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# Homoeopathic interventions for intellectual disabilities: Assessing caregiver burdens and behavioral improvements

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#### Abstract

**Background:** Intellectual Disability (ID) involves challenges in both intellectual and adaptive functioning, affecting learning, problem-solving, and daily activities. Manifesting early in development, approximately 1% of the population is affected, with 85% experiencing mild forms, and males more commonly diagnosed. Diagnosis entails assessing intellectual functioning through valid tests, with a score around 70 to 75 indicating significant limitations. Adaptive functioning in language, social skills, and independence is also evaluated. This case report aims to consolidate existing literature, particularly in homoeopathy, emphasizing its potential in managing behavioral aspects of ID. Addressing a gap in the literature, the report focuses on caregivers' burden in the homoeopathic context, aiming to contribute valuable insights to the field.

**Case summary:** A 30-year-old unmarried male, accompanied by his sister, attended at the Psychiatry Outpatient Department (OPD) of the National Homoeopathy Research Institute in Mental Health (NHRIMH), Kottayam on 3rd October 2022. The patient presented a spectrum of concerning behaviors, such as incomprehensible speech, wandering, spitting, hurting tendencies, destructive actions, abusive language, grimacing, laziness, dullness, poor personal care, limited socialization, academic challenges, reduced sleep, hair pulling, and a tendency for frequent masturbation. A comprehensive case analysis followed the Kentian method, and repertorization using Synthesis Repertory in RADAR Opus software led to the administration of Sulphur in 1M potency. Behavioral improvements were assessed using the Behavior Problems Inventory-01 (BPI-01) in every 3 months, while caregiver burden was evaluated with the Burden Assessment Scale (BAS) every six months. Follow up was assessed monthly for a period of one year.

**Conclusion:** This case report offers valuable perspectives on the potential efficacy of homoeopathy in the management of Intellectual Disability (ID), showcasing the behavioral improvement and the alleviation of caregiver burden.

Keywords: BPI-01, BAS, behavior assessment, caregiver burden, homoeopathy, intellectual disability

#### Introduction

Intellectual disability (ID) is the most prevalent developmental challenge, marked by significant limitations in both intellectual functioning and adaptive behaviors, encompassing various social and practical skills necessary for daily activities <sup>[1, 2]</sup>. The severity of ID varies from mild to profound, categorized based on IQ levels. Individuals with IQ levels between 50 and 69 are classified with mild intellectual disabilities, those between 36 and 49 with moderate intellectual disabilities, and those between 20 and 35 with severe intellectual disabilities <sup>[3]</sup>. The World Health Organization reports that over one billion people, constituting around 15% of the global population, live with some form of disability <sup>[4]</sup>.

Individuals with intellectual disabilities often demonstrate deficits in neurodevelopment, impacting both intellectual functioning and adaptive behavior. These disabilities typically emerge before the age of 18 and are frequently associated with co-occurring issues, such as mental health concerns, neurodevelopmental conditions, neurological problems, and medical conditions<sup>[5]</sup>.

Intellectual functioning, synonymous with intelligence, encompasses various mental abilities, including logical reasoning, problem-solving, learning capacity, and verbal skills. Assessment is commonly conducted through standardized tests, such as the Intelligence Quotient (IQ) scale, with an IQ score of 70 or below indicating intellectual limitations <sup>[5]</sup>. Adaptive behavior deficits manifest in social, conceptual, and practical skills, evolving throughout an individual's life and becoming more intricate with age.

Various validated tools exist for assessing limitations in adaptive behavior <sup>[5]</sup>.

To employ more respectful language, the term "Mental Retardation" has been replaced with "Intellectual Disability" in both the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and the International Classification of Diseases, Tenth Edition (ICD-10) (6). Both systems define intellectual disability based on key criteria, emphasizing deficits in intellectual and adaptive functioning evident during childhood or adolescence. Severity specifiers are included in DSM-5, serving as essential guidelines for healthcare professionals to diagnose and provide appropriate support and interventions <sup>[6]</sup>.

Behavior disorders are prevalent in children with intellectual disabilities, posing challenges in everyday life and potentially masking or revealing organic or psychiatric illnesses <sup>[7]</sup>. Parents often refrain from seeking help, possibly believing these issues are inherent to the child's disability and untreatable. Education, job training, family support, and individual characteristics like motivation and personality all play crucial roles in the ability of individuals with intellectual disabilities to adapt to the demands of everyday life <sup>[8]</sup>.

The prevalence of intellectual disability is estimated at about 1% of the population, with severe intellectual disability affecting approximately six per 1,000 people<sup>9</sup>. In developing countries, the estimated prevalence ranges from 10 to 15 per 1,000 children, with about 85% having mild intellectual disability. Western populations see an estimated 1 to 3% prevalence of intellectual disability, with incidence challenging to calculate accurately, especially for mild disabilities, which may go unrecognized until later in childhood. Peak prevalence is reported at ages 10 to 14 years, and the condition is 1.5 times more prevalent in males than females <sup>[10]</sup>.

The etiology of intellectual disability is complex, primarily characterized by genetic abnormalities and environmental exposures. Genetic factors include single gene mutations, copy number variations, and chromosomal abnormalities, leading to inborn metabolic errors, neurodevelopmental issues, and neurodegeneration. NoTablegenetic conditions include phenylketonuria (PKU), Lesch-Nyhan syndrome, Fragile X syndrome, Rett syndrome, and chromosome 22q11.2 deletion syndrome. Environmental factors encompass maternal exposure to alcohol during pregnancy, infections like rubella and HIV, uncontrolled maternal conditions, and complications during birth. Additionally, intellectual disability can be acquired in early childhood through factors like infections, head trauma, tumors, malnutrition, and toxic substance exposure [5, 11].

Disabilities impact not only children but also families across physical, emotional, and social dimensions. The birth of a child with an intellectual disability (ID), particularly when a healthy infant was anticipated, results in significant changes for family members in terms of social circles, expectations, plans, work lives, and financial conditions <sup>[12]</sup>.

A study spanning 11 European countries revealed that families with children with disabilities experienced increased instability, fear of having another child, and economic challenges. The caregiving responsibilities for a child with a disability often lead to the adoption of traditional gender roles among parents, driven not only by the complexity of the caregiver role but also by the higher level of care required for a child with a disability <sup>[13]</sup>.

Mothers with a child with a disability are reported to have lower employment rates, while the percentage of women taking care of their families is higher. Over three decades of research consistently show that families dealing with individuals facing serious mental illness bear significant burdens associated with caregiving responsibilities <sup>[14]</sup>.

The uncertainty about the child's future, the permanence of the disability, and the intense stress can lead parents to feel pessimistic and hopeless. Hope, defined as positive thoughts for the future, supports patients' improvement and strengthens their coping skills. In contrast, hopelessness, characterized by negative feelings and expectations for the future, leads to reduced effectiveness of coping strategies and a loss of meaning in life <sup>[15]</sup>.

The Behavior Problems Inventory (BPI-01) serves as a tool relying on informants to assess maladaptive behaviors in individuals with intellectual and Intellectual Disabilities (IDD), including conditions like Autism Spectrum Disorder (ASD). This instrument offers a detailed evaluation of the frequency and severity of three prevalent types of problematic behaviors: Self-injurious behavior, stereotyped behavior, and aggressive/destructive behavior <sup>[16]</sup>.

The Burden Assessment Scale (BAS), created by Reinhard and Horwitz, consists of 19 items aiming to encompass both the objective and subjective repercussions of consistently providing care to individuals facing serious mental illness. Notably, the scale differentiates the burden experienced from assessing disruptive behaviors exhibited by the mentally ill family member and the various caregiving activities undertaken by the family <sup>[17]</sup>.

Prognosis for intellectual disability hinges on cognitive severity and support. Mild cases can achieve independence with proper assistance, developing language and social skills. Moderate cases may not surpass second-grade academic levels but can communicate and work with supervision. Severe cases struggle with language but can develop alternative communication and critical word recognition, often requiring supervised living and work settings. Profound cases face significant communication and social challenges <sup>[5]</sup>.

The assessment of intellectual disability, following DSM-5 criteria, involves deficits in both intellectual and adaptive functioning, with onset before age 18. IQ tests, indicating intellectual disability with a score of 70 or below, classify cases as mild, moderate, severe, or profound based on severity. A comprehensive diagnosis also considers adaptive function, measuring communication, social engagement, and independent living. "Unspecified Intellectual Disability" is included for those facing testing challenges due to factors like sensory impairments or concurrent mental illnesses. Etiology assessment includes chromosomal analysis, urine and blood tests, and neuroimaging techniques like CT and MRI <sup>[5]</sup>.

Management typically involves a comprehensive approach, combining psychological and pharmacological interventions tailored to the individual's unique needs. Behavioral therapy, speech and language therapy, occupational therapy, and special education are crucial psychological components aiming to enhance skills, behaviors, and communication abilities. Supportive counseling and emotional guidance address the emotional and social challenges faced by individuals with intellectual disabilities and their families. Pharmacological interventions may be necessary for cooccurring conditions like ADHD, anxiety, or mood disorders. Additionally, a structured and supportive environment, along with caregiver and family involvement, plays a pivotal role in overall well-being <sup>[18, 19]</sup>.

Homeopathy presents itself as a valuable alternative for alleviating pathologies linked to mental disability. Considerable gaps exist in the available evidence regarding the role of homeopathy in addressing prevalent disorders associated with intellectual disability, including autism, challenging behavior, or developmental arrest in childhood <sup>[20]</sup>.This case report aims to consolidate existing literature, especially in the realm of homoeopathic articles, focusing on Intellectual Disability (ID) to underscore the potential scope of homoeopathy in managing behavioral aspects of ID. Recognizing a lack of literature addressing caregivers' burden in the homoeopathic context, the report seeks to fill this knowledge gap.

## Materials and Methods

Baseline investigations were conducted to eliminate the possibility of other systemic disorders. A comprehensive case taking was performed using a standardized form, and the evaluation was based on the Kentian method <sup>[21]</sup>. The of symptoms was then constructed, and totality repertorization was carried out using the Synthesis Repertory in RADAR Opus software<sup>22</sup>. Based on the severity of symptoms, Sulphur, the most indicated remedy, was administered in 1M potency. Behavioral improvements were assessed over a three-month period using the Behavior Problems Inventory-01 (BPI-01), while caregiver burden was evaluated using the Burden Assessment Scale (BAS) at six-month intervals <sup>[16, 17]</sup>. Monthly follow-ups were conducted, and medicines and potencies were adjusted in accordance with the evolving symptom picture.

## **Case summary**

A case of 30-year-oldunmarried male patient brought by his sister to the psychiatry outpatient department of (OPD) of the National Homoeopathy Research Institute in Mental (NHRIMH), presented Health with complaints of incomprehensible speech, wandering away from home, spitting on others, hurting tendency, destructiveness, abusive talk, grimacing, laziness, dullness, poor personal care, poor socialisation, poor academic performance, reduced sleep, hair pulling and masturbation tendency without seeing people are there or not. All the complaints have been present since childhood. The patient was born as a younger child of his parents of non-consanguineous. Mother had mental stress during the gestation period due to the problems with the in-laws. It was a difficult and prolonged labour due to the breach presentation. His birth

weight was 3.250 kg. All the development of milestones were delayed. He started speaking after 4 years of age only. He was poor in academic activities and wants to compel him to do things. Had difficulty with mingling with the peer group and used to sit alone in the classroom. He failed in the 10<sup>th</sup> standard and after that, he stopped his education. Has increased craving for Hans and taking from the used Hans packets found in public places. Both of his parents are died due to old age and now he is staying with his sister.

## Family History

He has one elder brother and sister. Father had alcoholism. Mother had the complaint of ovarian cyst and the mother's sister had CA breast and mother's brother had CA Intestine.

## Physical generals

- Appetite and thirst are normal. Patient having scanty perspiration
- Desires sweet.
- Sleep reduced
- Thermally Hot

#### Mental status examination

General appearance & behavior: Conscious & cooperative, but displays poor personal care and grooming, reserved, rapport is not established. Eye-to-eye contact was given but not maintained, and interpersonal relationship was poor. Psychomotor activity was reduced, speech parameters, including rate, volume and tone, were all reduced with lack of clarity and coherence, and reaction time was increased. The individual's affect was inappropriate and labile, although their mood was reported as euthymic. Thoughts were disorganized. Orientation, Memory (Immediate, recent and remote), Attention & concentration, general information & intelligence, abstract thinking Judgment, including social judgment and test judgment are reported as poor. Insight was absent.

## **Diagnosis and assessment**

The Consultant Psychiatrist verified the diagnosis as Moderate mental retardation with significant impairment of behavior (F71/F7x.1) in accordance with the ICD-10 criteria.

## **First prescription**

Considering the totality of symptoms, Repertorisation was done on RADAR opus software and the final selection of medicines was done after the consultation with Materia Medica. One dose of Sulphur 1M was prescribed as the first prescription.

Table1: Follow-up of the case

Date	Observation	Prescription
28/10/22	Laziness persists	
	Dullness persists	1. SAC LAC/8D (1-0-0)
	Poor socialisation and communication	2D/Week
	Speech is mildly improved	2. BT(1g)/(1-0-1) for 4week
	Answers when questioned occasionally	
	Craving for Hans persist	
	Masturbation tendency	
	Sleep improved than before	
11/11/22	Want to compel him to do things	
	Speech is not clear	1. Sulphur 10M/1D (1-0-1)
	Responding to questions.	2. SAC LAC/8D (1-0-0)
	Laziness persists	2D/Week

	Dullness persists Generals: Normal	3. BT(1g)/(1-0-1) for 4 week
00/12/22	Mild improvement of the case	
0)/12/22	Using Hone daily	1. Sylphya $10M/1D(1,0,1)$
		1. Supplui $10W/1D(1-0-1)$
	Laziness reduced than before.	2. SAC LAC/8D (1-0-0)
	Increased anger and irritability	2D/Week
	Poor socialisation	3. $BT(1g)/(1-0-1)$ for 4 week
	Generals: Normal	
13/01/23	Complaints are persisting same as before	Rx,
	Involuntary passage of stool is present.	1. SAC LAC/8D (1-0-0)
	Poor speech	2D/Week
		2. BT(1g)/(1-0-1) for 4 week
13/02/23	Involuntary passage of stool present, almost daily.	D.,
	Anger and irritability are present.	
	Socialisation is slightly improved than before.	1. CAUSTICUM 200/4D
	Masturbating tendency persists	1D/week
	Laziness persists	2.B1(1g)/(1-0-1) for 4 week
09/03/23	Mild improvement is present.	Rx
00,00,20	No involuntary passage of stool	1  SAC I AC/8D (1-0-0)
	Started going for a job	2D/Week
	Anger reduced	$2 BT(1g)/(1_0-1)$ for 4 week
	Started reading newspaper	2. DI(15)/(1-0-1) 101 4 WCCK
	Generals: Normal	
14/04/22	Conceptly hottan	D.,
14/04/23	Generally better	
	Craving for Hans reduced	1. SAC LAC/8D (1-0-0)
	Masturbation tendency reduced	2D/Week
	Going to work regularly	2. $BT(1g)/(1-0-1)$ for 4 week
	Socialisation improved	
	Generals: Normal	
15/05/23	Complaints slightly reappeared.	Rx,
	Anger and irritability are present.	1. Sulphur 0/1/15 D
	Stealing tendency present	On alternate days
	Using Hans now	2. BT(1g)/(1-0-1) for 4 week
	Masturbation tendency reduced.	
	Not going to work	
	Disturbed sleep	
16/06/23	Stealing tendency persist	Rx,
	Anger reduced	1. Sulphur 0/2/15 D
	Obstinate	On alternate days
	Involuntary passage of stool reduced	2. $BT(1g)/(1-0-1)$ for 4 week
	Masturbation reduced	
	Laziness persists	
	Sleep Reduced	
	Generals: Normal	
22/07/23	Stealing tendency reduced	Rx
22/01/23	Masturbation reduced	1 Sulphur $0/3/15$ D
	Craving for Hans reduced	On alternate days
	Going for work	2 $BT(1g)/(1-0-1)$ for 4 week
	No involuntary passage of urine	2. D1(1g)/(1-0-1) 101 + week
	Socialisation is improved than before	
	No anger or irritability	
	Generals: Normal	
24/09/22		D
24/08/23	General improvement	KX,
	Stealing tendency reduced	1. Sulphur 0/4(15 D
	Masturbation-Not observed	On alternate days)
	Craving for Hans-Nil	2. B1(1g)/(1-0-1) for 4 week
	Going for work regularly	
	Socialisation-improved	
	No anger or irritability.	
	Generals: Normal	
20/09/23	General improvement	Rx,
	Stealing tendency reduced	1. Sulphur 0/5(15 D
	Masturbation-Not observed	On alternate days)
	Craving for Hans-Nil	2. BT(1g)/(1-0-1) for 4 week
	Going for work regularly	
	Socialisation-improved	
	No anger or irritability.	
	Generals: Normal	

### Results

The patient initially exhibited a range of symptoms, including incomprehensible speech, laziness, dullness, poor personal care, limited socialization, academic struggles, reduced sleep, and a tendency towards masturbation. Additionally, there were severe behavioral issues such as causing harm to others, spitting, occasional verbal abuse, and engaging in repetitive movements like spinning and twirling objects. Interestingly, despite the evident distressing symptoms, there was a lack of concern about the patient's health in the family. However, the repercussions of his behavior were profoundly affecting the life of his sister, who was visibly upset during the initial visit. Following the administration of Sulphur, a noTableimprovement was observed after six months. However, subsequent months did not consistently show the same level of progress. Monitoring and further adjustments in treatment may be necessary to address the fluctuating nature of the patient's condition and sustain the positive changes achieved.

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1. MIND - ABUSIVE	(108) 1	1	3	2	1	1	1	1	2	3	3	2	1	1	1	2	1
2. MIND - DESTRUCTIVENESS	(71) 1	1	2	1	1	1	1	1	2		4	2	1	1	1		1
3. MIND - DULLNESS	(512) 1	3	2	3	3	2	3	1	3	3	2	3	3	3	2	1	1
4. MIND - LAZINESS	(382) 1	3	3	3	3	2	1	1	3	2	1	1	3	2	2	2	1
5. MIND - RETARDATION; MENTAL	(20) 1	1			1	1	1	2	2	1						1	
▶ 6. MIND - SPITTING	(57) 1	2	2	1	1	1	1	1		1	1	2	1				
7. GENERALS - FOOD AND DRINKS - sweets - desire	(285) 1	3	1	2	2	2	2	1	2	3	2	1	1	2	2	1	2
8. GENERALS - FOOD AND DRINKS - stimulants - desire	(45) 1	1	1	1										1	1	1	1

Fig 1: Repertory chart

The patient initially presented with The Behavior Problems Inventory (BPI) data depicts a positive trend in the individual's behavior over the 12-month assessment period (Table2). Notably, Self-Injurious Behavior (SIB) exhibits a substantial improvement, with the frequency decreasing from 26 at baseline to 8 at the 12<sup>th</sup> month, accompanied by a reduction in severity from 21 to 7. Similarly, Stereotyped Behavior (SB) and Aggressive/ Destructive Behavior (AB) also demonstrate positive changes. SB frequency decreases from 28 to 6, and severity drops from 19 to 5. AB, initially at a frequency of 28 and severity of 21, reaches zero at the 12th month, indicating complete cessation. These positive shifts suggest the effectiveness of interventions or environmental adjustments implemented over the assessment period. Continuous monitoring is essential to ensure the sustained progress of the individual, allowing for timely adjustments to interventions if necessary.

Fable2: Behavior	problems	inventory-01	scores
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	The Behavior Problems Inventory-01										
Month	Self-Injurious Behavior (SIB) Frequency	SIB Severity	Stereotyped Behavior (SB) Frequency	SB Severity	Aggressive/Destructive Behavior (AB) Frequency	AB Severity					
Baseline	26	21	28	19	82	21					
3rd Month	24	20	25	16	25	19					
6 <sup>th</sup> Month	15	13	20	13	21	17					
9 <sup>th</sup> Month	12	10	12	9	15	12					
12 <sup>th</sup> Month	8	7	6	5	0	0					

Fable 3: Burden	assessment	scale	Scores
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Question	Question Description		6 <sup>th</sup> Month	12 <sup>th</sup> Month
1	Had financial problems	4	3	2
2	Missed days at work (or school)	4	2	1
3	Found it difficult to concentrate on your own activities	4	3	2
4	Had to change your personal plans like taking a new job, or going on vacation	4	3	2
5	Cut down on leisure time	4	3	1
6	Found the household routine was upset	4	3	2
7	Had less time to spend with friends	4	4	3
8	Neglected other family members' needs	4	3	2
9	Experienced family frictions and arguments	4	4	2
10	Experienced frictions with neighbors, friends, or relatives outside the home	4	4	2

11	Became embarrassed because of (name's) behavior		3	2
12	Felt guilty because you were not doing enough to help		2	1
13	Felt guilty because you felt responsible for causing (name's) problem	1	1	1
14	Resented (name) because s/he made too many demands on you	4	3	2
15	Felt trapped by your caregiving role		4	3
16	Were upset about how much (name) had changed from his or her former self	2	2	1
17	Worried about how your behavior with (name) might make the illness worse	2	2	2
18	Worried about what the future holds for (name)	4	4	4
19	Found the stigma of the illness upsetting	3	3	3
	Total	66	56	38





Fig 2: Changes in BPI-01 score

Fig 3: Changes in burden assessment scale scores

The Table 3 reflects a longitudinal assessment of a caregiver's experience over three time points-baseline,  $6^{th}$  month, and 12th month. The caregiver's challenges are measured across 19 different aspects, each rated on a scale from 1 to 4. A noticeable trend emerges, as the total score declines from 66 at the baseline to 56 at the  $6^{th}$  month and

further drops to 38 at the 12<sup>th</sup> month. This suggests an overall improvement in the caregiver's situation over time. Specific areas of improvement include reduced feelings of guilt (questions 12 and 13) and lesser upset about the changed behavior of the care recipient (question 16). However, challenges persist in aspects such as disruptions to

routine, strained relationships, and worries about the future (questions 6, 7, 9, 14, 15, 17, and 18). The caregiver's evolving experience, as captured by the decreasing total score, indicates a positive trajectory in adapting to the caregiving role and managing associated difficulties.

# Discussion

In the present study focusing on the use of homoeopathic medicine in the management of Intellectual Disabilities (ID), the selected homoeopathic remedy has demonstrated a considerable impact on the prognosis within a span of one year. The individualized prescription, based on the unique characteristics and symptoms of each participant, has shown noteworthy improvement in behavioral aspects. a Importantly, caregivers experienced a substantial reduction in burden, emphasizing the potential of homoeopathic intervention not only in enhancing patient outcomes but also in alleviating the challenges faced by those providing care. This study underscores the relevance and effectiveness of homoeopathy in addressing the multifaceted aspects of Intellectual Disabilities.

Sulphur emerged as the remedy with the closest resemblance to the totality of symptoms, and due to the severity of the condition, a higher potency of 1M was prescribed during the initial visit. However, with no significant improvement noted after two months, the potency was increased to 10M. Subsequently, a gradual improvement, particularly in behavioral symptoms, was observed. In the beginning, the patient's caregiver found it challenging to effectively handle the situation at home. However, after three months of undergoing homoeopathic treatment, there was a noticeable improvement in the caregiver's ability to manage the patient. Significantly, the distressing symptom of wandering away from home gradually diminished. Positive changes were also evident in other areas, including a reduction in hurting tendencies, improved socialization, and decreased destructiveness. A no Table improvement was reported in the patient's craving for Hans and collecting used Hans's packets from public places. These consistent positive developments over subsequent months instilled confidence and hope in the caregiver, indicating a promising trajectory in the patient's overall well-being.

In the sixth month, the appearance of new behavioral problems was noted such as involuntary passing of stool nearly every day and an aggravation in anger and irritability. These symptoms led to an increase in the caregiver's sense of hopelessness. In response to the acute totality of symptoms, Causticum 200 was prescribed weekly for one month. Encouragingly, in the subsequent month, there was a significant improvement, with the condition brought under complete control, and eliminations became normal. The patient received advice on toilet training, and reassurance, particularly during the prior visit.

Despite the observed improvements, recurring complaints, especially in behavioral symptoms each month, necessitate a careful approach to treatment. Recognizing the need for frequent repetition without exacerbating symptoms, administered LM potencies, starting with 0/1 in the case after the ninth month. Additionally, there are limited prior studies investigating the impact of LM potencies on intellectual disabilities. Subsequently, a gradual and rapid improvement was observed across all domains, with the patient responding well, and behavioral issues such as hyperactivity, impulsiveness, violent destructive behaviours, repetitive behavioural, shyness and self-injurious behaviours are alleviated. Such behavioural problems are the most challenging task faced with ID in which homoeopathic intervention may prove to be a boon for the family and society. The LM potency was systematically escalated every month, and the improvement remained steady during these periods <sup>[23]</sup>.

In a 2020 study conducted by Dhara S. Arora, a significant reduction in features of intellectual disability (ID) across all four domains was demonstrated. The practical domain exhibited the maximum improvement, followed by the individual domain, with the social domain showing comparatively lesser improvement. The conceptual and social domains ranked lower in terms of improvement <sup>[24]</sup>.

A study addressing the management of behavioral issues in individuals with ID, comprising 449 cases, highlighted common problems in this population, including irritability, restlessness, hyperactivity, lack of concentration, salivation, disobedience, involuntary laughing, involuntary urination, and sleeplessness. The study found that homoeopathic medicines such as Belladonna, *T. hispanica*, Tuberculinum, and Sulphur were more effective in addressing hyperactivity in children. Conversely, *B. carbonica* and Pulsatilla were identified as more beneficial for addressing behavioral issues in shy and underactive children <sup>[25]</sup>.

Poorva *et al* conducted a study on the management of behavioral problems in ID using 'Lectures on Homoeopathic Materia Medica' by Dr. JT Kent. The study, involving 33 cases of both genders under the age of 18, demonstrated the effectiveness of homoeopathy in ID. Medicines were found to help individuals develop their intellectual and functional skills to some extent <sup>[26]</sup>.

Moorthi *et al* published a case report highlighting the positive role of individualized homoeopathic treatment in behavioral problems of ID and symptoms of psychosis <sup>[27]</sup>.

A 2005 study by Dolce Filho revealed that out of 58 patients detailed in the tables, 47 showed improvement according to both evaluation and reports from their companions. The study emphasized that employing a single, individualized remedy in homoeopathic therapy approaches is feasible and yields positive outcomes in mentally disabled patients. Dolce Filho concluded that homoeopathy serves as a beneficial alternative for alleviating pathologies linked to mental disability. Instances showing resemblances between the remedy and the entire symptomatology resulted in observed enhancements in adaptation skills and overall health <sup>[28]</sup>.

The experience of family burden in intellectual disability encompasses a multifaceted set of challenges for caregivers. Families bear the responsibility of providing constant care and emotional support, navigating complex systems to meet the unique needs of individuals with intellectual disabilities. This ongoing commitment often leads to financial strain due to the costs associated with medical care and specialized services. The emotional impact is significant, with caregivers facing stress, anxiety, and social isolation. Siblings may also feel the effects, and families grapple with uncertainty about the future and limited opportunities for respite <sup>[29]</sup>.

## Conclusion

This case report provides valuable insights into the potential effectiveness of Homoeopathy in managing ID, with

positive outcomes observed in behavior reduction and caregiver burden. However, it's important to recognize the limitations of case studies, such as the absence of a comparison group, which impacts the internal validity of the findings. To establish the utility of homoeopathic treatments for ID on a more scientifically robust basis, future research should prioritize randomized controlled trials. Additionally, long-term follow-up studies are recommended to explore the scope of Homoeopathy incases with relapses. Despite these limitations, the findings from this report contribute to the growing body of evidence supporting the use of Homoeopathy in the comprehensive management of ID.

# Acknowledgment

We extend our sincere thanks to Dr. ND Mohan, the consultant psychiatrist at the National Homoeopathy Research Institute in Mental Health, Kerala, for confirming the diagnosis and follow-up evaluations. Our appreciation also goes to the patient and their caregivers for their valuable inputs and unwavering compliance.

# **Declaration of patients' consent**

The authors hereby certify that appropriate consent have been obtained from the patient and caregiver. In the consent form, the caregiver has provided approval for the reporting of clinical information. They understand that their names and initials will not be disclosed, and all reasonable efforts will be made to conceal their identity. However, it is acknowledged that complete anonymity cannot be guaranteed.

# **Conflict of Interest**

Not available

# **Financial Support**

Not available

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