

CHAPTER 12

Bridging Tradition and Technology: AI Applications in Homoeopathic Materia Medica and Repertory Analysis - Narrative review

Shiwani Malai and Apeksha Kanago***

ABSTRACT

The Integration of Artificial Intelligence is transforming Modern Homoeopathic practice by enhancing accuracy, individualization and efficiency in clinical decision making. Homoeopathy relies on detailed case taking, careful observation of body language, extraction of characteristic symptoms, conversion of symptoms into precise rubrics and repertorisation according to Hahnemannian principles. As Repertorisation was introduced in homoeopathic system because of the expanding Materia Medica which is time consuming and complex, therefore the use of AI tools can expedite this process by swiftly analyzing symptom databases to suggesting relevant remedies and differentiating them. The advent of AI and advanced computing technologies in homeopathic medicine is paving the way for a future where traditional repertorisation may become obsolete. Well, its purpose should be to complement the expertise and judgement of well-trained homoeopaths, rather than a replacement for Professional Consultation and Diagnosis. This study provides Systematic overview of integration of AI into homoeopathic practice and assess its impact on patient care. Therefore, AI can quickly go through extensive repertories and prioritize remedies based on symptom similarity and can also assist in remedy relationship. AI homoeopathy integration offers efficiency, evidence-based practice and patient empowerment while following the Holistic principles of Homoeopathy.

Keywords: Homoeopathy; Artificial Intelligence; Repertorisation; Materia Medica; Integration.

1.0 Introduction

Homoeopathy is based on Holistic case taking, individualization, remedy selection on totality of symptoms. Classical Repertorisation emerged to manage expanding Materia medica but remains complex and time-intensive.

**Corresponding author; Assistant Professor, Gynaec and Obs, KLE Homoeopathic Medical College, Belagavi, Karnataka, India (E-mail: shivanism27@gmail.com)*

***Assistant Professor, Pathology, KLE Homoeopathic Medical College, Belagavi, Karnataka, India (E-mail: kanagoapeksha@gmail.com)*

In rapidly evolving healthcare Profession, recent advances in Artificial Intelligence have been offering various tools like machine learning^{2,7,8}, chatbot², NLP^{2,5,8}, Materiomics¹² which is capable of Repertorisation, analysing large symptom data, assisting in rubric formation, differentiating remedies and their relationship, understanding patient's constitution, behavioural patterns, cross referring Materia Medica, philosophical background, to maintain track of history and medical records etc aiding practitioners in evidence-based decision making. The integration of AI into Homoeopathic practice offers an opportunity to bridge traditional wisdom with modern computational tools. This narrative review synthesizes these contemporary studies to evaluate how AI supports Materia Medica understanding and Repertorial analysis, while reviewing the methodologies, strengths and limitations.

AI in Homoeopathy requires more of Empirical studies, but most of the reviewed articles are of conceptual dominance and involves heterogenicity of study designs. Thematic synthesis was done using framework analysis, grouping the findings into six themes by interpreting multiple research study to understand the depth and insights of each individual studies. Future research can be taken with more of clinical evidence-based study along with ethical concerns and larger datasets. Integrating AI with homoeopathy requires more of exploration and awareness of the tools, as to how it's been used how much accuracy, weightage etc is carried considering its strengths and limitations. However, AI can be useful for assisting a practitioner but not replace the Holistic-Healing of the patient's healthcare.

- *Research question:* Does AI Support and Enhance Homoeopathic Materia Medica and Repertory analysis?
- *Aim:* To explore the Application of AI in Homoeopathic Materia Medica and Repertorial analysis by critical review and synthesize existing literature to evaluate its role in enhancing clinical decision-making while preserving the holistic principles of homoeopathy.
- *Objectives:*
 - To Explore recent developments in AI tools applied to homoeopathic Materia medica and Repertorisation.
 - To Review the Advantages and Limitations of existing articles of AI assisted tools in homoeopathic practice.

3.0 Methodology

Study design: The purpose of this study is to conduct a narrative review of existing research on use of AI in repertorial analysis and homoeopathic Materia Medica. This approach was undertaken to enable conceptual synthesis and critical interpretation of

heterogenous study designs like analytical review, conceptual review, systematic review, technology-based evaluations.

Data sources: For this research, data was collected from various sources like:

1. PubMed
2. Scopus
3. Google Scholar
4. AYUSH research portal
5. ResearchGate
6. Research Rabbit

Search Strategy: Search terms included: “Artificial Intelligence”, “Machine Learning”, “Materia Medica”, “Repertorisation”, “Natural Language Processing”, “Homoeopathy”. Boolean operators (AND/OR) were applied.

3.1 Inclusion criteria

1. Published articles related to AI and homoeopathy: Review articles, analytical articles and conceptual framework.
2. Articles discussing AI, Machine learning, Chabot or digital tools applied to homoeopathy
3. Articles published in English.

3.2 Exclusion criteria

1. Articles unrelated to homoeopathy.

3.3 Thematic synthesis

Early work emphasizes on Expert Systems and Rule-based Algorithms for Remedy selection, while recent publications focus on machine learning, predictive analytics and conversational AI (e.g. ChatGPT). Most authors agree that AI enhances speed, accuracy and accessibility but cannot replace the physician’s intuition, empathy and individualisation central to Hahnemannian principles

4.0 Thematic Integration of Reviewed Articles

Theme 1: AI as a Supportive Adjunct in Homoeopathic Practice: Several authors consistently emphasize that AI should function as assistant rather than a replacement for the homoeopath. Bishwas et al. highlight that while AI enhances repertorisation, documentation and research efficiency, it lacks the capacity for empathy, intuition and individualization, which remain central to Hahnemannian practice. Ethical discussions across studies reinforce that professional judgement must remain paramount. Drawback is that there isn’t clinical outcome data.

Theme 2: AI in Repertorial Analysis and Remedy Selection: Early algorithm-based models and contemporary machine learning approaches demonstrate AI's potential in rubric selection and remedy prioritization. Studies indicate that AI can rapidly process large repertories, identify symptom-remedy correlations and reduce manual errors. However, limitations related to data quality and dependence on accurate case input are repeatedly noted i.e limited datasets.

Theme 3: Digital repertories as a foundation for AI Integration: Reviews of repertory software illustrate the transition from manual to digital workflows in homoeopathy. These tools, while not fully autonomous AI systems, form the technological backbone for advanced AI applications with high clinical relevance. Authors report significant gains in efficiency and accessibility, though the interpretative responsibility remains with the clinicians. There is limited discussion of AI algorithms.

Theme 4: Conversational AI and Clinical Decision Support: Recent literature on ChatGPT and conversational AI suggest potential roles in symptom narration analysis, patient education, follow-up documentation and research assistance. While not homoeopathy-specific, these studies provide a conceptual framework for integrating NLP-based tools into homoeopathic case management, with caution regarding accuracy and ethical use.

Theme 5: AI in AYUSH and Sustainable Healthcare Systems: Systematic reviews across AYUSH disciplines position AI as a driver of sustainable healthcare innovation. Homoeopathy benefits from AI through scalable decision-support systems, research automation, and optimized resource utilization, aligning with sustainability and low-cost healthcare models.

Theme 6: Ethical and Philosophical Dimensions of AI in homoeopathy: Philosophical analyses underscore the epistemological limits of AI in healing sciences. Across articles, there is consensus that AI cannot capture the subjective, experiential, and relational dimensions of homoeopathic healing. Ethical frameworks are therefore essential to ensure responsible integration.

Author	Focus area	Methodology	Strengths /contribution	Limitations
Bishwas et al; 2025 ¹	AI homoeopathy: blessing or curse	Analytical review	Comprehensive overview of AI roles in repertorisation, patient management and education.	Dependence on data quality Validation gap: AI application remains experimental and lack robust clinical trials Complex case management: AI struggles with remedy aggravation, potency adjustments and nuanced follow-ups Conceptual, lacks empirical validation

Arya Manisha; 2024 ¹¹	Artificial Intelligence in Homoeopathy- The End or the Beginning?	Comprehensive review	Personalized Treatment plans based on patient symptoms and constitution. Symptom analysis and diagnosis using ML for accuracy Remedy selection with advanced algorithms and large remedy data Patient management Predictive analytics to forecast disease outbreaks and health trends Telemedicine and chatbots for remote guidance and patient education.	Validation gap: AI application remain experimental and lack robust clinical trials Ethical and professional concerns: patient privacy, data security and clinical responsibility. Conceptual, lacks empirical validation
Sai Lavanya Katari; 2025 ¹⁰	An Overview of Repertory Software Tools for Clinical Repertorisation in Homeopathy	Comprehensive	The article reviews repertory software tools used in clinical homoeopathy. Digital tools like RADAR Opus, Hompath Zomeo, MacRepertory, Complete Dynamics, ISIS, Vision, Cara etc. have transformed practice. These programs integrate multiple repertories, Materia medica, patient record, remedy comparison tools and analytical features. The study evaluated 50 different software tools, categorising them by functionality, repertory content, usability and target users. Findings show that digital repertory tools improve accuracy, speed and efficiency in case analysis, support education and enhance patient care. These tools are meant to assist practitioners not to replace to replace their expertise.	Dependence on software quality: accuracy varies depending on the repertory database and algorithms used. Some tools are complex and require significant training before use. Some of advanced software and tools can be expensive, limiting for access. Practitioners may depend too much, overlooking subtle patient cues. Outdated tools, not updated reducing their clinical relevance.
Doherty Rachel; 2025 ³	The application of AI in acute prescribing in homoeopathy	A comparative Retrospective study.	100 acute cases from a homoeopathy teaching clinic were analysed through an online available remedy finder. Researchers compared AI recommendation with practitioner-prescribed remedies. Data included symptoms, remedies, posology. AI tool covered 74 acute complaints; clinic cases represented 22 of these. Remedy overlap: Practitioner remedy appeared in AI results in 59% of cases. 37% it was among the top 3 suggestions. 17%, was top recommendation.	Low match rates: influenza (0%) AI tools lacked guidance on managing remedy response (e.g aggravations, potency) Can assist with acute, self-limiting complaints, but struggle with complex case management. AI tools may be risky and misused, especially with chronic or serious conditions. Reliance on case notes, small sample size, variability in complaints.

			High match rates: COVID-19(80%), ear infection (80%), kidney stones, nausea of pregnancy, sprains (100%)	Limited accuracy Weak case management, no guidance on remedy response, potency adjustments or handling aggravations.
Patil Aditya; 2025 ⁴	“Comparative Evaluation of Diagnostic and Treatment Accuracy: A Five-Level Scale Analysis of Generative AI and Homoeopathic Approaches”:	conceptual/ comparative study	Developed a five level evaluation scale level 1=poor, level 5=excellent) Comparative analysis General diagnostic: (fair-good) level 2-3. Standardized but less personalized; Generative AI: (level 1-5) Basic models weak (symptoms matching only) Advanced models strong (integrating genetics, lifestyle, clinical data). Homoeopathy: expert practitioner at level 4-5 with individualized, holistic care. Evaluates both technology (AI) and traditional (homoeopathy) Highlights Personalization whether via AI or homoeopathy. Suggests hybrid models integrating AI precision and Holistic approaches. Encourages collaboration between data scientists and homoeopaths for integrative healthcare innovation.	Non peer reviewed, findings are preliminary and needs empirical validation. Relies on descriptive rather than quantitative clinical trials. Focuses on diagnostic/ treatment accuracy but does not address cost-effectiveness or scalability in healthcare system.
Parajiya Tilak; 2022 ⁵	A Survey on Applications of AI in Homeopathy	Literature survey.	The article mentions some of applications of AI in homoeopathy: Expert systems: AI that replicate expert decision making. Remedy selection: - Fuzzy Expert systems: effective in handling unstructured patient data. - Decision Trees: less accurate compared to fuzzy systems. Glaucoma treatment (SEHO): Is an AI-powered expert system that helps homoeopaths and ophthalmologists select remedies for glaucoma by systematically analysing patient data and offering transparent, evidence-based recommendations. Expert System Development Uses Expert system development lifecycle (ESDLC): Assessment knowledge acquisition, design, testing, documentation, record maintenance.	Limited clinical trials Some conclusions are broad and not supported by detailed case studies or statistics. Even though The article focuses on Expert systems and fuzzy logic, it lacks to give insights on newer AI methods and its application (e.g. NLP)

D. Akhila; 2023 ²	“Homoeopathic Chatbot: A Simplified and Accurate Case-Receiving and Repertorising Application”:	Conceptual Study	Chatbots collect detailed complaints by NLP and ML to stimulate human interaction and provide precise symptom mapping. It is affordable, user friendly, scalable, and capable of collecting accurate patient data. Minimizes repetitive manual entry of Rubrics. Provides a judgement free environment where patients can disclose without any hesitation.	Chatbot is currently limited to “HEAD” chapter of BBCR. It doesn’t include clinical trials or patient outcome data. Uses Google firebase cloud storage, which may raise concerns about scalability, privacy.
Muthuperumal Prakash; 2024 ⁷	Status of artificial intelligence and machine learning in Indian traditional medicine systems.	A systematic review	This article aims at analysing how AI/ML have been applied in Ayush system. 54 studies were reviewed out of which majority i.e 36 studies were from India. Use of AI/ML shows >95% accuracy in tasks like drug identification, diagnosis, treatment support, personalized medicine.	Very limited study on homoeopathy. The research has no unified framework or large-scale clinical validation. Very limited datasets.
Mukta Nivedita Bera; 2025 ⁸	Homoeopathy meets Machine learning	Systematic review	Intersection of Homoeopathy and AI explores how ML techniques can be applied to homoeopathic practice, research and clinical decision making. ML can identify subtle symptoms pattern, supporting individualised remedy selection. It highlights Evidence Mapping where AI has been applied in homoeopathy (e.g. Expert systems, NLP, predictive modelling)	Lacks large, standardized and high-quality datasets, limiting ML model validation. ML models can be “Black Boxes” making it difficult to align outputs with homoeopathic principles. Ethical concerns.
Bhadoria Suraj; 2021 ⁹	‘Standardization of Homoeopathic Drugs’ by various tools	Systematic Review	The author analysed 25 studies published from Google Scholar between 2010-2021. On standardization of drugs using various analytical tools (like UV- Visible Spectroscopy, HPTLC, TLC etc.) it helped in assessing physiochemical properties, phytoconstituents, nanoparticles, molecular and structural changes in drugs including high dilutions. Tabulated form helped in comparison, clarity, readability of data. Emphasizes the importance of standardization.	Articles were collected only from Google Scholar. No PRISMA flow diagram. Limited clinical co-relation.

5.0 Discussion

Across the articles, AI is presented as a transformative tool for homoeopathy. Applications include chatbots for case taking, expert systems (like SEHO) for specific conditions, fuzzy logic and machine learning for remedy selection and digital repertory software for faster analysis. Coming to efficiency and accessibility AI systems and chatbots can save time, reduce workload and make homoeopathy more accessible. Expert systems and repertory software provide structured, consistent analysis, reducing practitioner bias. AI can help in record keeping, process large datasets and map symptoms systematically, improving remedy selection accuracy in straightforward cases. A recurring theme is that AI should support, not replace practitioners. The best outcomes emerge when AI handles preliminary data processing and repertory mapping while human practitioners provide final interpretation, empathy and nuanced judgement.

6.0 Limitations

1. Lack of randomized clinical trials in AI-assisted homoeopathy. There is no data quality dependence, no precise patient inputs given.
2. Predominance of conceptual and review-based literature.
3. Limited personalization, AI struggles to capture subtle, individualized symptoms that only experienced homoeopath notices. True personalization remains a human strength.
4. Current AI tools cannot manage remedy aggravations, potency adjustments or long-term case evolution.
5. Lack of robust clinical trials or standardization.
6. Loss of human touch: empathy, intuition etc cannot be replicated by machines
7. Proprietary software can be expensive
8. Patients or practitioners may depend too much on AI, potentially overlooking critical human judgement.
9. Ethical and privacy concerns, patient's data security and trust in automated systems are ongoing challenges.

7.0 Future Scope

Future scope should focus on:

1. Integration of AI with classical case-taking methods.
2. Development of validated AI models trained on authentic homoeopathic data.
3. Prospective clinical trials assessing patient outcome.
4. Ethical frameworks and regulatory guidelines for AI use I homoeopathy.

8.0 Conclusions

The Narrative synthesis indicates that AI serves as a powerful adjunct in homoeopathic Materia Medica and Repertorial analysis by improving efficiency, accuracy and educational outreach. However, AI cannot replace the holistic perception, empathy and clinical intuition of a trained homoeopath. Future research should focus on ethically designed, evidence-based clinical studies integrating AI while preserving homoeopathy's philosophical foundations.

References

1. Bishwas R, Shatru A, Dewansh DK, Srivastava SK, Bhutt D, Biswas R. Artificial intelligence in homoeopathy: A curse or blessing, AI can help the homoeopath, but it cannot replace – an analytical review. *Glob J Clin Med Med Res.* 2025;3(10):25–29. doi:10.5281/zenodo.17383629.
2. Akhila D, Anita SP, Sunita SD. a simplified and accurate case-receiving and repertorising application. *Indian J Psychol.* 2023;Book No.11:22.
3. Doherty R, Pracjek P, Luketic CD, Straiges D, Gray AC. The application of artificial intelligence in acute prescribing in homeopathy: a comparative retrospective study. *Healthcare (Basel).* 2025;13:1923. doi:10.3390/healthcare13151923.
4. Patil AD, Singh SR. Comparative evaluation of diagnostic and treatment accuracy: a five-level scale analysis of generative AI and homoeopathic approaches. *Preprints.org*; 2025 May 15. doi:10.20944/preprints202505.1204.v1.
5. Parajiya T, Farkunde T, Popat MK. A survey on applications of AI in homeopathy. *Int J Adv Res Sci Commun Technol.* 2022;2(3):275. doi:10.48175/568.
6. Singh SR, Patil AD. Bridging the gap between artificial intelligence and ancestral intelligence in conventional medicine and homoeopathy. *Indian J Integrated Medicine.* 2024;4(2):66. Vol 4 | Issue 2 | Apr - Jun 2024
7. Muthuperumal P, Karmegama D, Mappillairaju B. Status of artificial intelligence and machine learning in Indian traditional medicine systems: a systematic review. *J Med Pharm Chem Res.* 2024;6:1173–1187. doi:10.48309/JMPCR.2024.443836.1119.
8. Bera MN, Gupta A. Homoeopathy meets machine learning: a systematic review of pattern recognition in patient constitutional types. *Int J Homoeopath Sci.* 2025;9(1):195–199. doi:10.33545/26164485.2025.v9.i1c.1355.
9. Bhadoria SS, Patel S, Desai P. A systemic review on ‘Standardization of Homoeopathic Drugs’ by various tools. *Int J All Res Education Sci Methods.* 2021;9(11):881–82.

10. Katari Lavanya Sai, Kratika, Bhadoria SS. An overview of repertory software tools for clinical repertorisation in homeopathy. J Evid Based Homeopath [Internet]. 2025 [cited 2026 Jan 5];3(1):12-4. Available from: doi:10.5281/zenodo.17346078.
11. Arya M, Sharma DB, Aphale P, Shekhar H, Dokania S. Artificial Intelligence in Homoeopathy- The End or the Beginning? Afr J Biomed Res [Internet]. 2024 Nov [cited 2026 Jan 5];27(45):4409-13. Available from: doi.org
12. Nambisan, N. (2025, July 18). A new approach to repertorization leveraging artificial intelligence: Materiazation or materiomics. Hpathy.com. <https://hpathy.com/homeopathy-repertory/a-new-approach-to-repertorization-leveraging-artificial-intelligence-materiazation-or-materiomics/>
13. Hahnemann S. Organon of Medicine.6th ed. New Delhi: Indian Books and periodicals publishers; 2001.
14. Farrington EA. Farringtons Lectures on clinical materiamedica. Reprintedition. B Jain Publishers;2003;2004
15. Boericke W. Pocket manual of homeopathic Materia medica & repertory. 9th ed. New Delhi: B. Jain Publishers; 2001.
16. Kent JT. Repertory of the homeopathic Materia medica. 6th ed. New Delhi: B. Jain Publishers; 2004.