

A Prospective Case Series to Study the Effectiveness of Individualised Homeopathic Medicine in Recurrent Upper Respiratory Tract Infection in School Children (Age 5–15 years)

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Abstract

Recurrent upper respiratory tract infections (URTIs) are highly prevalent among school-aged children and significantly impact health, attendance, and quality of life. This prospective case series assesses the effectiveness of individualized homeopathic treatment in reducing the severity of URTIs using the Jackson Scoring System. Forty-five children aged 5–15 years with recurrent URTIs were evaluated using Jackson scores before treatment and after a 6-month follow-up period. Individualized homeopathic remedies were prescribed based on symptom totality. Comparative analysis demonstrated a meaningful reduction in Jackson scores post-treatment, indicating improvement in URTI severity. The study suggests that individualized homeopathic medicine may provide symptomatic relief and decrease infection burden in children with recurrent URTIs.

Introduction

Upper respiratory tract infections constitute the majority of respiratory illnesses in children and include rhinitis, sinusitis, pharyngitis, and the common cold. School-going children are particularly vulnerable due to environmental exposures and an immature immune system. Recurrent URTIs not only affect physical health but also cause school absenteeism, parental work loss, increased medical visits, and frequent antibiotic use. Over-prescription of antibiotics—especially for viral infections—remains a concern, contributing to antimicrobial resistance. This has increased interest in alternative therapeutic approaches such as homeopathy, which emphasizes individualized prescribing based on a patient's characteristic symptoms and overall constitution. Given limited Indian paediatric data, this study aims to evaluate whether individualized homeopathic medicines reduce URTI severity in school-aged children based on before-and-after Jackson score comparison.

Materials and Methods

This prospective case series was conducted over 6 months through school health check-up camps. A total of 45 children were selected using simple random sampling. Children aged 5–15 years with a history of four or more URTI episodes in the previous year and who met the Jackson Score criteria (moderate to severe) were included after obtaining parental or guardian consent. Mentally challenged children, those younger than 5 or older than 15 years, those unwilling to consent, and those not meeting Jackson scoring criteria were excluded. Jackson scores were recorded before the initiation of individualized homeopathic treatment and again after 6 months. The difference between pre- and post-treatment scores was statistically analysed using the paired t-test.

Diagnostic and Operational Definition: Recurrent URTI was defined as ≥ 4 episodes in 12 months or ≥ 3 episodes per year over two consecutive years, with a minimum 2-week symptom-free period between episodes.

Methodology:

Eligible children were selected according to inclusion and exclusion criteria, and baseline symptoms were recorded using a Case Record Format. Initial Jackson Scores were documented before treatment. Individualized homeopathic medicines were prescribed based on totality of symptoms, modalities, and constitutional features, with potency selected according to clinical judgment. Children were monitored for general health over 6 months, after which the final Jackson Score was recorded. Improvement was assessed by comparing pre- and post-treatment Jackson scores.

Outcome Measure: Difference between pre-treatment and post-treatment Jackson scores.

Ethical Considerations: Consent was obtained from guardians, confidentiality maintained, and ethical approval received from the institutional ethics committee.

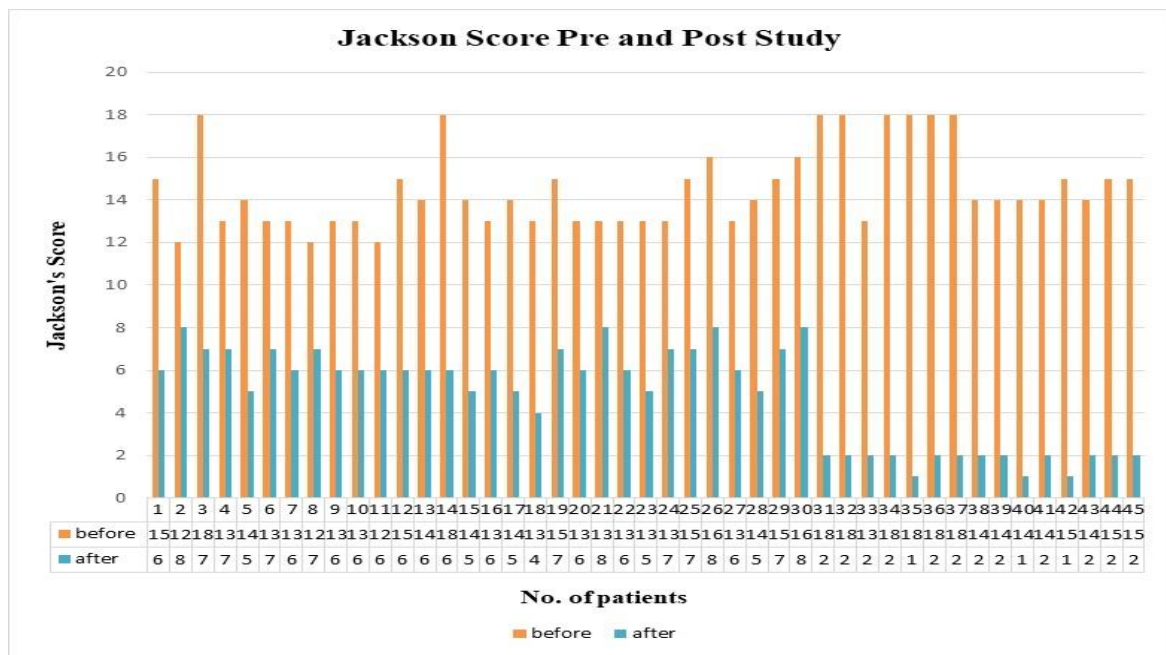
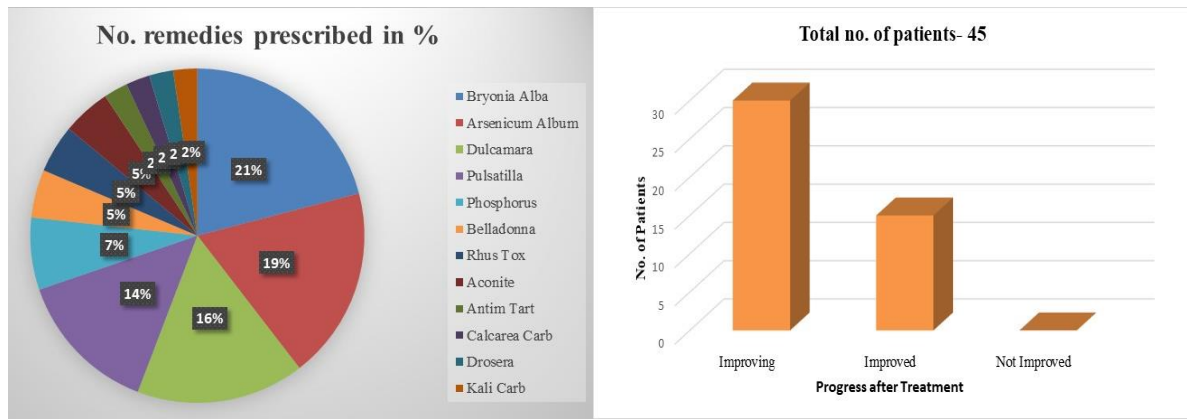
Results and Discussion

The findings of this prospective case series demonstrated a highly significant reduction in the severity of recurrent URTIs, as shown by the paired t-test ($t = 18.8692$, $d.f = 44$, $p < 0.05$). This confirms that the improvement observed after individualized homoeopathic treatment was not due to chance. Children showed notable reductions in both frequency and intensity of URTI episodes, reflecting better overall health and resistance to infection.

Analysis of prescribing patterns revealed that Bryonia Alba (21%), Arsenicum Album (19%), Dulcamara (16%), and Pulsatilla (14%) were the most frequently individualized remedies, indicating recurring symptom profiles among affected children. Remedies such as Phosphorus, Belladonna, and Rhus tox showed moderate usage, while others contributed smaller percentages.

The results suggest that individualized homoeopathy may play a preventive and therapeutic role by enhancing constitutional strength and reducing susceptibility to recurrent infections. These findings align with earlier studies reporting similar benefits in paediatric respiratory conditions.

However, the absence of a control group and the small sample size limit the generalizability of the results. Future randomized controlled trials with larger populations are recommended to confirm the effectiveness of individualized homoeopathic treatment in recurrent URTIs.



Conclusion

This prospective case series suggests that individualized homeopathic medicines may effectively reduce the severity of recurrent URTIs in school-going children. The before-and-after Jackson score comparison demonstrated notable improvement after 6 months of treatment. Larger controlled trials are recommended to strengthen the evidence base and confirm these findings.

References

1. Upper Respiratory Tract Infection; Micah Thomas; Paul A. Bomar; June 26, 2023; <https://www.ncbi.nlm.nih.gov/books/NBK532961/#:~:text=Continuing%20Education%20Activity,with%20upper%20respiratory%20tract%20infections>
2. Recurrent upper respiratory tract infections; MedGen UID: 154380 Concept ID: C0581381 Disease or Syndrome; [Recurrent upper respiratory tract infections](#)

(Concept Id: C0581381) - MedGen - NCBI (nih.gov)

<https://www.ncbi.nlm.nih.gov/medgen/C0581381>

3. Homoeopathic treatment of upper respiratory tract infections in children: Evaluation of thirty case series; Nita M. Ramchandani; May 2010, Pages 101-108;
<https://www.sciencedirect.com/science/article/abs/pii/S1744388109001017>
4. Homeopathic medicinal products for preventing and treating acute respiratory tract infections in children; Kate Hawke 1, Mieke L van Driel, Benjamin J Buffington, Treasure M McGuire, David King; 2022 Dec 13;
<https://pubmed.ncbi.nlm.nih.gov/30196554/>
5. Front. Pediatr.; Xuguang Zhang, Xuezheng Dai, Xianan Li, Xun Xie, Yiru Chen, Yanping Chen, Haoyang Guan, Yan Zhao; 05 January 2024; Sec. Children and Health Volume 11 – 2023;
<https://www.frontiersin.org/journals/pediatrics/articles/10.3389/fped.2023.1165037/full>
6. Management of URTI by different medical practices; Lamiae Grimaldi-Bensouda , Bernard Bégaud, Michel Rossignol, Bernard Avouac, France Lert, Frederic Rouillon, Jacques Bénichou, Jacques Massol, Gerard Duru, Anne-Marie Magnier, Lucien Abenheim, Didier Guillemot; March 19, 2014;
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0089990>
7. The Wisconsin Upper Respiratory symptom survey; Jackson G.G., Dowling H.F., Muldoon R.L. Acute respiratory diseases of viral etiology. VII. Present concepts of the common cold. Am J Public Health. 1962;52:940–945. doi: 10.2105/ajph.52.6.940; Bruce Barrett, Roger Brown, Marlon Mundt, Nasia Safdar, Leota Dye, Rob Maberry, Jennifer Alt; <https://pmc.ncbi.nlm.nih.gov/articles/PMC7119015/table/tb11/>
8. Homeopathy in the Age of Antimicrobial Resistance: Is It a Viable Treatment for Upper Respiratory Tract Infections?; Alison Fixsen; <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0037-1621745?device=mobile&innerWidth=424&offsetWidth=424#JR1700040-12>
9. To Evaluate The Efficacy of Homoeopathic Medicine in Management of Upper Respiratory Tract Infection in Children; Dighe, Leena; Trivedi, Mehul; Patel, Girish; Shah, Pranav; Academic Journal;
https://openurl.ebsco.com/EPDB%3Aagd%3A13%3A16918797/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Aagd%3A131155284&crl=c&link_origin=scholar.google.com
10. Practical Approach for the Diagnosis, Prevention, and Management of Recurrent Upper Respiratory Tract Infection in Children: Report from an Expert Closed-group Discussion;
extension://efaidnbmnnnibpajpcglclefindmkaj/https://www.pidjournal.com/doi/PID/pdf/10.5005/jp-journals-10081-132

11. Upper Respiratory Tract Infection; Author: Zab Mosenifar, MD, FACP, FCCP; Chief Editor: Zab Mosenifar, MD, FACP, FCCP; Updated: May 31, 2024; <https://emedicine.medscape.com/article/302460-overview?form=fpf#a3>
12. Types of upper and lower respiratory tract infection in paediatrics; Kholoud Abdullah Hothan, Mohammed Ali Alawami, Eman Abdulrahman Baothman, Fatima Ali Alghanem, Diana Mohammed Al-Haddad, Ruqyah Ibrahim Al Daerwish, Zainab Ahmed Albetiyan, Ghadeer Ali Alghanem, Khulood Abdullah Bayazeed, Ghadeer Ali Al Yusuf, Anwar Mohammed Aljurfi; VOL. 9 NO. 12 (2022): DECEMBER 2022; <https://www.ijcmph.com/index.php/ijcmph/article/view/10613>
13. Upper respiratory tract disorders ICD Classification; <https://icd.who.int/browse/2024-01/mms/en#433284171>
14. Traditional Chinese Medicine in the treatment of recurrent respiratory tract infections in children: an overview of systematic reviews and Meta-analyses; Yasheng DENG, Siyin HAN, Lanhua XI, Hui HUANG, Tianwei LIANG, Yiqing ZHENG, Yanping FAN, Jiang LIN, PMCID: PMC11462541 PMID: 39380218; 2024 Oct 15 <https://pmc.ncbi.nlm.nih.gov/articles/PMC11462541/#s2:~:text=2.3.%20Research%20Objects,severity%20of%20illness>
15. Chamberlain`s Symptoms and Signs in Clinical Medicine – Twelfth Edition; Colin Ogilvie, Christopher C. Evans; Symptoms of Respiratory Disease; SPUTUM page no. 103