

Original article

A Scoping Review of the Literature on Homoeopathy in Child and Adolescent Psychiatry.

Deepthi Gilla ^{*1}; Sreeja KR ², Sreelakshmy SR ³, BSJ Rajakumar ⁴

1. M.D (Hom), Research Officer(H)/ Asst. Professor, Department of Psychiatry, National Homoeopathy Research Institute in Mental Health, Kottayam, Kerala, India.
2. Post Graduate Scholar, Department of Psychiatry, NHRIMH.
3. Junior Research Fellow, NHRIMH.
4. Officer Incharge, NHRIMH, Kottayam.

* drdeepthigilla@gmail.com - <https://orcid.org/0000-0002-5849-642X>

Abstract

Background: Emotional and behavioural disorders are very common in childhood and adolescence. Homoeopathy is an alternative system of medicine which has a potential role in Child and Adolescent Psychiatry (CAP). **Objectives:** To identify, summarize and disseminate research findings that could assess the role of Homoeopathy in CAP. **Materials and Methods:** Three electronic databases PubMed, Cochrane and Google scholar are searched for publications on childhood behavioural disorders in peer-reviewed, indexed journals. Articles published on Homoeopathy and CAP from 2000 to 2022 are included. An explicit systematic search strategy included web-based keyword searches. The collected information has been collated, summarized, and the results are presented in tables and charts according to key themes. **Results:** The research studies varied widely in all aspects such as design, conduct, intervention and outcome reporting. 56 eligible publications, (Both quantitative or qualitative) are identified on different clinical conditions in CAP. Individual sources of data are critically appraised and findings are discussed in terms of implications for gaps in research. **Conclusions:** There is a limited evidence base for the utility of Homoeopathy in CAP, although existing evidence shows positive findings. Our review emphasizes the paucity of studies in other CAP disorders such as Intellectual disability, Learning disability, Conduct disorder, Childhood depression and Anxiety disorders etc. which is the domain of future research.

Keywords: Child and Adolescent Psychiatry (CAP), Emotional and Behavioural Disorders in Children, Homoeopathy, Scoping review.

Introduction

"Today's children are tomorrow's citizens" is a well-known statement and it is well accepted saying that the seeds of the future society are in the children of the present day. Children's mental health is as vital as physical health and demands special attention. Emotional and behavioural disorders are common during childhood and adolescence. They are classified as either "Internalizing" i.e emotional disorders such as depression and anxiety or "Externalizing" (disruptive behaviours such as oppositional defiant disorder (ODD), conduct disorder (CD), attention deficit hyperactive disorder (ADHD) or "Developmental" (speech/language delay, intellectual disability, autistic spectrum disorder) [1].

Despite varied prevalence rates across the studies, it is suggested that 25–30% of children and adolescents are affected by some mental disorder [2]. Childhood ADHD, ODD, CD, and Depression increase the risk of developing substance-related disorders and other psychiatric disorders in



adulthood. Hence there is a need for early detection and intervention to prevent debilitating disorders in later life [3].

Medications, psychosocial interventions and brain stimulation techniques are treatment options for children/adolescents with mental disorders, but each has its own limitations and side effects. Psychotropic medicines such as antipsychotics are mostly prescribed for targeted symptoms such as disruptive behaviours, anxiety, irritability, and sleep problems and often for longer periods of time than recommended. This off-label use of antipsychotics may be hazardous to children, as the effects and possible adverse effects have not yet been studied adequately [4]. Hence safe and effective alternatives are to be explored in the area of CAP.

Treatment for mental health disorders for children and adolescents has improved considerably with more evidence-based and effective medications, and psychosocial interventions in the past few decades [5]. However, the practice of child psychiatry is not accessible and not cost-effective in its present form, hence other professionals can perform some of the functions of child psychiatrists at a fraction of the cost. In addition, there is an urgency to meet the treatment gap of childhood mental health disorders [6].

Currently, there is a trend towards a unified medical philosophy referred to as Integrative Medicine (IM) that represents the convergence of Complementary and Alternative Medicine (CAM) and Conventional medicine. Homoeopathy is an alternative system of medicine that has a potential role in Psychiatry and can be integrated into the mainstream as an adjunctive or as a stand alone in certain cases. Several research studies are conducted and evidence base is generated for the role of Homoeopathy in various child psychiatric disorders but there is no systematic review of literature in this complex subject.

Scoping review design represents a methodology that allows the assessment of emerging evidence, as well as a first step in research development [7]. Scoping reviews of literature on Homoeopathy will serve to function as a good means to map the existing literature in terms of the volume, nature and characteristics of the primary research [8]. Few systematic reviews were conducted on the usefulness of Homoeopathy in Psychiatric disorders [9] as well as the role of Homoeopathy in paediatric conditions^[10], but none were conducted specifically on Child and adolescent psychiatry (CAP). Hence a review is undertaken so as to synthesise preliminarily the research evidence on the usefulness of Homoeopathy in CAP.

Methods

Research studies on child psychiatry published between 2000 to 2020 in peer-reviewed journals of Homoeopathy were searched with the study being restricted to English. Unpublished manuscripts, thesis reports, conference abstracts, presentations, regulatory data, and working papers are excluded. Information is collected from three major electronic data bases i.e “PubMed”, “Google Scholar” and Cochrane from February to August 2021. Two independent researchers carried out the search for making the information thorough. The date on which the most recent search was executed is 28th February 2023. The search is carried out with keywords like “Child Psychiatry and Homoeopathy”, “Behavioural problems in children and Homoeopathy”, and terms of individual mental health issues of childhood and homoeopathy viz., “Autism and Homoeopathy”, “ADHD and Homoeopathy” etc. The key words are listed in Table no.1. Systematic reviews, Meta-analyses, Randomized controlled trials, Open label clinical trials, Case series and Case reports were included. This review did not undertake any processes for obtaining and confirming data from investigators. Studies using patents, Bach flower remedies and combinations are not considered in this review.

Table no.1: Key Words/ Terms used for the Search

S. NO	SEARCH TERMS/ WORDS
1	Child Psychiatry AND Homoeopathy
2	Behavioural disorders in childhood and Homoeopathy
3	Child Psychiatry AND Homoeopathic medicine
4	Emotional AND behavioral problems in children and Homoeopathy
5	Autism AND Homoeopathy
6	ADHD AND Homoeopathy
7	Hyperkinetic disorder AND Homoeopathy
8	Intellectual disability AND Homoeopathy
9	Mental Retardation AND Homoeopathy
10	Speech and Language disorder AND Homoeopathy
11	Developmental disorder AND Homoeopathy
12	Depression in children AND Homoeopathy
13	Anxiety in children AND Homoeopathy
14	Conduct disorder AND Homoeopathy
15	Oppositional Defiant Disorder AND Homoeopathy
16	Enuresis AND Homoeopathy
17	Pica AND Homoeopathy
18	Phobic disorder AND Homoeopathy
19	elective mutism AND Homoeopathy
20	Childhood anxiety disorder AND Homoeopathy
21	Obsessive Compulsive disorder AND Homoeopathy

Results

A total of 57 articles were found after removing the duplicates. One meta-analysis, three systematic reviews, six review articles, six randomized controlled trials, four open-label, non-randomised, single-arm clinical trials, twelve case series, six case reports are identified on the related subject. The information has been coalesced and reported according to PRISMA extension for Scoping reviews (PRISMA-ScR) guidelines. The number of sources of evidence screened, assessed for eligibility, and included in the review has been demonstrated using a flow diagram in Figure no.1. No studies on

Phobic disorder, elective mutism, Separation anxiety disorder, and other neurotic disorders in children were identified. Number of articles published on different child psychiatric conditions are presented in table no.2. Individual papers are critically appraised in the 'Discussion' section.

Table no.2: Number of publications in different CAP conditions and Homoeopathy

Type of Study	Child Psychiatric Disorder								
	ASD	ADHD	CD	LD	Childhood Depression	MR (IDD)	Childhood Anxiety disorder	Others	Total
Meta-analysis	-	2	-	-	-	-	-	-	1
Systematic Review	1	2	-	-	-	1	-	-	4
Review articles	3	1	-	-	1	-	-	2	7
RCT'S	-	4	-	1	-	-	-	1	6
Open-label, Non randomized, single-arm trials	4	1	-	3	-	2	1	0	11
Case Series	8	3	1	1	-	1	-	2	16
Case Reports	2	4	2	-	1	2	-	-	11
Total	18	17	3	5	2	6	1	5	56

ASD- Autism Spectrum Disorder, ADHD- Autism Deficit Hyperactivity Disorder CD- Conduct disorder, SLD- Specific Learning Disability MR-Mental Retardation/ IDD- Intellectual disability disorder.

Discussion

Heterogeneity of studies was encountered in all aspects such as design, conduct, intervention and outcome reporting of the studies on Homoeopathy in CAP. Homoeopathy is a system of medicine that is accepted among the public for paediatric conditions and has relevance to emotional and behavioural problems, especially of children. Most of the studies on CAP reported using classical homoeopathic method of prescribing i.e single remedy and minimum dose. Remedies were prescribed in centesimal as well as in millesimal scale.

The different study designs used in the studies related to CAP in Homoeopathy are randomised controlled trials, randomized placebo-controlled trials, pragmatic RCTs, cross-over design, partial cross-over design, TwiCs design etc. Most of the studies reported using classical homoeopathic method of prescribing i.e Single remedy and minimum dose. Remedies were prescribed in centesimal as well as in millesimal scale.

A systematic review on mental health in homoeopathy by Tiwari P et al, retrieved 83 studies from the different databases and internet site searches, out of which 77 studies were excluded & 06 studies were included by applying Critical Appraisal Skills Programme Score Tool (CASPS). (CASPS is the

most commonly used tool for quality appraisal in health-related qualitative evidence syntheses, with endorsement from the Cochrane Qualitative and Implementation Methods Group.) The review concluded that though there are various literatures available in homoeopathic materia medica and repertory but conducted clinical trials are limited. There is not enough evidence to reliably assess the possible role of homeopathy in mental health conditions.^[11] But there is currently a comparably better evidence base for role of homoeopathy more specifically in childhood behavioural disorders as found by our review.

The majority of the studies on CAP identified in Homoeopathy is in the field of Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD). Few studies were found on other CAP disorders which are summarized below.

Autism Spectrum Disorder (ASD): Apart from few published case studies, 5 uncontrolled studies are conducted in relation to Autism which are summarized in Table no.3. There are no published Randomized controlled trials in field of Autism with homoeopathic intervention to show the efficacy of homoeopathy in ASD.

In a Study conducted by Gupta et al on 25 autistic children with identified behavioural pattern of autistic symptoms homoeopathic medicines were given to the subjects according to the severity of symptoms based on Childhood autism rating scale physical conditions of subjects based on classical and non-classical approaches. Results of 18 participants who completed the study evaluated 60% (n=6) improvement in autistic symptoms by the classical method of homeopathic treatment where as the non-classical showed 38% (n=3) improvement. However, in the remaining 9 participants, 3 showed mild improvement 33% (3/9) with multi-drug Homoeopathic therapeutic regimen [13]. The result implies better improvement with classical approach of Homoeopathy.

A study conducted by Barvalia et al (2011) at a Holistic Multidisciplinary Institute treating 123 autistic children showed that there is a reduction of autistic behavior after homoeopathic intervention. The study emphasized that the rehabilitation of the child into mainstream society can be achieved through classical homeopathy integrated with psychological, behavior-modification interventions.^[14] Another study by Barvalia et al (2014) on 60 children with ASD reported statistically significant changes in Autism Treatment Evaluation Checklist (ATEC) scores being observed in all the quarters analyzed through repeated measures ANOVA, with F-value 135.952, P = 0.0001. An impact was observed on all core autistic features [15].

A series of cases are published by Rajalakshmi [20,21,22,23] showing the experiences of treating autistic children with positive results but no rating scales were used to demonstrate the effects quantitatively. Two illustrative cases of Autism spectrum disorder by Barvalia et al [24], and a case series of 4 cases (2013) and 10 cases by Gupta et al. (2010) suggest that a homeopathic medicinal regimen does produce positive improvement and modification of autistic symptoms if followed dutifully [25]. A case series of 3 cases showed a piece of preliminary evidence for the role of *Carcinosinum* in ASD [26]. A case report of a 7 year-old boy showed the role of *Podophyllum Peltatum* in the management of ASD in individualized approach [27].

The homoeopathic principle of individualization correlates with the DSM-5 classification of Autism under a spectrum, due to wide variation of symptoms in each child. This favors Hahnemann's assumption that each and every child is different from another in disease expressions also [28]. In future, randomized, placebo-controlled trials to determine the effect of Homoeopathic medicines in specific domains of ASD are necessary.

Table no.3: Studies on ASD in Homoeopathy [12-19]

S. No	Author	Title of the study	Type of study	Sample size	Demographic features	Primary outcome measure	Follow -up time	Results Define in terms of outcome variables, CI, statist. significance
1	Robinson (2001)	Homeopathic Secretin in autism: a clinical pilot study	Clinical pilot study	12 adults having autism	Age 24-43 years	Not mentioned	Weekly assessment for 12 weeks	Worsening of autistic symptoms during treatment and some improvement that are not recordable
2	Fonseca et.al (2008)	Effect of homeopathic medication on the cognitive and motor performance of autistic children	single arm pilot study	N = 30 cases of ASD	Children of both sexes, below 7 years	Psycho-educational profile -revised (PEP-R)	10 months	Positive inference of Homoeopathic intervention in cognitive, behavioural and motor performance
3	Gupta et.al (2010)	Homeopathic medicinal treatment of Autism.	single arm study	25 cases of Autism	Both sexes, ages 4-14 years	Childhood autism rating Scale (CARS)	18 months	Significant improvement in 60% mild to moderate, 38% severe autism
4	Barvalia P (2011)	Autism Spectrum Disorder- Holistic homoeopathy	single arm study	123 cases of Autism	Both sexes, ages 3- 12 years	CARS: Childhood Autism Rating Scale. ATEC: Autism Treatment Evaluation Checklist	Long term- not mentioned	Statistically significant lowering of autistic load following Homoeo interventions. Mean CARS came down from 34 to 19 and ATEC came down from 63 to 4.
5	Barvalia et al (2014)	Effectiveness of homeopathic therapeutics in the management of childhood autism disorder.	single arm self-controlled study	60 cases of Autism	Both sexes, ages below 12 years	ATEC- Autism Treatment Evaluation Checklist	18 Months	A statistically significant difference in the mean scores was observed in all the categories based on degree of autism, i.e. mild, moderate, and severe (14.45, 16.81 and 11.78 respectively with $P < 0.005$)
6	Rajalakshmi (2018)	Homeopathic treatment as an aid to inclusive integration of children with autism spectrum disorders.	before and after quasi-experimental study design	40 cases of ASD	Both sexes, ages 2-9 years	ATEC- Autism Treatment Evaluation Checklist	Long term- not mentioned	significant reduction in the mean post treatment scores (M=33.17, S.D=6.42) as compared to the mean pre-treatment ATEC scores (M=78.15, S.D.=13.47), $t(39)=26.8$ $p =000$.
7	Gilla et al (2022)	Autism Spectrum Disorder Managed with Individualised Homoeopathic Medicine— Analysis of 20 Cases	Retrospective, formal case series	20 cases of ASD	The mean age of the children at baseline was 7.23+/-2.52.	ATEC- Autism Treatment Evaluation Checklist	12 months	median baseline ATEC score of 110.0 (116.0–94.5) reduced to 33.5 (61.75–25.0) at $p<0.001$, with an effect size of 0.88.
8	Saxena et al (2021)	Systematic review of the effectiveness of homoeopathy in the treatment of autism spectrum disorder	systematic review	19 articles on Homeopathy and Autism		ATEC- Autism Treatment Evaluation Checklist		Positive role of Homeopathy in Autism

Attention Deficit Hyperactivity Disorder (ADHD): The largest body of evidence pertaining to the use of homeopathy in CAP is present in the treatment of ADHD but the results are ambivalent. There is heterogeneity in the quality of trials and the outcome of studies but overall our findings suggest some potential for using homeopathy in ADHD.

Table no.4: Studies on Homoeopathy in ADHD [29-36]

S. No	Author/ Year	Type of study	Sample size	Demographic features	Primary outcome measure	Follow-up time	Result/ Conclusion
1	Frei H, et.al, (2001)	Comparative study of Homoeopathy with Methylphenidate (MPD)	115 cases (92 boys and 13 girls)	3-17 years	Conner global index (CGI)	6.5 month	86 patients sufficiently responded to homoeopathy. 25 needed MPD. 3 patients didn't respond to any treatment. Clinical Global Improvement showed better change with Homoeopathy
2	Jacob J et.al, (2005)	Randomized double blind placebo controlled trial	43 cases	6-12 years	Conner's Global Index—Parent, Conner's Global Index— Teacher, Conner's Parent Rating Scale— Brief, Continuous Performance Test, and the Clinical Global Impression Scale.	18 Weeks	There were no statistically significant differences between homeopathic remedy and placebo groups on the primary or secondary outcome variables. Future studies should be carried out over a longer period of time
3	Heirs M (2007)	Systematic review	Pragmatic RCTs and case series were described	168 Studies			The forms of homeopathy evaluated to date do not suggest significant treatment effects for the global symptoms, core symptoms of inattention, hyperactivity or impulsivity, or related outcomes such as anxiety in ADHD
4	Frei H et.al, (2007)	Randomized, double blind, placebo-controlled crossover trial	83 cases	6-16 years	Clinical Global Impression Scale	6 weeks+ 6 weeks= 3months	CGI at entry to the crossover trial, cognitive performance such as visual global perception, impulsivity and divided attention, had improved

							significantly under open-label treatment (P<0.0001). During the crossover trial, CGI parent-ratings were significantly lower under verum (average 1.67 points) than under placebo (P =0.0479).
5	Fibert P et.al (2016)	A comparative consecutive case series	20 cases with homeopathy for one year and 10 cases with similar time and attention for 4 months	5-16 years	Conners' Parent Rating Scale, Revised Long Version &MYMOP	1 year	Treatment by a homeopath was associated with sustained, increasing improvements and the intervention was acceptable to participants.
6	Fibert P et. al, (2018)	Pilot study with (Trial within Cohorts) Twics design	124 cases	5-18 years	Conners' Global Index (CGI) , Swanson, Nolan and Pelham Teacher and Parent Rating Scale (SNAP) and Child Health Utility health-related quality of life (CHU-9) measure	6 months	This pragmatic trial design allows the testing of treatment by homeopaths as experienced in usual practice over the long term. Attrition and non-attendance were common in ADHD trials, and providing evidence about the acceptability of interventions is therefore useful.
7	Goyal A., Singh M	Single- arm study	50 cases	Up to 12 years	Vanderbilt Diagnostic Scale	18 months	Of the 50 cases, only 6 patients showed marked improvement (i.e. 12 of the cases), 24 showed moderate improvement (i.e. 48% of the cases) and 15 patients showed mild improvement after treatment (i.e. 30% of the cases). Status quo in 5 patients (i.e. 10% of the cases).

8	Gaertner K, Teut M, Walach H.	Meta-analysis	Six studies				a significant effect size across studies of Hedges' $g = 0.542$ (95% CI 0.311-0.772; $z = 4.61$; $p < 0.001$) against any control and of $g = 0.605$ (95% CI 0.05-1.16; $z = 2.16$, $p = 0.03$) against placebo ($n = 4$).
---	-------------------------------	---------------	-------------	--	--	--	--

A Case of a 16-year-old youth with a diagnosis of ADHD was reported to be treated for over one and half years with individualized homeopathic medicines and additional ultra-molecular dilutions of cannabis, and there were improvements in ADHD status and patient generated outcomes [37].

A randomized placebo-controlled pilot trial to evaluate the usefulness of individualised homeopathic medicines in treatment of total of 54 patients (homeopathy = 27, placebo = 27). All patients in homeopathy group showed better outcome in baseline adjusted General Linear Model (GLM) repeated measures ANCOVA for oppositional, cognition problems, hyperactivity and ADHD Index (domains of CPRS-R (S)) and CGI-IS at T3, T6, T9 and T12 ($P = 0.0001$) [38].

In a study conducted by Frei et al, for treatment of hyperactive children with homeopathy compared to methylphenidate (MPD) in a family setting, 86 patients sufficiently responded to homeopathy. 25 needed MPD [39]. A pilot randomized-controlled trial carried out for evaluating the effectiveness of homeopathy in the treatment of ADHD concluded that there is no evidence to support a therapeutic effect of individually selected homeopathic remedies in children with ADHD as there were no statistically significant differences between homeopathic remedy and placebo groups on the primary or secondary outcome variables - Future studies are suggested to be carried out over a longer period of time [30].

A randomized controlled trial of homeopathy in hyperactive children treatment procedure lead to an unconventional study design because of the necessity of identifying an optimal medication before response to treatment can be expected. This study identifies that randomization at the start of treatment in an RCT of homeopathy in ADHD children has a high risk of failure to demonstrate a specific treatment effect, if the observation time is shorter than 12 months [32].

In a study conducted by Fibert et al, 20 children with a diagnosis of ADHD receiving homeopathic treatment were compared with 10 children receiving usual care. Treatment by a homeopath was associated with sustained, increasing improvements and the intervention was acceptable to participants. It is recommended that future research in this area uses comparative effectiveness randomized controlled trial designs and CPRS-L long scale with 80 questions [33][34][40][41].

In a double-blind partial cross-over study conducted by John et al, 43 children randomly given homeopathic medicine and placebo and after 10 days changes are compared among groups and also same individual before and after cross over. Statistically significant changes are found suggesting the efficacy of homeopathic medicine [42].

The results of systematic review conducted by extracting data from four eligible studies (total $n = 168$) do not suggest significant treatment effects for the global symptoms, core symptoms of inattention, hyperactivity or impulsivity, or related outcomes such as anxiety in Attention Deficit/Hyperactivity Disorder. Development of optimal treatment protocols is recommended prior to further randomized controlled trials being undertaken [31].

A study design of a Randomized, Placebo Controlled Trial (RPCT) of the Homeopathic Treatment of ADHD was published in *Homeopathy* journal. [43] Preliminary feasibility and clinical results of a pilot study of treatment by homeopaths for children with ADHD using the trials within cohorts (twics) design are also published [34].

Metanalysis by Gaertner et.al concluded Individualized homeopathy showed a clinically relevant and statistically robust effect in the treatment of ADHD [36]. Some of the recent case reports also pointed to the usefulness of individualized homoeopathic medicine in the treatment of ADHD [44,45,46].

Intellectual disabilities: there is paucity of literature on usefulness of homeopathy for treatment of Intellectual disabilities, speech and language difficulties [47]. A case of Mental retardation treated with *Sulphur* is reported to produce holistic improvement [48]. In a study including 58 cases of patients suffering from Intellectual disability, 28 females and 30 males, forty-seven had improvement in adaptation skill. The study concluded that Homeopathy is a useful alternative to relieve pathologies associated with mental disability. In those cases, in which there were similarities between remedy and whole symptomatology, improvements in adaptation skills and in overall health were observed [49]. In a study conducted by Tiwari et al on 30 children aged 3 to 18 years diagnosed with intellectual disabilities, the result was found to be significant ($p < 0.05$) in all the domains of the Behavioural Assessment Scale for Indian Children with Mental Retardation (BASIC- MR) but the attrition rate was high and only a few patients ($n=10$) completed follow up of the short study period of 6 months [50].

Arora D conducted a purposive, non-randomized, self-controlled, pre- and post-intervention study of 25 participants diagnosed with IDD. The initial 6 months were the control period, thereafter, the same participants were treated for 18 months, with homoeopathy. Treatment outcomes were assessed using domains of Diagnostic and Statistical Manual-V-V. Scores of each domain were observed at 6 months interval and there was a statistically significant difference ($P < 0.001$) in adaptive functioning treatment scores for conceptual domain, social domain and practical domains [51]. A case of Factor XIII Deficiency is reported to be successfully managed with constitutional medicine *Bufo Rana* in intellectually disabled child [52].

Learning disabilities: Analysis of 30 cases of Dysgraphia treated with homoeopathy found that Homoeopathy is effective. The efficacy of Homoeopathy medicine on Dysgraphia was assessed by comparing before and after-treatment writing scores with Learning Disability Diagnostic Inventory [53]. A case series of 4 cases of Learning disabilities reported positive outcome with Homoeopathic intervention. The medicines indicated are *Calcarea Mur*, *Calcarea Silicata*, *Hyoscyamus* and *Lachesis*. The study suggests that identifying and valuing the coping mechanisms are of value in arriving at the similimum in children with LD [54]. In a 3-year randomized, double-blind case-control study carried out by Dhawale et al on 67 children between ages 8-12 years fulfilling the criteria of LD (ICD-10) for dyslexia and dysgraphia with a minimal observation period of one year, Fifty-nine percent of children from the treatment group experienced no difficulty in reading at the end of one year as compared to 39% in the placebo group. The results indicated a significant change not only in the expressions of the LD but also in a better adaptation of the child to the environment [55]. In another study by Kondhalkar et al, homoeopathic medicine was prescribed to the 30 children having learning disability of age group 6 to 15. Statistical analysis of data of paired test. by using VAS (Visual Analogue Scale) for scoring before and after study outcome at 95% confidence interval of degree of freedom 29 shows significant difference ($p < 0.0001$) [56]. No studies are identified on treating speech and language difficulties with homoeopathic medicines.

Childhood depression: The role of Homoeopathy in Depressive disorders has been presented through evidence-based studies such as Oberai et. al. [57]. But there is a paucity of studies on childhood depression. Owing to the increasing prevalence of Depression in children in recent times especially in the pandemic scenario, studies are highly recommendable. There is an article published on “Depression in Children and Its Homoeopathic Management with *Magnesium Carbonicum*.” It narrates that *Mag Carb* can be given as it has been suggested in Kent’s lectures [58]. But no clinical application or verification is quoted in this article. A single case report of Childhood depression responded well to *Aurum met*, *Natrum mur*, *Aurum Mur Natronatum* and *Stramonium* which were based on Herscu’s cycles [59].

Childhood anxiety and other neurotic disorders: there is scarcity of studies on childhood anxiety disorders, although there are many studies conducted in anxiety disorders in general [60]. Three children with severe anxiety and Obsessive-compulsive disorder (OCD) were reported to be successfully treated with homeopathy [61].

Conduct disorder: Homoeopathic studies on Conduct disorder (CD) (individual under 18 who habitually violate the right of other, and will not conform their behaviour to the law or social norm appropriate to their age.)are very limited with hardly a case report on CD and two cases of Oppositional Defiant Disorder (ODD)(A pattern of angry/irritable mood, argumentative/defiant behavior, or vindictiveness lasting at least 6 months)A case of Oppositional defiant disorder treated with *Platina* has found to produce favorable results [62][63][64].

Other behavioural problems of Children: There are isolated case reports and review articles of other behavioural issues of childhood like Pica [65], Nocturnal enuresis [66] etc. 20 children suffering from enuresis were treated in an open trial with *Ilex paraguensis* for 2 months. The results were complete disappearance of the enuresis and improvement in the psychological symptoms in 50%. 10% of patients improved at the start of the treatment but relapsed. 40% did not respond to treatment [67]. Specific developmental disorders of speech and language is yet another area to be explored.

Most studies were based in international classification of diseases (ICD)-9, (ICD-10) criteria or Diagnostic Statistical Manual (DSM)-IV classifications, which are renewed by the ICD -11 and DSM V versions. Hence it would be ideal for futures studies to be based on the renewed criteria.

Infant mental health has emerged as a unique area of practice and research distinguished from child and youth sub-specialties by its advocacy for a relational practice framework with an emphasis on parents/caregivers [68]. Studies in homoeopathy on Infant mental health is an area which has to be explored.

There are few limitations of this “scoping” review process in terms of articles which were not open for free access and publications in different languages which may be included in the future reviews. The diversity of practice in homoeopathy presents unique challenges for researchers who wish to improve the evidence base by scoping and systematic reviews. Study designs which are compatible with the homeopathic principle of individualization can be suggested for future research. The observations of studies for the potential integration of homeopathic practice into conventional settings are necessary [69]. Homoeopathic medicines are apparently safe and effective to children with emotional and behavioral problems either as standalone or in integrated approach, the evidence of which has to be corroborated with rigorous studies. Studies using universally accepted psychiatric rating scales and specific biomarkers are suggested.

Conclusions and Recommendations



There is a limited evidence base for the utility of Homoeopathy in CAP, although existing evidence show positive findings. Studies with rigorous study designs and definite parameters are necessary to establish the evidence. Certain areas of CAP Conduct disorders, Intellectual disability, Specific Learning disabilities etc. are yet to be studied to find the effectiveness and efficacy of Homoeopathy. Methodological errors and publication bias should be overcome to bring out the full potential of Homoeopathy in the field of CAP.

Acknowledgments

The authors profusely thank Dr. K.C. Muraleedharan, AD (H), Dr. R. Sitharthan, Principal and Dr.N.D Mohan, HOD, Dept. of Psychiatry, NHRIMH for their support and guidance.

Funding and Sponsorship

Nil

Conflict of Interest

The authors have no conflicts of interest to disclose.

Ethics and Dissemination

As this review has undertaken a secondary analysis of data already collected, ethical approval is not acquired. This review is intended to be presented at relevant national and international conferences by the authors after publication.

REFERENCES

- [1] Ogundele MO. Behavioural and emotional disorders in childhood: A brief overview for paediatricians. *World J Clin Pediatr.* 2018;7(1):9-26. Published 2018 Feb 8.
- [2] Chen YL, Chen WJ, Lin KC, Shen LJ, Gau SS. Prevalence of DSM-5 mental disorders in a nationally representative sample of children in Taiwan: methodology and main findings. *EpidemiolPsychiatr Sci.* 2019;29:e15. Published 2019 Jan 30.
- [3] Groenman AP, Janssen TWP, Oosterlaan J. et al Childhood Psychiatric Disorders as Risk Factor for Subsequent Substance Abuse: A Meta-Analysis. *J Am Acad Child Adolesc Psychiatry.* 2017;56(7):556-569.
- [4] Dinnissen M, Dietrich A, van der Molen JH, et al. Prescribing antipsychotics in child and adolescent psychiatry: guideline adherence. *Eur Child Adolesc Psychiatry.* 2020;29(12):1717-1727.
- [5] Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. *Lancet* 2007;369:1302-13.
- [6] Fung, D. S., & Lim-ashworth, N. S. Child Psychiatry Without Psychiatrists: A New Model for Old Problems. *Annals of the Academy of Medicine, Singapore,* 2017;46(2), 42-43.
- [7] Peterson J, Pearce PF, Ferguson LA, Langford CA. Understanding scoping reviews: Definition, purpose, and process. *J Am Assoc Nurse Pract.* 2017;29(1):12-16. doi:10.1002/2327-6924.12380

- [8] Khurana A. Building up the scientific evidence base of homoeopathy. *Indian J Res Homoeopathy* [serial online] 2020 [cited 2021 Aug 13];14:1-2. Available from: <https://www.ijrh.org/text.asp?2020/14/1/1/282112>
- [9] Jonathan R. T. Davidson, MD; Cindy Crawford, BA; John A. Ives, PhD; and Wayne B. Jonas, MD, Homeopathic Treatments in Psychiatry: A Systematic Review of Randomized Placebo-Controlled Studies, *J Clin Psychiatry* 2011;72(6):795-805
- [10] Ekins-Daukes S, Helms PJ, Taylor MW, Simpson CR, McLay JS. Paediatric homoeopathy in general practice: where, when and why?. *Br J Clin Pharmacol.* 2005;59(6):743-749.
- [11] Dr. Prerna Tiwari, Dr. Esha Tyagi. Mental health in homoeopathy: A systematic review. *Int J Hom Sci* 2019;3(3):09-12.
- [12] Fonseca GRMM, Bolognani FA, Durão FF, Souza KM, Accioly MCC, Bagarollo, MF. Effect of homeopathic medication on the cognitive and motor performance of autistic children (pilot study). *International Journal of High Dilution Research.* 2008;7(23)63-71
- [13] Gupta, N., Saxena, R. K., Malhotra, A. K., & Juneja, R. Homeopathic medicinal treatment of Autism. *Indian Journal of Research In homeopathy*, 2010;4(4)
- [14] Barvalia, P. Autism spectrum disorder: Holistic homeopathy. *Homeopathic links*, 2011; 24(01), 31-38.
- [15] Barvalia, P. M., Oza, P. M., Daftary, A. H., Patil, V. S., Agarwal, V. S., & Mehta, A. R. Effectiveness of homoeopathic therapeutics in the management of childhood autism disorder. *Indian journal of research in Homoeopathy*, 2014;8(3)
- [16] Rajalakshmi, M. A., & BHMS, M. Publication In Homeopathy For Everyone 17 November 2018.
- [17] Gilla D, Sreeja KR, Resmy R. Autism Spectrum Disorder Managed with Individualised Homeopathic Medicine—Analysis of 20 Cases. *Homœopathic Links.* 2022 Mar;35(01):070-5.
- [18] Saxena V, Chacko G, Saxena U, Saxena V, Chacko G, Saxena U. Systematic review of the effectiveness of homoeopathy in the treatment of autism spectrum disorder. *Clinical Archives of Communication Disorders.* 2021 Apr 30;6(1):1-1.
- [19] Robinson TW. Homeopathic secretin in autism: a clinical pilot study. *The British Homoeopathic Journal.* 2001;90:86-91
- [20] Rajalakshmi, M. A., & BHMS, M. Role of homoeopathy in the management of autism: study of effects of homoeopathic treatment on the autism triad. *The Internet Journal of Alternative Medicine*, 2008; 6(1).
- [21] Rajalakshmi, M. A Case of Autism: A Case for Homeopathy. *Homœopathic Links*, 2011;24(01), 39-43
- [22] Rajalakshmi, M. Healing Autism with Homeopathy In Synergy With Other Therapies. *Hpathy Ezine*, 2015; January.
- [23] Rajalakshmi, M. A. Homeopathy in Harmony with Music Therapy for Children with Developmental Disorders and Autism, *Clinical and Experimental Homoeopathy*, 2017;4(2):11-24
- [24] Barvalia, P. Homeopathic Management of Autism Spectrum Disorder: Illustrative Cases. *The Homoeopathic Heritage*, March 2014; 35-42

- [25] Gupta, N., Saxena, R. K., & Juneja, R. A. Effectiveness of Homeopathy in Four Autism Spectrum Disorder Cases. *Homoeopathic Links*, 2013; 26(04), 256-261.
- [26] Nair SK, Gilla D, Devasia MN. Role of Carcinosinum in autism spectrum disorder-A case series. *Indian Journal of Research in Homoeopathy*. 2022;16(2):2.
- [27] Nair SK, Gilla D, Devasia MN. Autism Spectrum Disorder treated with *Podophyllum peltatum*-A Case Report. *International Journal of AYUSH Case Reports*. 2021 Dec 25;5(4):298-305.
- [28] Bindu BR, Lakshmanan S, Preema EP, Gayathri S, Ghosh OS. Effectiveness evaluation of personalized-precision Homoeopathic Medical Interventions in Autism Spectrum Disorder Management: A Case Series Report.
- [29] Frei, H., & Thurneysen, A. Treatment for hyperactive children: homeopathy and methylphenidate compared in a family setting. *British Homoeopathic Journal*, 2001; 90(4), 183-188.
- [30] Jacobs, J., Williams, A. L., Girard, C., Njike, V. Y., & Katz, D. Homeopathy for attention-deficit/hyperactivity disorder: a pilot randomized-controlled trial. *Journal of Alternative & Complementary Medicine*, 2005; 11(5), 799-806.
- [31] Heirs, M., & Dean, M. E. Homeopathy for attention deficit/hyperactivity disorder or hyperkinetic disorder. *Cochrane Database of Systematic Reviews*, 2007;(4).
- [32] Frei, H., Everts, R., von Ammon, K., Kaufmann, F., Walther, D., Schmitz, S. H., & Thurneysen, A. Randomised controlled trials of homeopathy in hyperactive children: treatment procedure leads to an unconventional study design: Experience with open-label homeopathic treatment preceding the Swiss ADHD placebo controlled, randomised, double-blind, cross-over trial. *Homeopathy*, 2007; 96(1), 35-41.
- [33] Fibert, P., Relton, C., Heirs, M., & Bowden, D. A comparative consecutive case series of 20 children with a diagnosis of ADHD receiving homeopathic treatment, compared with 10 children receiving usual care. *Homeopathy*, 2016; 105(2), 194- 201.
- [34] Fibert, P., & Relton, C. Preliminary Feasibility and Clinical Results of a Pilot Study of Treatment by Homeopaths for Children with ADHD using the Trials within Cohorts (TwiCs) Design. *Homeopathy*, 2018; 107(S 01), A008.
- [35] Goyal A., Singh M., Study Of Cases Of –Attention Deficit Hyperactivity Disorder: ADHD|| To Ascertain The Effectiveness Of Homoeopathy In Its Management. *TUJ. Homo & Medi. Sci*. 2022;5(2):02-12.
- [36] Gaertner K, Teut M, Walach H. Is homeopathy effective for attention deficit and hyperactivity disorder? A meta-analysis. *Pediatric Research*. 2022 Jun 14:1-7.
- [37] Fibert, P. Case report of a 16year old youth with diagnoses of attention deficit hyperactivity disorder (ADHD), Asperger's syndrome and dyslexia receiving homoeopathic and tautopathic treatment. *European Journal of Integrative Medicine*, 2015; 7(3), 312-317.
- [38] Oberai P, Gopinadhan S, Varanasi R, Mishra A, Singh V, Nayak C. Homoeopathic management of attention deficit hyperactivity disorder: A randomised placebo-controlled pilot trial. *Indian J Res Homoeopathy* 2013;7:158-.

- [39] Frei, H., & Thurneysen, A. (2001). Treatment for hyperactive children: homeopathy and methylphenidate compared in a family setting. *British Homeopathic Journal*, 90(04), 183-188.
- [40] Fibert, P. Rationale for a pragmatic randomised controlled trial of the effectiveness of treatment by homeopaths for ADHD. *Homeopathy*, 2016; 105(01).
- [41] Fibert, P. Is homeopathic treatment as an effective intervention for children with a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD)?. *Homeopathy*, 2014; 103(01).
- [42] Lamont, John. "Homeopathic treatment of attention deficit hyperactivity disorder: a controlled study." *Biomed Ther* 16.3 1998; 219-22.
- [43] Brulé, D. Study design of a Randomized, Placebo Controlled Trial of the Homeopathic Treatment of Attention Deficit Hyperactivity Disorder (ADHD). *Homeopathy*, 2016; 105(01).
- [44] Dhanaraj Kumar Rana D, Villan J, Deepak KP. Homoeopathic approach of hyperkinetic disorder with eczema: A case report. *International Journal of Homoeopathic Sciences*, 2021, Vol. 5 Issue 1, Part E
- [45] Gnanaprakasham M, Mathew S, Mohan ND. Homoeopathic Perspective of Attention Deficit Hyperactivity Disorder-Hyperactive Type-A Review. *Journal of Complementary and Alternative Medical Research*. 2021 Sep 7;16(2):11-22.
- [46] Thote G, Lawhate AC. Scope of Homoeopathy Constitutional Management in Hyperactivity Disorder in Children's-A Case Report. *Journal of Medical and Pharmaceutical Innovation*. 2022 Aug 16;9(48).
- [47] Shaddel, F., Ghazirad, M., & Bryant, M. What is the best available evidence for using homeopathy in patients with intellectual disabilities?. *Iranian journal of pediatrics*, 2014;24(4), 339
- [48] Mahmoudian, D., & Amin, D. Successful treatment of severe mentally retarded child by homeopathy. *Asian Journal of Traditional, Complementary and Alternative Medicines*, 2018; 1(1-2), 22-26.
- [49] Filho RD, Homeopathic approach in the treatment of patients with mental disability, *Homeopathy*, 2006;95(01):31-44
- [50] Tiwari P, Nair A, Vaishnavi Rathore D, Nair R, Hora RK, Sahay A, Kumar MB. Management of behavioural problems in intellectual disability using 'Lectures on homoeopathic Materia Medica' by Dr. JT Kent. *International Journal of Homoeopathic Sciences* 2021, Vol. 5 Issue 3, Part d
- [51] Arora DS. Role of adjuvant homoeopathic medicines in the management of intellectual disability-A purposive, non-randomised, self-controlled, pre-and post-intervention pilot study. *Indian Journal of Research in Homoeopathy*. 2021;15(4):2
- [52] Shaikh, A., Kundu, T., Ghosh, K., Kumat, O., & Mirza, G. (2022). Factor XIII Deficiency Managed With Individualized Homoeopathic Medicine In Intellectually Disabled Child: An Evidence Based Case Report. *Homoeopathic Links*, 35(04), 307-314.
- [53] Sugathan, N. V., Mohan, C. K., Goswami, A. D., & Siju, V. Homoeopathy for dysgraphia in school children. *Ann Trop Med & Public Health*; 23(S6):767-772., 2020

- [54] Tamboli, M. P., & Dhawale, K. M. Utility of coping mechanisms in children with learning disabilities to arrive at the similitum: A case series. *Journal of Integrated Standardized Homoeopathy*, 2020; 3(1), 13-19.
- [55] Dhawale KM, Tamboli MP, Katawala MY, Tambitkar NN, Tamboli PP. Use of homoeopathic remedies in the management of learning disabilities. *Indian J Res Homoeopathy* [serial online] 2014 [cited 2021 Mar 26];8:87-94.
- [56] Kondhalkar AK, Nerlekar MA, Jadhav AB. A Single blind singlearm clinical study to see the effect of constitutional homoeopathic medicines in the management of learning disabilities viz dyslexia and dysgraphia of age group 6-15 years. *Int J Health Sci Res.* 2020; 10(3):90-93.
- [57] Oberai P, Balachandran I, Janardhanan Nair K R, Sharma A, Singh V P, Singh V, Nayak C. Homoeopathic management in depressive episodes: A prospective, unicentric, non-comparative, open-label observational study. *Indian J Res Homoeopathy* 2013;7:116-25
- [58] Chimane, N., & Mundane, U. Depression in Children and Its Homoeopathic Management with Magnesium Carbonicum. *Journal of Medical and Pharmaceutical Innovation*, 2019; 6(33), 6-7.
- [59] Kaladish R, A Case Of Childhood Depression, *The New England Journal of Homeopathy* Spring/Summer 1999, Vol.8 No.1
- [60] Gilla, D., Ahammed, J., Akhila, A. L., & Sreelakshmy, S.R. A Review on Anxiety Disorders During Covid-19 Pandemic:: Homoeopathic Perspective. *International Journal of High Dilution Research*, 2021; ISSN 1982-6206, 20(2-3), 75-85.
- [61] Saltzman, S. Three Cases of Severe Obsessive Compulsive Disorder in Children: A Homeopathic Medicine Case Series Report. *American Journal of Homeopathic Medicine*, 2018; 111(1).
- [62] Moorthi SK, Radhika P. Homoeopathic Management of Conduct Disorder: A Case Series. *Homoeopathic Links.* 2021 Sep;34(03):241-8.
- [63] Rothenberg A, Oppositional Defiant Disorder – Homoeopathic Links Winter 2009, Vol. 22: 1–6
- [64] Moorthi SK, Radhika P. Usefulness of Homoeopathic Medicine in Oppositional Defiant Disorder (ODD): A Case Report. *International Journal of Traditional and Complementary Medicine Research.* 2022;3(2):101-8.
- [65] Jaiswal RR, Mutha N. PICA (Abnormal cravings) in children and homoeopathic management. *Journal of Medical and Pharmac Innovation.* 2021 Mar 5;8(39):1-4.
- [66] Stanton, H. E. Enuresis, homoeopathy, and enhancement of the placebo effect. *American Journal of Clinical Hypnosis*, 1981;24(1), 59-61.
- [67] Cortina, J. Enuresis and its homoeopathic treatment: Study of 20 cases treated with *Ilex paraguensis*. *British Homoeopathic journal*, 1994; 83(4), 220-222.
- [68] McLuckie, A., Landers, A.L., Curran, J.A. et al. A scoping review of mental health prevention and intervention initiatives for infants and preschoolers at risk for socio-emotional difficulties. *Syst Rev* 8, 183 (2019).
- [69] Brulé, D., Landau-Halpern, B., & Nastase, V. P05. 39. Clinical experiences of homeopaths participating in a study of the homeopathic treatment of children with

attention deficit/hyperactivity disorder. *BMC Complementary and Alternative Medicine*; 2012; 12(S1), P399.



© International Journal of High Dilution Research.
Not for commercial purposes.