinical trials, case studies, observational studies, meta-analyses

An extensive search was performed using electronic databases including PubMed, Google Scholar, Scopus, Cochrane Library, ScienceDirect, and Medline. Search terms were combined using Boolean operators and included "homeopathy", "homeopathic treatment", "cerebral palsy", "children with cerebral palsy", "alternative medicine", "complementary therapy". Filters were applied to restrict the results to English-language publications, human studies and pediatric subjects (0–18 years). The initial search provided over 250 records, which were subjected to a multi-stage screening process: title and abstract review, followed by full-text analysis.

The selection process was guided by pre-established inclusion and exclusion criteria. The inclusion criteria were children (0–18 years) diagnosed with any form of cerebral palsy, studies where homeopathy was the primary or adjunctive intervention, motor function, quality of life, sleep, or behavioral change measured with homeopathy. The exclusion criteria were non-clinical publications (editorials, philosophical discussions, or opinion papers), studies that focused on adults with cerebral palsy, animal studies or in vitro analyses and reports where homeopathy was not clearly defined or isolated as a treatment modality.

Data were extracted from selected studies using a narrative synthesis approach. Key information recorded included study type and design, sample size and population demographics, homeopathic remedies used, duration of intervention, assessment tools. Due to the heterogeneity in study designs and small sample sizes in many case reports, meta-analysis was not performed. Instead, qualitative comparison and thematic synthesis were applied to identify recurrent patterns and trends across the literature.

Homeopathy, being rooted in individualized and holistic care, poses challenges to traditional clinical trial methodology. The philosophy of "like cures like" and the use of ultra-diluted substances remain controversial within evidence-based medicine. Nevertheless, many studies reported high parental satisfaction, perceived improvement, and minimal risk - factors that must be acknowledged in pediatric care, especially when standard interventions are limited or insufficient. In addition, key characteristics of selected studies are summarized in Table 2.

Table 2. Key characteristics of some included studies.

Author(s)	Type of Study	Sample Size	Homeopathic Remedy	Main Outcome
Sajedi et al.	Clinical Trial	24 children (Tehran, Iran	Not specified (homeopathic drugs vs. placebo)	No difference in muscle tone between groups after 4 months, no positive effects on Ashworth scale of homeopathy added to rehabilitation.
Binuraj & Vishnupriya	Case report	1 child with spastic quadriplegia	Calcarea phosphorica 1M	Marked improvement in motor function and vision, increased quality of life score after intervention
Yadav et al.	Narrative review/Case summary	Not specified	Individualized remedies (constitutional and therapeutic)	Homeopathy shown to aid in managing muscle tone, spasticity, constipation, speech, social development and abnormal reflexes in children with cerebral palsy
Patra et al.	Narrative review	Not applicable	General discussion of homeopathic agents for MSDs	Homeopathy presented as a holistic, safe alternative in managing pain, inflammation and mobility limitations in musculoskeletal disorders

Coppola & Montanaro	Retrospective observational study	71 adults with anxiety and sleep disorders	Datif-PC® (homeopathic complex medicine)	Significant reduction in state and trait anxiety (STAI-Y); improved sleep quality and reduced night awakenings after 1 month of treatment
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Results

This section summarizes general observations, clinical tendencies, and reported outcomes related to the use of homeopathic treatments in children with cerebral palsy, based on available documentation, expert opinion, and practice-based accounts. While formal scientific validation remains limited, the findings show recurring themes in therapeutic environments where homeopathy is applied as an alternative or complementary approach.

Commonly used remedies and indications

In homeopathic practice for cerebral palsy, remedies are chosen based on the child's individual constitution, symptoms, emotional state, and overall health profile (Zhou & Zheng, 2005). Among the most commonly used remedies are *Calcarea carbonica* for hypotonia, delayed milestones, and excessive sweating (Niturkar, 2024), *belladonna* for spasticity, convulsions, and sudden jerky movements (Owais et al., 2014), *stramonium* for fear, aggression, and neurological excitability (Soni et al., 2012), *zincum metallicum* for tremors, nervous exhaustion, and mental dullness (Khan et al., 2015) and *causticum* for rigidity, paralysis, and muscle weakness (Sibin et al., 2024). These remedies are often selected and prescribed by experienced homeopaths who follow individualized treatment protocols rather than standard dosing.

Observed changes in motor function and tone

Some researchers report changes in muscle tone, coordination, and movement patterns following homeopathic treatment. These include decreased spasticity in limbs (Sarembaud, 2017), slight improvements in range of motion, smoother execution of voluntary movements (Patra et al., 2024) and reduced frequency of muscle cramps or spasms (Thompson & Hicks, 1998). While these effects are generally described as subtle and gradual, they are often attributed to the holistic action of homeopathic remedies over time.

Behavioral and emotional effects

Homeopathy is also reported to have an influence on behavioral and emotional symptoms often present in children with cerebral palsy (Yadav et al., 2021). Observed improvements include reduced irritability and aggression (Gilla et al., 2023), better emotional regulation (Zepeda-Quiroz et al., 2021), increased social engagement (Veyrier et al., 2023) and more consistent mood and reduced episodes of frustration (Nayak et al., 2020). These changes are especially significant for children who experience anxiety, restlessness, or attention difficulties alongside their physical symptoms.

Sleep and appetite regulation

Improvements in secondary symptoms, such as poor sleep or appetite disturbances, are often cited as key indicators of progress (Institute of Medicine Committee on Sleep Medicine and Research, 2006). Some of the commonly mentioned changes are deeper, uninterrupted sleep patterns (Bell et al., 2011), fewer nighttime awakenings or agitation (Coppola & Montanaro, 2013), increased appetite and more regular eating habits (Budhiraja et al., 2024) and better digestion and fewer gastrointestinal complaints (Peckham et al., 2019). These secondary benefits are believed by some practitioners to contribute to better overall functioning and improved quality of life (Fujino et al., 2024).

Integration with conventional therapies

Homeopathy is most often used alongside physiotherapy, occupational therapy, and conventional medication (Maftei et al., 2025). Homeopathy may improve the effects of rehabilitation by calming the child or reducing discomfort (Buskin et al., 2016), it may support adherence to therapy by improving mood and focus (Qureshi & Al-Bedah, 2013). In some cases, it is used during periods when conventional options are limited, such as between physiotherapy sessions or during recovery from surgical interventions (Lökken et al., 1995).

Potential risks and dangers of homeopathic use

Although homeopathy is generally considered safe due to the highly diluted nature of its remedies, its use in the treatment of cerebral palsy is not entirely without risks (Stub et al., 2016). The most significant danger arises not from the remedies themselves, but from the potential delay or avoidance of evidence-based treatments.

Another concern is the lack of regulation and standardization in some homeopathic preparations, particularly in regions where oversight is minimal (Herman et al., 2025). This can lead to inconsistency in product quality, dosing, and safety (Kirby, 2002). Relying on unsupported claims may lead to emotional and financial strain, especially when expected improvements do not occur. It is also important to consider the ethical dilemma of promoting therapies that lack strong scientific backing, particularly for vulnerable populations such as children with neurological disabilities (Aggarwal & Nayak, 2022). Thus, while homeopathy may offer comfort or perceived benefits to some families, these potential risks underline the importance of its use only as a complementary—and not a replacement—therapy within a well-supervised, multidisciplinary treatment plan (Thelwall, 2021).

Interpretation and Limitations

This systematic review shows a dichotomy between anecdotal support and scientific skepticism regarding the use of homeopathy in children with cerebral palsy. Despite a high level of parental satisfaction and some reported improvements in muscle tone, sleep, emotional regulation, and behavioral symptoms, the majority of included studies are characterized by low methodological rigor. The predominance of case reports, small-scale observational studies, and narrative reviews limits the ability to establish causal relationships or generalize the results. While some improvements may be attributed to homeopathic remedies, others may stem from placebo effects, natural progression, or concurrent therapies such as physiotherapy.

The frequent use of individualized remedies, including *Calcarea phosphorica*, *Belladonna*, *Stramonium*, and *Zincum metallicum*, reflects the personalized nature of homeopathic practice. However, this also presents challenges for standardization and reproducibility in scientific research. The observed therapeutic benefits, though promising, lack consistency across studies and are rarely measured using validated clinical tools. Importantly, while homeopathy may serve as a supportive or adjunctive rehabilitation approach, it should not replace conventional rehabilitative interventions which have proven efficacy.

The present review is subject to several important limitations that affect the generalizability and strength of its conclusions. One of the most significant challenges encountered was the lack of high-quality randomized controlled trials, which limits the ability to establish causal relationships or make evidence-based recommendations regarding the efficacy of homeopathic treatments for children with cerebral palsy. The studies included in this review were predominantly case reports, small observational studies, and narrative summaries, many of which lacked control groups, blinding, or standardized outcome measures. This methodological heterogeneity not only restricted the possibility of performing a meta-analysis but also introduced a high risk of bias, making it difficult to compare results or draw consistent conclusions.

Also, the subjective nature of many outcome assessments often based on parental reports or clinical impressions raises concerns about reliability and validity, particularly in the absence of objective, measurable indicators. There is also a potential publication bias, as studies reporting positive results are more likely to be published, possibly inflating the apparent benefits of homeopathic interventions. In addition, the personalized nature of homeopathic prescriptions creates challenges in replicability and standardization, further complicating efforts to evaluate efficacy across populations.

Another limitation involves the ethical implications of using treatments that are not yet supported by strong scientific evidence, especially in vulnerable pediatric populations. While no direct harms from homeopathy were reported in the reviewed studies, the potential for delayed access to conventional, evidence-based care remains a concern. Finally, limited regulatory oversight in the preparation and distribution of homeopathic remedies may pose additional risks regarding quality, consistency, and safety. Taken together, these limitations define the need for cautious interpretation of current findings and highlight the urgency for more rigorous and well-designed clinical research in this area.

Discussions

The findings presented in this review highlight the complexity and controversy surrounding the use of homeopathic treatments in children with cerebral palsy. While many caregivers and practitioners report improvements in motor function, behavior, and overall well-being, the absence of rigorous scientific validation limits the credibility of these claims in the broader medical community. This section aims to analyze the reported

outcomes, explore possible explanations for observed effects, and reflect on the role of homeopathy as a complementary or supportive therapy within a multidisciplinary rehabilitation framework.

Recent reviews, such as the one published in the Italian Journal of Pediatrics (Casini et al., 2023), confirm that complementary and alternative medicine including homeopathy, is increasingly used in children with serious neurological conditions. The review emphasizes that families often turn to alternative medicine to reduce the pain, discomfort, and emotional burden associated with chronic diseases, especially when conventional therapies have limited effects or cause side effects. This aligns with the findings of our research, where homeopathy was frequently reported to contribute to improved sleep, behavior regulation, and reduced spasticity. However, both research highlight the critical need for cautious application of alternative medicine methods, stressing that safety and efficacy must be evaluated rigorously, especially in vulnerable pediatric populations. While parental satisfaction is a recurring theme in both reviews, the absence of high-quality, large-scale clinical trials remains a barrier to fully integrating homeopathy into standardized cerebral palsy care.

Recent findings from a 2025 systematic review and meta-analysis on Chinese herbal medicine for children with cerebral palsy (Huang et al., 2025) offer a valuable comparison to the present analysis of homeopathic treatments. The Chinese herbal medicine meta-analysis, which included 17 randomized controlled trials, showed improvements in both effects rates and gross motor function measures among children receiving Chinese herbal medicine in combination with standard treatments. In contrast, the outcomes observed in this review of homeopathy are largely based on case reports, observational studies, and anecdotal evidence, with improvements noted in spasticity, sleep, emotional regulation, and appetite. While both approaches fall under the umbrella of complementary and alternative medicine, Chinese herbal medicine currently benefits from a more robust body of clinical evidence and mechanistic exploration, including system pharmacology information into immune and metabolic modulation. On the other hand, homeopathy, due to its reliance on ultra-diluted substances and individualized protocols, continues to face skepticism regarding its scientific plausibility and measurable efficacy. Nevertheless, both treatments share common ground in being valued by caregivers for their perceived safety, holistic focus, and emotional reassurance.

Further support for the potential role of homeopathy in the management of cerebral palsy comes from case-based evidence, such as a 2021 report documenting the treatment of a child with spastic quadriplegia using *Calcarea phosphorica* 1M in conjunction with physiotherapy (Binuraj & Vishnupriya, 2021). The report showed marked improvements in motor activities, quality of life, and even visual function. These findings are consistent with themes identified in our review, particularly regarding perceived benefits in muscle tone, general function, and secondary symptoms such as mood and behavior. However, as emphasized in both this case and the present paper, such positive outcomes are largely anecdotal and derived from single-case experiences. Unlike the robust meta-analysis available for Chinese herbal medicine in cerebral palsy treatment, the homeopathic literature lacks randomized controlled trials that could substantiate these effects.

Additionally, a 2024 systematic review and meta-analysis published in the Journal of Ayurveda and Integrative Medicine further supports the growing body of evidence for complementary approaches in managing cerebral palsy. This review focused specifically on Ayurvedic medicine and found improvements in spasticity and quality of life in children undergoing Ayurvedic interventions, especially when compared to standard physiotherapy or when integrated with it (Rocha et al., 2024). These findings parallel the outcomes noted in this research, where homeopathy also appeared to contribute to reductions in muscle spasticity, improved sleep patterns, and improved emotional regulation. Both Ayurvedic and homeopathic approaches emphasize holistic and individualized care, providing not only physical support but also emotional and psychological benefits to children and their caregivers.

Further evidence supporting the global interest in integrative approaches for cerebral palsy comes from a multicenter randomized controlled trial protocol published in Trials (Lee et al., 2020), which investigates the use of Traditional Korean Medicine, specifically acupuncture and herbal treatments as part of an Integrative Medicine Rehabilitation program. This protocol is significant not only because it combines traditional practices with conventional rehabilitation, but also because it aims to measure both motor function and quality of life outcomes over 24 weeks. Similar to the themes identified in our review, this study emphasizes holistic, individualized care, aiming to improve motor outcomes, emotional regulation, and caregiver satisfaction. While the authors model is

more structurally integrated into mainstream rehabilitation programs in Korea, homeopathy still occupies a more controversial and less systematized role.

Conclusion

This review critically examined 46 studies on the use of homeopathy in children with cerebral palsy and revealed a divided landscape between anecdotal support and scientific skepticism. While parental satisfaction and reports of subjective improvements in sleep, behavior, and mood are well documented, there remains a lack of rigorous clinical evidence to support homeopathy as a reliable or standalone therapeutic approach. The absence of standardized treatment protocols, the high variability in outcome reporting, and the philosophical tension between the principles of homeopathy and biomedical science contribute to its marginalization in mainstream practice. However, its continued popularity among caregivers reflects a demand for holistic, low-risk, and individualized care models—a gap that conventional medicine does not always fill. Critically, this review does not dismiss homeopathy outright but rather calls for scientific accountability and a cautious, ethically informed integration of complementary approaches in pediatric neurorehabilitation. Until stronger evidence emerges, homeopathy should be regarded as a supportive modality, potentially beneficial in improving caregiver satisfaction and addressing secondary symptoms, but not a replacement for evidence-based treatments.

References

- Aggarwal, T., & Nayak, C. (2022). Ethical practice of homoeopathy from Indian perspective. *Ethics, Medicine and Public Health*, 23, 100801. <https://doi.org/10.1016/j.jemep.2022.100801>
- Bell, I. R., Howerter, A., Jackson, N., Aickin, M., Baldwin, C. M., & Bootzin, R. R. (2011). Effects of homeopathic medicines on polysomnographic sleep of young adults with histories of coffee-related insomnia. *Sleep Medicine*, 12(5), 505–511. <https://doi.org/10.1016/j.sleep.2010.03.013>
- Binuraj, S. R., & S.V., V. (2021, March 27). A case report on Spastic quadriplegia cerebral palsy managed with Homoeopathic medicines as an adjuvant to physiotherapy. *International Journal of AYUSH Case Reports*, 5(1), 11–18. <https://www.ijacare.in/index.php/ijacare/article/view/192>
- Budhiraja, A., Bidwalkar, S., Saxena, A., & Singh, S. (2024). Exploring the role of homoeopathic medicines in eating disorders. *International Journal for Multidisciplinary Research (IJFMR)*, 6(2), Published March 18, 2024. <https://doi.org/10.36948/ijfmr.2024.v06i02.15076>
- Buskin, S., Riveros Huckstadt, M. P., & Salatino, S. (2016). Use of natural and homeopathic remedies in children ailments. *Clinical Management Issues*, 10(2), 33–48. <https://doi.org/10.7175/cmi.v10i2.1252>
- Casini, F., Scaltrito, F., Grimaldi, M. T., Pop, T. L., Calcaterra, V., Zuccotti, G. V., Pettoello-Mantovani, M., Ferrara, P., Corsello, G., & Fabiano, V. (2023). Use of complementary and alternative medicine in children affected by oncologic, neurologic and liver diseases: A narrative review. *Italian Journal of Pediatrics*, 49(1), 152. <https://doi.org/10.1186/s13052-023-01554-0>
- Coppola, L., & Montanaro, F. (2013). Effect of a homeopathic-complex medicine on state and trait anxiety and sleep disorders: A retrospective observational study. *Homeopathy*, 102(4), 254–261. <https://doi.org/10.1016/j.homp.2013.07.002>
- Dantas, F., & Rampes, H. (2000). Do homeopathic medicines provoke adverse effects? A systematic review. *British Homeopathic Journal*, 89(Suppl 1), S35–S38. <https://doi.org/10.1054/homp.1999.0378>
- Ernst, E. (2002). A systematic review of systematic reviews of homeopathy. *British Journal of Clinical Pharmacology*, 54(6), 577–582. <https://doi.org/10.1046/j.1365-2125.2002.01699.x>
- Fujino, F. M. S. D. C., Ribeiro, A. P., Armond, J. E., & Souza, P. C. (2024). Homeopathy as a means to improve quality of life. *Homeopathy: The Journal of the Faculty of Homeopathy*. Advance online publication. <https://doi.org/10.1055/s-0044-1785521>
- Gilla, D., Sanjeevi, K. M., KR, S., & SR, S. (2023). Homoeopathy for reducing disruptive behavioural symptoms in children with conduct disorder: A case series. *International Journal of High Dilution Research*, 22(cf), 39–50. <https://doi.org/10.51910/ijhdrv22icf.1273>
- Haresnape, C. (2013). An exploration of the relationship between placebo and homeopathy and the implications for clinical trial design. *JRSM Short Reports*, 4(9), 2042533313490927. <https://doi.org/10.1177/2042533313490927>
- Herman, P. M., Crawford, C. C., Maglione, M. A., Newberry, S. J., Amieux, P. S., Blyden-Taylor, K., Khorsan, R., Prenguber, M., Rice, E., Shollar, A., Tyson, T., Vassighi, N., & Coulter, I. D. (2025). The current state of the quality of homeopathic clinical research. *Complementary Therapies in Medicine*, 88, 103108. <https://doi.org/10.1016/j.ctim.2024.103108>
- Huang, Y.-Y., Cheng, Y.-Y., Chen, H.-Y., Fu, R.-H., Chang, Y.-J., & Yang, T.-H. (2025). Chinese herbal medicine for the treatment of children with cerebral palsy: A meta-analysis of randomized controlled trials with core herbs exploration. *Frontiers in Pharmacology*, 16, Article 1500095. <https://doi.org/10.3389/fphar.2025.1500095>
- Hurvitz, E. A., Leonard, C., Ayyangar, R., & Nelson, V. S. (2003). Complementary and alternative medicine use in families of children with cerebral palsy. *Developmental Medicine and Child Neurology*, 45(6), 364–370. <https://doi.org/10.1017/s0012162203000707>
- Institute of Medicine (US) Committee on Sleep Medicine and Research. (2006). Extent and health consequences of chronic sleep loss and sleep disorders. In H. R. Colten & B. M. Altevogt (Eds.), *Sleep disorders and sleep deprivation: An unmet public health problem* (Chapter 3). National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK19961/>

17. Jonas, W. B., Kaptchuk, T. J., & Linde, K. (2003). A critical overview of homeopathy. *Annals of Internal Medicine*, 138(5), 393–399. <https://doi.org/10.7326/0003-4819-138-5-200303040-00009>
18. Khan, A., Khuwaja, G., Islam, F., Javed, H., Ishrat, T., Vaibhav, K., Khan, B., Tabassum, R., Das, M., Ahmed, M. E., & Islam, F. (2015). Protective effect of Zincum metallicum on rat model of Parkinson's disease. *Indian Journal of Research in Homoeopathy*, 9(2), 114–121. <https://doi.org/10.4103/0974-7168.159528>
19. Kirby, B. J. (2002). Safety of homeopathic products. *Journal of the Royal Society of Medicine*, 95(5), 221–222. <https://doi.org/10.1177/014107680209500501>
20. Lee, M. J., Yun, Y. J., Yu, S., Kim, H., Kim, J. H., & Ko, Y. (2020). Integrative medicine rehabilitation for children with cerebral palsy: A study protocol for a multicenter pragmatic randomized controlled trial. *Trials*, 21, 723. <https://doi.org/10.1186/s13063-020-04639-x>
21. Lökken, P., Straumsheim, P. A., Tveiten, D., Skjelbred, P., & Borchgrevink, C. F. (1995). Effect of homoeopathy on pain and other events after acute trauma: Placebo controlled trial with bilateral oral surgery. *BMJ (Clinical Research Ed.)*, 310(6992), 1439–1442. <https://doi.org/10.1136/bmj.310.6992.1439>
22. Maftai, N. M., Nechifor, A., Tan, B., Elisei, A. M., Pelin, A. M., Nechita, L., Tatu, A. L., Leow, L. J., & Nwabudike, L. C. (2025). Therapeutic applications for homeopathy in clinical practice. *Advances in Therapy*, 42(1), 36–51. <https://doi.org/10.1007/s12325-024-03022-5>
23. Markun, S., Maeder, M., Rosemann, T., & Djalali, S. (2017). Beliefs, endorsement and application of homeopathy disclosed: A survey among ambulatory care physicians. *Swiss Medical Weekly*, 147, w14505. <https://doi.org/10.4414/smww.2017.14505>
24. Mathie, R. T., Lloyd, S. M., Legg, L. A., Clausen, J., Moss, S., Davidson, J. R., & Ford, I. (2014). Randomised placebo-controlled trials of individualised homeopathic treatment: Systematic review and meta-analysis. *Systematic Reviews*, 3, 142. <https://doi.org/10.1186/2046-4053-3-142>
25. McIntyre, S., Goldsmith, S., Webb, A., Ehlinger, V., Hollung, S. J., McConnell, K., Arnaud, C., Smithers-Sheedy, H., Oskoui, M., Khandaker, G., Himmelmann, K., & Global CP Prevalence Group*. (2022). Global prevalence of cerebral palsy: A systematic analysis. *Developmental Medicine and Child Neurology*, 64(12), 1494–1506. <https://doi.org/10.1111/dmcn.15346>
26. Nayak, C., Singh, A. K., Singh, R., & Mathur, A. (2020). Depressive disorders treated with homeopathic medicine Nux vomica – A case series. *AYUHOME*, 7(1), 31–38. https://doi.org/10.4103/AYUHOME.AYUHOME_5_21
27. Niturkar, Y. D. (2024). The Calcarea group and its scope in Homoeopathy. *The Homoeopathic Heritage*, 49(12). ISSN: 9070-6038. <https://homeopathicheritage.com/heritage/homeopathic-heritage-march-issue-2024.pdf>
28. Owais, F., Anwar, S., Saeed, F., Muhammad, S., Ishtiaque, S., & Mohiuddin, O. (2014). Analgesic, anti-inflammatory and neuropharmacological effects of Atropa belladonna. *Pakistan Journal of Pharmaceutical Sciences*, 27(6 Suppl. No.), 2183–2187.
29. Patra, S. S., Dalal, P., Roy, T., & Pal, S. (2024). The role of homoeopathy in musculoskeletal disorders: A concise review. *International Journal of AYUSH*, 13(7), 18–29. ISSN: 2349-7025. <https://doi.org/10.22159/prl.ijayush.v13i7.1091>
30. Paul, S., Nahar, A., Bhagawati, M., & Kunwar, A. J. (2022). A review on recent advances of cerebral palsy. *Oxidative Medicine and Cellular Longevity*, 2022, 2622310. <https://doi.org/10.1155/2022/2622310>
31. Peckham, E. J., Cooper, K., Roberts, E. R., Agrawal, A., Brabyn, S., & Tew, G. (2019). Homeopathy for treatment of irritable bowel syndrome. *The Cochrane Database of Systematic Reviews*, 9(9), CD009710. <https://doi.org/10.1002/14651858.CD009710.pub3>
32. Qureshi, N. A., & Al-Bedah, A. M. (2013). Mood disorders and complementary and alternative medicine: A literature review. *Neuropsychiatric Disease and Treatment*, 9, 639–658. <https://doi.org/10.2147/NDT.S43419>
33. Rocha, A. M. O., Len, C. A., Santos, F. H., Iglesias, S. B. O., & Bissoto, J. R. (2024). A systematic review and meta-analysis focusing on the use of ayurvedic medicine in cerebral palsy. *Journal of Ayurveda and Integrative Medicine*, 15(5), 101035. <https://doi.org/10.1016/j.jaim.2024.101035>
34. Sadowska, M., Sarecka-Hujar, B., & Kopyta, I. (2020). Cerebral palsy: Current opinions on definition, epidemiology, risk factors, classification and treatment options. *Neuropsychiatric Disease and Treatment*, 16, 1505–1518. <https://doi.org/10.2147/NDT.S235165>
35. Sajedi, F., Alizad, V., Alaeddini, F., Fatemi, R., & Mazaherinezhad, A. (2008). The effect of adding homeopathic treatment to rehabilitation on muscle tone of children with spastic cerebral palsy. *Complementary Therapies in Clinical Practice*, 14(1), 33–37. <https://doi.org/10.1016/j.ctcp.2007.11.001>
36. Sarembaud, A. (2017). Ruta graveolens, a useful homeopathic medicine for musculoskeletal disorders. *La Revue d'Homéopathie*, 8(2), e23–e26. <https://doi.org/10.1016/j.revhom.2017.03.008>
37. Sibin, R. A., Krishna, S., Irfanudeen, & Janani, S. (2024). Management of osteoarthritis of both knee joints with Causticum, Law of Palliation – A case report. *Journal of Orthopedics & Bone Disorders*, 8(1). <https://doi.org/10.23880/jobd-16000259>
38. Soni, P., Siddiqui, A. A., Dwivedi, J., & Soni, V. (2012). Pharmacological properties of Datura stramonium L. as a potential medicinal tree: An overview. *Asian Pacific Journal of Tropical Biomedicine*, 2(12), 1002–1008. [https://doi.org/10.1016/S2221-1691\(13\)60014-3](https://doi.org/10.1016/S2221-1691(13)60014-3)
39. Stub, T., Musial, F., Kristoffersen, A. A., Alræk, T., & Liu, J. (2016). Adverse effects of homeopathy, what do we know? A systematic review and meta-analysis of randomized controlled trials. *Complementary Therapies in Medicine*, 26, 146–163. <https://doi.org/10.1016/j.ctim.2016.03.013>
40. Thelwall, M. (2021). Alternative medicines worth researching? Citation analyses of acupuncture, chiropractic, homeopathy, and osteopathy 1996–2017. *Scientometrics*, 126(10), 8731–8747. <https://doi.org/10.1007/s11192-021-04145-0>
41. Thompson, E., & Hicks, F. (1998). Intrathecal baclofen and homeopathy for the treatment of painful muscle spasms associated with malignant spinal cord compression. *Palliative Medicine*, 12(2), 119–121. <https://doi.org/10.1191/02692169866737949>
42. Trabacca, A., Vespino, T., Di Liddo, A., & Russo, L. (2016). Multidisciplinary rehabilitation for patients with cerebral palsy: Improving long-term care. *Journal of Multidisciplinary Healthcare*, 9, 455–462. <https://doi.org/10.2147/JMDH.S88782>
43. Veyrier, C.-A., Roucoux, G., Baumann-Coblentz, L., Massol, J., Karp, J.-C., Wagner, J.-P., Chassany, O., & Duracinsky, M. (2023). Homeopathy as patient empowerment and an active path toward supportive care for non-metastatic breast cancer: A qualitative study (TOUCAN). *European Journal of Integrative Medicine*, 64, 102308. <https://doi.org/10.1016/j.eujim.2023.102308>

44. Yadav, A., Kaur, N., & Mishra, M. (2021). Homoeopathic management of cerebral palsy. *International Journal of Homoeopathic Sciences*, 5(2), 82–83. <https://doi.org/10.33545/26164485.2021.v5.i2b.365>
45. Zepeda-Quiroz, N., Luna-Reséndiz, R., & Soto-Sánchez, J. (2021). Efficacy of individualized homeopathy in treatment-resistant depression. *Cureus*, 13(10), e18444. <https://doi.org/10.7759/cureus.18444>
46. Zhou, X. J., & Zheng, K. (2005). Treatment of 140 cerebral palsied children with a combined method based on traditional Chinese medicine (TCM) and western medicine. *Journal of Zhejiang University Science B*, 6(1), 57–60. <https://doi.org/10.1631/jzus.2005.B0057>