

ROLE OF HOMEOPATHY IN AUTISM SPECTRUM DISORDER

**Prasoon Choudhary¹, Tushar Agarwal^{2*}, Ritika Sharma³, Mayank Jethiwal⁴ and
Pratishtha Patel⁵**

¹HOD, Dept. of Pediatrics, Dr. M.P.K. Homeopathy Medical College, Hospital and Research Center, (Constituent College of Homoeopathy University), Jaipur, Rajasthan, India.

^{2,3,5}PG Scholar, Dept. of Pediatrics, Dr. M.P.K. Homeopathy Medical College, Hospital and Research Center, (Constituent College of Homoeopathy University), Jaipur, Rajasthan, India.

⁴PG Scholar Dept. of Pharmacy, Dr. M.P.K. Homeopathy Medical College, Hospital and Research Center, (Constituent College of Homoeopathy University), Jaipur, Rajasthan, India.

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***Corresponding Author**

Dr. Tushar Agarwal

PG Scholar, Dept. of
Pediatrics, Dr. M.P.K.
Homeopathy Medical
College, Hospital and
Research Center,
(Constituent College of
Homoeopathy University),
Jaipur, Rajasthan, India.

ABSTRACT

Autism Spectrum Disorder (ASD), commonly called as just autism, is a neurodevelopment condition involving deficits in social interaction, communication, and/or the presence of restrictive or repetitive behaviors. There is a growing prevalence of autism worldwide which has led to an increase in research of various treatment options, including complementary and alternative medicine, with homeopathy being one of the more widely discussed alternatives. Homeopathy offers a new and individualistic approach in the management of the various presenting complains associated with ASD. This article sheds light on the role of homeopathy in the management of autism, exploring the epidemiology, etiology, risk factors, signs& symptoms, and general management strategies. There is also a brief discussion about various homeopathic medicines which can be used in dealing with cases of autism. The review also emphasises on the potential benefits of using homeopathic medicines in the context of ASD.

KEYWORDS: Autism Spectrum Disorder, Role of homeopathy in ASD, aetiology for autism, risk factors for autism.

INTRODUCTION

Autism Spectrum Disorder (ASD) is considered as a neurodevelopmental disorder in which

there are varying degrees of problems encountered in social interactions, communication, and the presence of stereotyped and often repetitive behaviors. The disorder has a wide spectrum of variation in presentation, from mild to severe, depending upon the extent of disability caused by its symptoms, with each individual exhibiting different presentation. While conventional therapies for Autism primarily consist of behavioural therapy, educational interventions, and medications, there is a lack of definitive beneficial effect with the use of such therapies. This has led parents and caregivers to consider complementary and alternative therapies such as homeopathy.^[2]

Homeopathy, is an alternative system of therapeutics founded by Dr. Samuel Hahnemann in the late 18th century. It is based on the principal of “Similia Similibus Curantur” and uses highly diluted substances to stimulate the body’s self-healing abilities, the vital force as it is called in homeopathy. Homeopathy can address the root causes of symptoms, providing a more individualized and comprehensive approach to treatment.^[3] This article discusses our current understanding of ASD and explores the role of homeopathy in its management.

Epidemiology

Autism Spectrum Disorder (ASD) affects people of all races, ethnicities, and socioeconomic groups, although there is significant geographical variation in prevalence rates. According to the Centers for Disease Control and Prevention (CDC), the prevalence of ASD in the United States has been on rising, with estimates showing that 1 in 54 children is diagnosed with the condition, as of the latest data.^[1,4]

This shows a marked increase from previous decades, though part of this rise can be attributed to improved diagnostic methods and better medical facilities available to the general population.^[5]

The gender disparity is another aspect of ASD epidemiology, with males being diagnosed approximately four times more frequently than females.^[6] The reasons for this discrepancy are still unknown but may be related to the biological differences between the two genders. Additionally, studies have shown a higher prevalence of ASD among children with a family history of neurodevelopmental disorders or genetic syndromes.^[7]

Area-wise, prevalence rates vary, with high rates reported in North America and parts of Europe, compared to developing countries, where awareness and diagnostic infrastructure

may be less accessible and developed.^[9] A growing body of research is focused on understanding the global prevalence of ASD and identifying key environmental, genetic, and cultural factors that may influence these trends.^[10]

Aetiology

A definite cause of Autism Spectrum Disorder remains unknown, although several factors are believed to contribute to its onset. Genes are strongly implicated in the development of ASD, with research showing that heritable genes may play a major role in its manifestation.^[11] Family studies show that ASD tends to run in families, and twin studies demonstrate higher incident rates in identical twins compared to fraternal twins.^[12]

Environmental factors, including prenatal exposure to toxins, infections, or certain medications, may also contribute to the risk of developing ASD.^[8] Maternal infections during pregnancy, and stress have been linked to an increased risk.^[13] Moreover, prenatal exposure to various substances like alcohol, tobacco, and certain medications has been associated with a higher incidence of ASD.^[14]

Neurobiological factors are another important aspect of the aetiology of ASD. Structural and functional abnormalities due to birth defect or various pathologies in brain areas related to social interaction, communication, and behavior have been observed in patients of ASD.^[15] These include differences in the size and structure of the amygdala, hippocampus, and cerebellum, as well as altered neural connection between brain regions.^[16]

Classification of autism spectrum disorder

Autism Spectrum Disorder can be classified in various ways, one of which is based on the severity of symptoms and functional impairment. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), categorizes ASD into the following three levels:

Level	Severity	Characteristics
Level 1	Requiring support	Individuals may have difficulty with social interactions and may exhibit restricted or repetitive behaviors that interfere with functioning. ^[17]
Level 2	Requiring substantial support	Individuals exhibit marked deficits in social communication and engage in more pronounced restrictive or repetitive behaviors. ^[18]
Level 3	Requiring very substantial support	Severe deficits in communication and social interaction. Significant behavioral challenges that require intensive intervention. ^[19]

Risk factors

A number of factors both environmental and genetic have been identified which are found to increase the likelihood of developing ASD. Some of them are as follows:

- **Hereditary inclination:** A family history of Autism or other neurodevelopmental disorders substantially increases the risk of developing ASD.^[20]
- **Gender:** Males are at an increased risk of being diagnosed with ASD than females.^[21]
- **Pregnancy related:** Exposure to certain toxins, maternal infections during pregnancy, or certain medications.^[22]
- **Advanced maternal age:** High parental age at the time of conception has been linked to a higher risk of ASD.^[23]
- **Premature birth or low birth weight:** Children born prematurely or with low birth weight have an increased chance of developing ASD.^[24]
- **Environmental factors:** Exposure to pesticides, air pollution, and heavy metals has been shown to increase the risk in some studies.^[25] Unstable emotional environment in early childhood and even in neonatal period can increase the risk of developing autism.

Signs and Symptoms

The signs and symptoms of ASD typically start emerging before the age of 3 and can vary widely from person to person. Some commonly observed signs and symptoms are as below:

- **Social communication problems:** Difficulty in understanding social cues, forming relationships, and engaging in reciprocal conversation.^[26]
- **Repetitive and Rigid behaviour:** Engaging in repetitive actions, such as hand-flapping, rocking, or insisting on rigid routines.^[27]
- **Tactile sensitivities:** Heightened sensitivity to sounds, lights, textures, or smells.^[28]
- **Delayed development:** Difficulty with verbal communication, often combined with a preference for non-verbal communication.^[29]
- **Focused interests:** Intense focus on one topic or object, often to the exclusion of other surroundings.^[30]

General management

There is no specific treatment for ASD till date. A number of techniques/therapies are used, singly or in combination with others to manage the symptoms and alleviate distress due to the condition. Some of the commonly used therapies are:

- **Behavioral therapies:** Applied Behavior Analysis (ABA), speech therapy, and

occasionally hypnotherapy are often central components.^[31]

- **Educational intervention:** Individualized education programs (IEPs) made according to the child's strengths and needs.^[32]
- **Pharmacotherapy:** Medicines may be used to manage associated symptoms.^[33]
- **Family support and encouragement:** Parent training and counselling, can help families cope with the challenges of dealing with ASD.^[34]

Homeopathic management of autism spectrum disorder

Homeopathy offers a more holistic, individualized and harmless approach to the management of ASD. Although Homeopathic remedies are often selected on the patient's overall constitution, emotional state, and specific symptoms, rather than merely targeting the diagnosis,^[35] some commonly used homeopathic remedies for ASD include:

1. **Arsenicum album:** For children exhibiting anxiety, restlessness, and obsessive behaviors.^[36]
2. **Calcarea carbonica:** Indicated for children who are slow to develop, with a tendency toward anxiety and stubbornness.^[37]
3. **Hyoscyamus:** Used for children displaying hyperactivity, impulsiveness, and inappropriate behavior.^[38]
4. **Natrum muriaticum:** Helps children who are emotionally withdrawn, introverted, and have difficulty in social interactions.^[39]
5. **Sulphur:** Indicated for children with strong personalities, irritability, and tendencies to engage in rebellious behaviors.^[40]
6. **Stramonium:** Beneficial for children who experience intense fear, particularly of the dark or unfamiliar situations.^[41]
7. **Baryta carbonica:** For children with delayed developmental milestones and poor social interaction.^[42]
8. **Phosphorus:** Helps children who are emotionally sensitive, easily frightened, and prone to anxiety.^[43]
9. **Medorrhinum:** Used for children who exhibit hyperactivity, impulsiveness, and strong desires for sweets or salty foods.^[44]
10. **Kali bromatum:** For children with excessive activity, nervousness, and poor attention span.^[45]

CONCLUSION

While conventional medical treatments and therapies remain the cornerstone in the management of Autism Spectrum Disorder, Homeopathy offers a complementary, individualized and holistic treatment approach for addressing various behavioral and emotional aspects of the disorder. Homeopathy's focus on treating the person as a whole and addressing both the physical and emotional manifestations of ASD may provide some relief, especially when combined with traditional therapies.

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