

Behavioural Problems of Mentally Challenged Children

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Objectives: The objectives of the study were to identify a group of most useful homoeopathic medicines in the treatment of behavioural problems found in mentally challenged children and to identify their reliable indications, most useful potencies, frequency of administration and relationship with other medicines.

Methods: This study was undertaken from 1991 to 2001, on children who were attending special schools for the mentally challenged children. A detailed past, family, psychiatric and personal history of the children were recorded in one to three interviews with the parents. From the case history, the symptoms were carefully analyzed and evaluated for determining the prescribing totality and the similimum. Routine laboratory examinations were carried out to assess the general health of the children.

Results: Eight hundred and thirty five (835) children were followed up, out of which 531 children showed improvement in common behavioural problems of mentally challenged children like aggressiveness, destructiveness, disruptiveness etc., whereas 304 children did not improve. Medicines found useful were: *Antimonium crudum* (n=5), *Argentum nitricum* (n=6), *Arsenicum album* (n=14), *Baryta carbonicum* (n=74), *Baryta muriaticum* (n=31), *Belladonna* (n=43), *Cannabis indica* (n=8), *Causticum* (n=46), *Chamomilla* (n=31), *Cina* (n=36), *Cuprum metallicum* (n=49), *Gelsemium* (n=12), *Hyoscyamus* (n=26), *Kali bromatum* (n=7), *Medorrhinum* (n=4), *Mercurius solubilis* (n=50), *Natrum muriaticum* (n=6), *Opium* (n=4), *Phosphorus* (n=25), *Pulsatilla* (n=26), *Silicea* (n=4), *Staphisagria* (n=5), *Stramonium* (n=23), *Sulphur* (n=30), *Syphilinum* (n=5), *Tarentula hispanica* (n=36), *Tuberculinum* (n=56) and *Veratrum album* (n=3). In hyperactive children, *Belladonna*, *Sulphur*, *Tarentula hispanica* and *Tuberculinum*, in aggressive children, *Belladonna*, *Hyoscyamus* and *Tarentula hispanica*, and in dull, backward and shy children *Baryta carb.*, *Baryta mur.*, *Opium* and *Pulsatilla* were found more useful.

Conclusion: The objectives to identify the most useful medicines and their reliable indications have been achieved. However, the other objectives, which include relationship between different medicines, could not be achieved.

Key words: homoeopathy; mental retardation; behavioural problems; observational study; *baryta carbonicum*; *belladonna*; *causticum*; *cina*; *cuprum metallicum*; *hyoscyamus*; *mercurius solubilis*; *sulphur*; *tarentula hispanica*; *tuberculinum*.

Introduction

Mental retardation (MR) is a condition of arrested or incomplete development of the mind or a state of subnormal intelligence, which is especially characterized by failure to achieve developmental milestones, which contribute to the overall level of intelligence, i.e. cognitive, language, motor and social abilities. Retardation can occur with or without any other mental or physical disorder. A large share of the problems of the mentally challenged results, not directly from their intellectual limitations but primarily from their inability to meet or adjust to the demands of the normal social environment¹.

Many of the emotional problems of mentally challenged children resolve into emotional insecurity. Criticism, unfavourable comparisons or punishments develop into feelings of inferiority and inadequacy.

Diagnosis is made on professional assessment of intelligence and adaptive behaviour. The primary goal of treatment is to develop the child's potential to the fullest. There are special schools where education and training may begin as early as infancy for developing the social skills to help the child function as normally as possible².

During the study on behavioural disorders in Central Research Institute (Homoeopathy), Kottayam, Kerala, many mentally challenged children came for treatment. On administration of homoeopathic medicines, a lot of positive changes were observed in majority of the children. Therefore, the present study was undertaken and doctors from the institute visited special schools for mentally challenged to register children for the study³.

Aims and Objectives

To evolve a group of most efficacious homoeopathic medicines useful in the management of behavioural disorders found in mentally challenged children, to identify their reliable indications, most useful potencies, frequency of administration and relationship with other medicines.

Material and Methods

Study design

This was an open, prospective, observational study undertaken from July 1991 to March 2001, at Clinical Research Institute (Homoeopathy), Kottayam, Kerala, on

children attending special schools that offer specialized educational facilities to these children. These schools admit only mentally deficient children who are educationally subnormal. Here the children are trained to utilize their existing mental capacity and prepare them for domestic skills and vocational training through individualized educational programs. Although their domestic skills improve, they suffer from a lot of behavioural abnormalities of mild to moderate degree.

Study sample

865 children of the age group of 3 – 20 years were registered and of these, 835 children were followed up.

Assessment of mental retardation

Intelligence quotient tests and other aptitude tests were conducted before admission. The classification of mentally challenged children in this study was made as per the IQ level already recorded in the school register. *Mental Retardation* is classified as mild, moderate, severe and profound according to the intelligence quotient (IQ)⁴.

Mild Mental Retardation – IQ between 50-69. Understanding and use of language tend to be delayed to a varying degree, and executive speech problems that interfere with the development of independence, may persist into adult life.

Moderate Mental Retardation – IQ between 35-49. Discrepant profiles of abilities are common in this group, with some individuals achieving higher levels in visuo-spatial skills than in tasks dependent on language, while others are markedly clumsy but enjoy social interaction and simple conversation.

Severe Mental Retardation – IQ between 20-34. Most people in this category suffer from a marked degree of motor impairment or other associated deficits, indicating the presence of clinically significant damage to or mal-development of the central nervous system.

Profound Mental Retardation – IQ 20 and below. Severe neurological or other physical disabilities affecting mobility are common, as epilepsy, visual and hearing impairments. Pervasive developmental disorders in their most severe form, especially atypical autism are particularly frequent, especially in those who are mobile.

Data collection

The medical team of the institute used to visit these schools once in a fortnight. A detailed history including milestones development, personal, psychiatric and family history was carefully recorded in one to three interviews. The histories included information from the parents/relatives, teachers, attendants and reports of other doctors. During history taking, importance was given to details of the behavioural problems of these children. Routine urine and blood examinations were carried out to assess the general health of the children.

Methods of prescription

From the case history, the symptoms were carefully evaluated for determining the prescribing totality. The

repertorisation was done after identifying the corresponding rubrics. Selection of indicated medicines was further guided by *miasmatic* background, predisposing and precipitating factors, generalities, modalities, presenting complaints and constitutional features. In some patients, however, prescriptions were based on characteristic symptoms or keynotes.

Observations

Children of age group 3 – 20 years (Fig. 1) were assessed for their intensity of mental retardation (Fig. 2). These children belonged to different family structure (Table 1) and were from different economic background (Table 2). Predisposing factors (Table 3) and hereditary background (Table 4) responsible for development of these complaints were also analyzed. Various types of

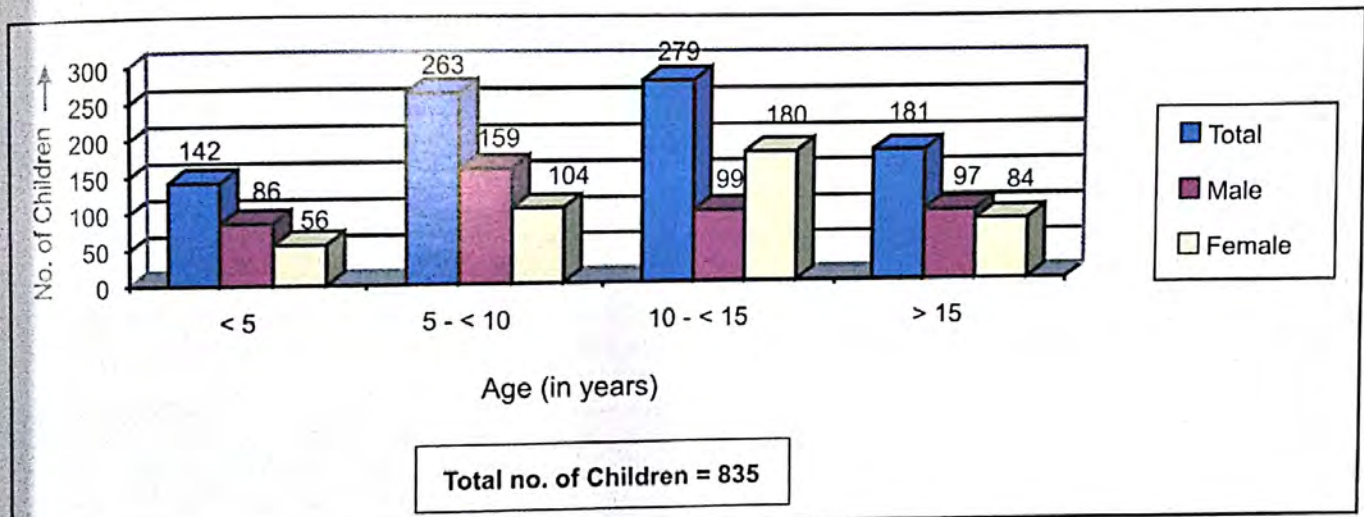


Figure 1: Age profile

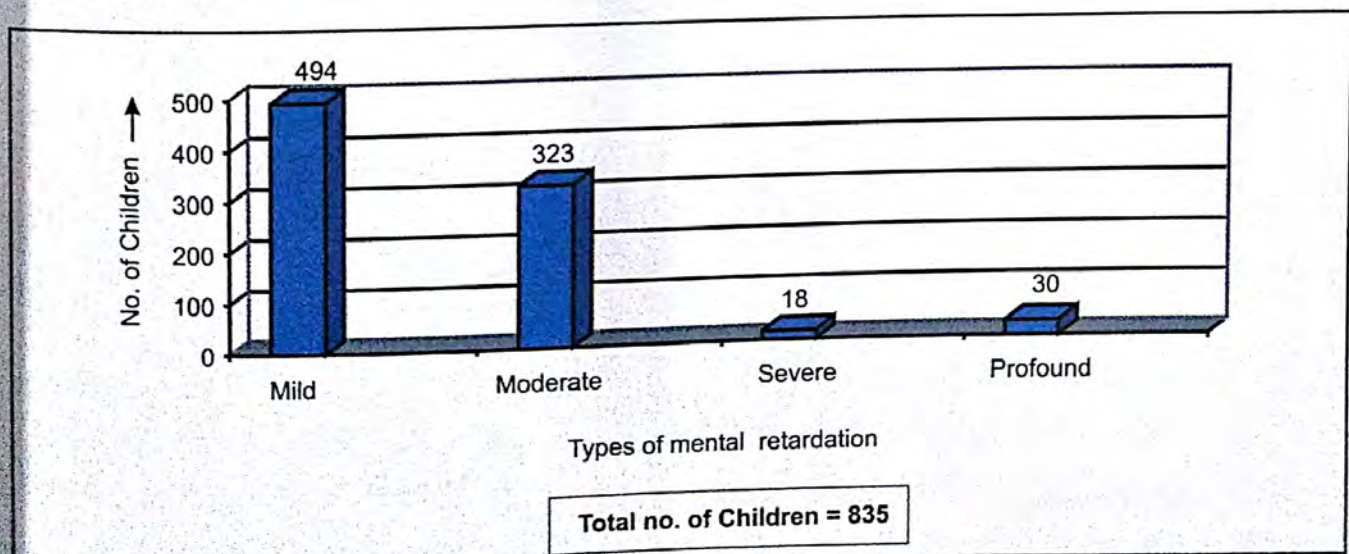


Figure 2: Types of mental retardation

Table 1: Family structure of children

	Total	Male	Female
Single	477	280	197
Joint	339	150	189
Orphan	49	11	38

Table 2: Economic status of children

	Total	Male	Female
Low income group	482	272	210
Middle income group	357	169	188
High income group	26	0	26

Table 3: Predisposing factors

	No. of children
Hereditary factors	124
High maternal age	92
Complicated delivery	186
Intake of medicines in early stage of pregnancy	214
Not known	249

Table 4: Hereditary background of the children

	Total	Male	Female
Maternal	70	49	21
Paternal	35	18	17
Siblings	19	9	10

behavioural problems (Fig. 3) were found associated with mental retardation, having different appearance and behaviour (Table 5). Intelligence, memory, orientation and miasmatic background of the behavioural problems of mentally challenged children were also assessed and are detailed in Table 6, 7, 8 and 9 respectively.

Results

Out of 835 children followed up, 531 children improved whereas 334 children did not improve (Fig 4). Common behavioural problems in mentally challenged children like aggressiveness, destructiveness, disruptiveness etc. were studied and a group of useful medicines for each problem was identified (Table 10). Along with the improvement of behavioural problems, there was also improvement in other associated conditions like respiratory tract infections, nocturnal enuresis, seizures, recurrent attacks of tonsillitis, chronic suppurative otitis

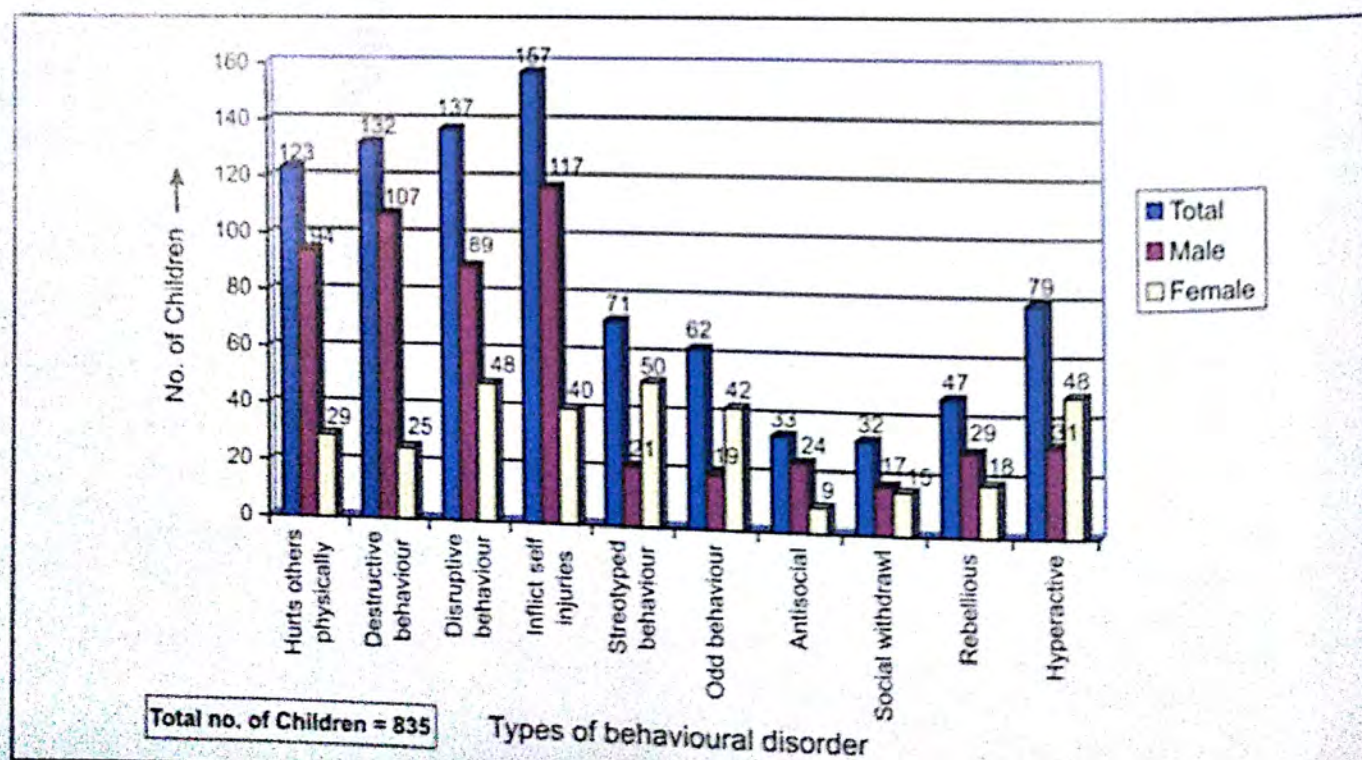


Figure 3: Types of behavioural problems found in mentally challenged children.

Table 5: Appearance and behaviour

	Total	Male	Female
Dull	166	98	68
Autistic	148	91	57
Melancholic	126	24	102
Extreme behaviour	179	94	85
Having insight	167	88	79
No insight	79	46	33

Table 6: Intelligence

	Total	Male	Female
Average	282	159	123
Below average	474	201	273
Idiotic	109	81	28

Table 7: Memory

	Total	Male	Female
Poor	470	204	266
Intact	395	237	158

Table 8: Orientation

	Total	Male	Female
Oriented	518	280	238
Less oriented	268	123	145
Disoriented	79	38	41

Table 9: Miasmatic background

	Total	Male	Female
Psora	482	221	261
Sycosis	71	45	26
Syphilis	50	27	23
Mixed	262	148	114

media and angular stomatitis. A group of useful medicines in these conditions was also identified (Table 11). An overall group of useful medicines with their useful potencies and reliable indications were identified (Table 12).

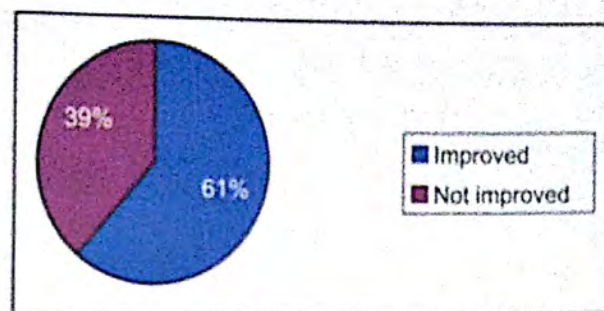


Figure 4: Response to the treatment in terms of behavioural problems

57% of children were classified as mild mental retardation, 37% moderate mental retardation, 2% severe mental retardation where as only 3% as profound mental retardation (Fig 2). 63% of children were in the age group of 5 to 15 years (Fig 1). Family structure (Table 1) acted as a support system in these children.

Indications of medicines found useful

Antimonium crudum

- Inclined to grow fat.
- Child gets irritated when looked at.
- Fearful, peevish, cannot bear to be touched or looked at.
- Impatient.
- Sensitive to cold, sore nostrils.
- Thick white coated tongue.

Argentum nitricum

- Very restless and hurried activities.
- Very impulsive in activities when irritated.
- Weakness of memory.
- Great craving for sweets.
- Convulsions preceded by restlessness.
- Urine passes unconsciously.
- Purulent discharge from eyes.

Arsenicum album

- Irritable.
- Fears to be alone.
- Attacks of anxiety during night.
- Complaining against others.
- Mentally and physically restless, changes places continuously.
- Frequent upper and lower respiratory tract infections.

Table 10: Medicines found useful in various behavioural problems of mentally challenged children

Common behavioural problems	No. of children		Medicines found useful
	Observed in	Improved in	
1 Aggressive - Threatens - Pushes and pinches others - Spits at others - Bites and attacks others etc.	137	94	Bell., Calc. carb., Hyos., Nat. mur., Tarent. hisp., Tuberc.
2 Destructive - Tears things - Soils things - Breaks and damages objects - Puts things into fire	132	107	Bell., Cham., Cina, Merc. sol., Tarent. hisp.
3 Disruptive - Pulls things from others - Makes loud noises - Cries and screams - Slams doors and bangs objects	137	89	Bell., Cham., Cina, Nat. mur., Bar. carb.
4 Self injury - Biting self - Hanging head - Pulling and tearing own hair	157	117	Ars. alb., Bell., Merc. sol.
5 Stereotyped behaviour - Thumb sucking - Nail biting - Teeth grinding - Head nodding - Jumping up and down - Repetitive activities	103	28	Bell., Op., Cina, Stram., Calc. carb.
6 Odd behaviour - Silly, laughs to self - Talks to self - Makes peculiar sounds - Echolalia, echopraxia - Irrelevant talk	62	22	Ant. crud., Sulph., Stram., Hyos., Bar. carb., Phos., Kali brom., Verat. alb.
7 Anti-social behaviour - Tells lies - Steals things/kleptomania - Makes obscene gestures - Exposes the person - Masturbates in front of others - Uses vulgar languages	33	24	Bell., Hyos., Nat. mur., Tarent. hisp.
8 Withdrawal behaviour - Sits idle for a long time - Stares blankly - Hides face, timid - Avoids company	59	27	Ars. alb., Bar. carb., Op., Puls., Stram., Syph.
9 Rebellious behaviour - Disobedient - Poor personal care - Inattentive - Talks rudely - Regressive	93	58	Arg. nit., Bell., Cina, Cham., Nat. mur., Tuberc., Sulph.
10 Hyperactive - Running - Going up and down - Restless, changes place - Wandering from home/school	79	39	Ars. alb., Bell., Calc. carb., Hyos., Tarent. hisp., Tuberc.

Table 11: Associated complaints

Associated complaints	Medicines found useful	No. of children	
		Observed in	Improved
1 Lower respiratory tract infections	Ars. alb., Cina, Medor., Nat. sulph., Phos., Puls., Sulph., Tuberc.	36	28
2 Upper respiratory tract infections	Ars. alb., Bar. carb., Calc. carb., Calc. phos., Merc. sol., Sulph., Tuberc.	120	99
3 Nocturnal enuresis	Bar. carb., Bar. mur., Bell., Caust., Calc. carb., Calc. phos., Phos., Sil., Sulph., Tuberc.	46	31
4 Seizures/Convulsions	Bar. carb., Cann. ind., Caust., Cina, Cup. met., Gels., Hyos., Op., Stram., Sulph., Tuberc.	93	52
5 Recurrent attacks of Tonsillitis	Bar. carb., Bell., Merc. sol.	86	84
6 Chronic Suppurative Otitis Media	Calc. carb., Merc. sol., Kali bi., Puls.	19	16
7 Angular stomatitis	Merc. sol., Acid nit., Sulph.	31	25

Baryta carbonicum

- Children who do not grow.
- Aversion to strangers.
- Hides behind the mother or door.
- Very shy and timid in nature.
- Loss of memory, child cannot be taught due to deficient attention.
- Takes cold easily; with least cold has an attack of tonsillitis, particularly follicular tonsillitis.
- Increased salivation.
- Swelling and induration of glands.

Baryta muriaticum

- Children who are slow to learn or understand.
- No desire to play.
- Fear of men.
- Foolish behaviour, idiotic, imbecile and timid.
- Irritable
- Child who breathes with open mouth and has a nasal tone.
- Frequent urination and screams before urination.

Belladonna

- Excited mental stage, furious rage, bites and strikes others.

- Spits on the face of others.
- Very restless and hyperactive.
- Pulls his own hair when irritated.
- Hits his own head against wall when irritated.
- Grinds teeth when irritated.
- Stammering.

Cannabis indica

- Poor orientation.
- Very forgetful.
- Auditory hallucinations of music.
- Fear of darkness.
- Absent minded.
- Talks, startles and grinds teeth in sleep.
- Thick, frothy and sticky salivation during sleep.

Causticum

- Children are slow in learning to walk.
- Melancholy mood, intensely sympathetic.
- Fears to be alone, cannot sleep alone.
- Unsteady walking and easy falling.
- Nocturnal enuresis in first sleep.

Table 12: Medicines and potencies found useful

Medicines & potencies administered	No. of children	
	Prescribed	Found useful
	10	6
Argentum nitricum 200C, 1M	18	5
Antimonium crudum 30C, 200C	28	14
Arsenicum album 30C, 200C	84	74
Baryta carbonicum 30C, 200C, 1M	74	31
Baryta muriaticum 200C, 1M	62	43
Belladonna 200C, 1M, 10M	19	8
Cannabis indica 200C, 1M	66	46
Causticum 30C, 200C, 1M, 10M	92	31
Chamomilla 1M, 10M	54	36
Cina 30C, 200C	86	49
Cuprum metallicum 30C, 200C	19	12
Gelsemium 200C, 1M	29	26
Hyoscyamus 30C, 200C	10	7
Kali bromatum 200C, 1M	14	4
Medorrhinum 200C, 1M	97	50
Mercurius solubilis 30C, 200C, 1M, 10M	12	6
Natrum muriaticum 200C, 1M	7	4
Opium 30C, 200C, 1M	42	25
Phosphorus 30C, 200C	64	26
Pulsatilla 30C, 200C, 1M	7	4
Silicea 200C, 1M, 10M	15	5
Staphisagria 200C	33	23
Stramonium 200C, 1M	36	30
Sulphur 200C, 1M, 10M	6	5
Syphilinum 30C, 200C, 1M, 10M	49	36
Tarentula hispanica 1M, 10M	61	56
Tuberculinum 200C, 1M	10	3
Veratrum album 30C, 200C		

Chamomilla

- Highly irritable and sensitive.
- Restless.
- Wants many things but rejects when offered, continues to cry.
- Child wants to be carried that gives relief.
- Very obstinate and impatient.
- Child cannot endure any one near him.
- Cannot bear to be spoken to, averse to talk.

Cina

- Very cross, irritable when touched or looked at.
- Screams and talks in sleep.
- Wants to be carried which does not give relief.
- Children suffering from worms, grind teeth during sleep, sleep on abdomen.
- Profuse sweat on head.
- Frequent lower respiratory tract infections in children with worms.
- Constantly rubs nostrils.
- Palms and abdomen are hot.

Cuprum metallicum

- Convulsions, tonic and clonic spasms beginning in fingers and toes.
- Convulsions aggravated at night during sleep.
- Convulsions about new moon.
- Stammering speech.

Gelsemium

- Profound mental retardation with paralytic weakness of different parts.
- Excitable, irritable, sensitive and nervous.
- Bad effects from fright.
- Fear of exciting news.
- Social phobia, fears to go to public places, crowds etc.
- Easily tensed when in a company.
- Desires to sit alone and to be quiet.

Hyoscyamus

- Abusive, lascivious, suspicious and jealous.
- Shameless.
- Irrelevant talks, murmurs alone.
- Imagines that someone is sitting by his side to whom he is talking.
- Convulsions after fright, after eating.
- Shrieks during sleep.

Kali bromatum

- Loss of memory, especially for words and syllables.
- Absent minded
- Restless, cannot sit still, must move about or keep occupied, hands and fingers in constant motion.
- Epileptic convulsions.
- Night terrors.

Medorrhinum

- Dwarf, who are dull and weak.
- Nervous.
- Weak memory, cannot spell correctly.
- Overactive children, with absolute lack of concentration.
- Fear of darkness.
- Enuresis – passes enormous quantity of urine.

Mercurius solubilis

- Hurried and restless.
- Overanxious.
- Slow to answer.
- Sudden anger with impulse to do violence, inflicts self injuries.
- Frequent attacks of tonsillitis with excessive salivation.
- Offensive perspiration especially on head.
- Otorrhoea with offensive and blood tinged discharge.
- Tongue thick and coated, with thick tenacious and offensive saliva.

Natrum muriaticum

- Late in learning to talk.
- Laughs and cries immoderately.
- Weeping aggravated by consolation.
- Intense sadness and likes to be alone.
- Irritable, cries from least cause.
- Craves salty and fried food.
- Involuntary urination when walking, laughing and coughing.
- Mapped tongue.

Opium

- Starts with least noise.
- Dull and stupid; complaints of nothing, wants nothing.
- Stertorous breathing during sleep after convulsions.
- Convulsions always during sleep.
- During convulsions eyes half open and upturned.
- Constipation with no desire for stool and stool remains long in the rectum.

Phosphorus

- Nervous, oversensitive.
- Fearful, anxious and apprehensive.
- Unwilling to talk, answers slowly.

- Indifferent, especially to relatives.
- Imaginative, hallucinating.
- Restless, fidgety, moves continuously.

Pulsatilla

- Changeable temperament.
- Mild, gentle, yielding disposition.
- Inclination to weep, consolation ameliorates.
- Anxious, fears to be alone.
- Everything disgusts.

Silicea

- Child is nervous, cross and irritable.
- Fear of pointed objects.
- Very obstinate and arrogant in nature.
- Oversensitive physically and mentally.
- Children with large head and open fontanelles.
- Profuse sweating of head, palms and soles.
- Distended abdomen.
- Cervical and salivary glands are indurated.

Staphisagria

- Easily indignant and becomes irritable, excited or cries.
- Dwells on sexual matters.
- Desires to be alone due to sexual pre-occupation.
- Disposition to masturbate.

Stramonium

- Disposed to talk continually.
- Incoherent talk.
- Religious disposition.
- Desires light and company, cannot bear to be alone, worse in dark and solitude, screams and cries when alone.
- Terrifying hallucinations.
- Excitement after convulsion.
- Stammering – has to exert himself a long time before he can utter a word, makes great effort to speak.

Sulphur

- Quick tempered, fretful, irritable and sensitive.
- Indolent.
- Cannot think or fix his mind on any subject.
- Very busy, hyperactive.
- Great anxiety and apprehension.
- Weak memory, distracted mind.
- Very selfish.

- Dull and confused.
- Child is careless, averse to take bath, filthy in nature.
- Hot patient.
- Excessive appetite, desires sweet food.
- Recurrent attacks of skin affections, skin is dry and looks dirty.

Syphilinum

- Emaciated children with falling of hair.
- Wedged teeth and flattened nose.
- Loss of memory, misplaces words.
- Excessive salivation which flows out at night during sleep.
- Acts well as an *intercurrent medicine*.

Tarentula hispanica

- Anxiety and restlessness.
- Desire to run.
- Anger from least contradictions.
- Cunning and destructive.
- Constantly complaining and threatening.
- Violent behaviour.
- Uncontrollable sexual desire with lascivious thoughts.
- Sleeplessness before midnight.

Tuberculinum

- Hopeless.
- Aversion to mental work.
- Easily irritable and changeable nature.
- Desire to travel, cosmopolitan in nature.
- Very hyperactive.
- Fear of domestic animals especially dogs.
- Screams and talks during sleep.
- Sensitive to weather changes.
- Epileptic convulsions in mentally challenged children.
- Takes cold easily, frequent attacks of respiratory infections.
- Enlarged glands.
- Acts best as an *intercurrent medicine*.

Veratrum album

- Nervous
- Cannot bear to be alone.
- Mania with desire to cut and tear everything especially clothes.
- Howls and curses.
- Fainting attacks by least exertion.
- Excessive weakness.

Discussion

Mental retardation is one of the major issues under National Health Program, which is a cause of great concern. Our study has shown some positive role of Homoeopathy in alleviating the behavioural problems of mentally challenged children.

Mental retardation affects about 1 - 3% of the population. There are many causes of mental retardation, but a specific reason in 25% of children is known⁵. In our study hereditary was one of the predisposing factors (Table 3) in 124 children and of these, maternal hereditary background was found in 70 children (Table 4). These corroborate with the data given by Park⁶. The finding of this study that low income group children were more prone to mental retardation (Table 2) corroborates with that of Drews *et al*⁷ and Harry⁸. The miasmatic background in most of the children was Psora (Table 9).

During the study, it was observed that in mentally challenged children, with the support of homoeopathic medicines, behavioural problems were modified so that they could be trained to be self dependent to a certain extent. Our results were similar to those of Dolce⁹. The behavioural problems of the group of children modified by homoeopathic medicines were destructive and disruptive behaviour, antisocial and rebellious behaviour, hyperactive behavior and other habit disorders. Out of 865 children treated, 531 (64%) children improved whereas 334 children did not improve (Fig. 4). This was due to the reason that a few of them suffered from profound retardation and others were non-compliant with the treatment. A long continued treatment and observation are essential for this.

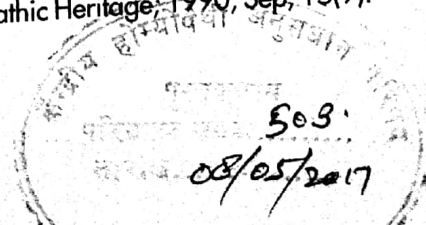
Besides relief in behavioural problems of these children, homoeopathic treatment also gave relief to most of the associated complaints (Table 11) such as recurrent upper and lower respiratory tract infections, nocturnal enuresis, convulsions, recurrent attacks of tonsillitis, chronic suppurative otitis media and angular stomatitis. Medicines such as *Belladonna*, *Tarentula hispanica*, *Tuberculinum* and *Sulphur* were found more useful in hyperactive children; *Belladonna*, *Hyoscyamus* and *Tarentula hispanica*, were more useful in aggressive children and *Baryta carb.*, *Baryta mur.*, *Opium* and *Pulsatilla* were found useful in dull, backward and shy children. Similar response with these medicines had been observed by Tyler when prescribed to mentally challenged children¹⁰⁻¹².

Conclusion

The study indicates that homoeopathic medicines are useful in different behavioural problems of mentally challenged children, which helped them in developing their intellectual and functional skills upto some levels. The primary objective of present study to identify a group of most useful medicines and their indications was thus achieved. However, the other objectives, which included relationship with other medicines and their frequency of administration, could not be achieved. Study opens up avenues of further research in this important area where the physical and mental sufferings of one affects the whole family.

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