

E-ISSN: 2616-4493 P-ISSN: 2616-4485 www.homoeopathicjournal.com IJHS 2024; 8(1): 168-171 Received: 03-11-2023 Accepted: 04-12-2023

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# Integrating Bio-Psycho-Social dimensions: A homeopathic perspective on the aetiology of food allergies

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#### DOI: https://doi.org/10.33545/26164485.2024.v8.i1c.1063

#### Abstract

Food allergy prevalence has risen considerably in recent decades, yet there is a dearth of comprehensive literature examining the bio-psycho-social factors in relation to Homoeopathy. This study aims to delineate these factors among patients presenting with food allergy symptoms at the National Institute of Homoeopathy (NIH) in Kolkata. Through a prospective questionnaire method, data from 2017 to 2019 were analysed, highlighting key demographic patterns and clinical characteristics. The mean age of patients was 33 years, with a predominance of female (77%) and rural (84%) subjects. Prawns and brinjal emerged as the most common allergens. Co-morbid conditions like bronchial asthma and a significant incidence of stress-related factors in allergy manifestation were noted. The findings underscore the necessity for a personalised treatment approach as recommended by Hahnemann in Homeopathic philosophy, which resonates with modern precision medicine principles. Further regression analysis is suggested to deepen the understanding of these associations.

Keywords: Allergy, food allergy, homoeopathy, bio-psycho-social

#### Introduction

The exact prevalence of food allergy in India is not yet known. Since there are inconsistencies in study design, it is difficult to compare the prevalence of Food Allergy (Boyce, 2010)<sup>[4]</sup>. Although regional variations occur (Ferrando, 2017)<sup>[5]</sup> the most common items associated with food allergy are shellfish, peanuts, milk, egg, wheat, fish and nuts. In India brinjal, citrus fruit, rice, black gram, banana, cucumber, shellfish are most common food causing clinical symptoms.

The prevalence of Food Allergy has increased rapidly. Since genetic factor results in a slow evolutionary change, it cannot alone play a role in the rapid trend, therefore environmental factor might be playing a central role in producing a epigenetic modification resulting in fast progress of food allergy. (Allen, Clinical aspects of paediatric food allergy and failed oral immune tolerance. 2010) <sup>[1]</sup>. Since Food Allergy is most common in developed countries, modern lifestyle can be an important factor. (Allen, The Epidemiology of Food Allergy, 2012).

#### The Hygiene Hypothesis

Early exposure of the infants to microbes results in mature immune development and there by decreases the risk of developing auto-immune diseases and allergy in future life. There are multiple environmental factors that are associated with hygiene hypothesis. The transmission of healthy microbiome can occur vertically from mother to child and also horizontally by exposing to other children and domestic animals. (Wills-Karp, 2001)<sup>[11]</sup>

#### **Clinical Overview of Adverse Reactions to Foods**

For a layman the term 'Allergy' is described as adverse reaction immediately after intake of food. Therefore, those reactions that are not immunologically mediated are referred to as food intolerance. For an Allergy specialist Food Allergy implies an immunological reaction resulting in elevation of Serum IgE (Zhonghua, 2015)<sup>[12]</sup>.

The following history of presenting complaint are very crucial in case taking of a person having food related complaint (Sicherer, 2010)<sup>[9]</sup>.

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- 1. Type of the food causing Allergy (Kelso, 2012)<sup>[13]</sup>.
- 2. Duration after which the symptoms started
- 3. The nature of the symptoms
- 4. Recurrence of the symptom
- 5. The treatment taken

Recent understanding of allergy and its relationship with homeopathic concept. An integrated Systems approach is needed to understand the multifactorial factors leading to complex reaction (Muraro, 2017)<sup>[8]</sup>.

### Individualisation

When analysing the strategy of treatment of modern medicine, a shift in the attitude from the avoidance of the allergic food and emergency management of the Allergic reaction to a preventive personalised treatment as occurred (Ferrando, 2017)<sup>[5]</sup>. The "one size fits all" idea on which the allergy treatment was based, was shifted radically in the recent years. The recent approach considers the individual differences in the genome, environmental factors and lifestyle of each person. (Vieths, 2013)<sup>[10]</sup>. This strategy of treatment is what Hahnemann has recommended in the aphorism 5 of Organon of medicine, when giving direction about evaluating the fundamental cause of disease (Hahnemanm, 2002)<sup>[6]</sup>.

Similar to Hahnemann's idea, modern medicine also accepts the fact that Allergies are "complex multifactorial disorders" with both genetic and environmental components. The complex genetic and epigenetic interaction determine the disease expression. These interactions can start in-utero and during perinatal period and persist throughout life (Bousquet, 2011). The same idea has been elicited by Hahnemann in aphorism 81 of Organon of Medicine, through the secondary symptoms of Psora. Here Hahnemann says that a number of circumstances like conditions of life, diet and regimen, and habits along with "congenital corporeal constitution," can modify the psora into innumerable morbid forms and these changes can be passed through hundreds of generations (Hahnemamm, 2002)<sup>[6]</sup>. Here Hahnemann fore visioned the genetic and epigenetic interactions of complex diseases.

# Methodology

## **Study Design**

This prospective observational study was conducted at the National Institute of Homoeopathy (NIH) OPD, Kolkata, between January 2017 and December 2019. The aim was to analyse the bio-psycho-social factors associated with food allergy manifestations.

#### **Participants**

Patients presenting with symptoms suggestive of a food allergy were recruited. Inclusion criteria were a documented history of adverse reactions following food consumption, with symptoms ranging from mild to severe. Patients with chronic illnesses affecting the immune system or those on long-term immunotherapy were excluded to maintain the homogeneity of the study sample.

#### **Data Collection**

A structured questionnaire was developed, pilot-tested, and employed to collect patient data, including demographics, clinical history, symptomatology, and treatment history. The questionnaire also inquired about family history of allergies, exposure to environmental factors, psychological stressors, especially during the antenatal period, and past medical interventions, including vaccinations.

#### **Ethical Considerations**

The study protocol was reviewed and approved by the Institutional Ethics Committee at NIH, Kolkata. Informed consent was obtained from all participants, ensuring confidentiality and compliance with ethical standards for research.

### Allergen Identification and Exposure Assessment

Patients underwent a detailed interview to identify suspected allergens. A food diary was maintained for a period of two weeks to track the correlation between food intake and allergic reactions. Skin prick tests and serum-specific IgE assays were conducted when available and appropriate to corroborate patient-reported data. Environmental factors such as rural versus urban residence, dietary habits, and occupational exposures were documented.

## **Treatment History Evaluation**

Homeopathic treatment history, including specific remedies, potencies, and response to treatment, was recorded. For patients with prior allopathic treatment, details of medications, duration, and perceived efficacy were noted.

#### **Data Analysis**

Data were entered into a secure database and analysed using statistical software. Descriptive statistics were used to summarise the demographic data and clinical characteristics.

## **Future Research Directions**

Based on preliminary findings, the study proposes further research using advanced statistical models to identify predictive factors for allergy development and treatment response in the homeopathic context.

#### Results

## **Demographic Profile of Patients with Allergy**

The demographic analysis of patients seeking treatment for allergy at the National Institute of Homoeopathy OPD revealed a mean age of 33 years (SD = 1.325), with the majority (54%, n=22) falling within the 25–44-year age range. Females represented 77% (n=31) of the patient cohort, indicating a gender disparity in allergy prevalence. A significant proportion (84%, n=34) resided in rural areas, demonstrating a rural predominance in patient demographics. With regard to religious background, the majority were Hindu (65%, n=26), followed by Islam (35%, n=14).

### **Clinical Characteristics and Allergen Profile**

The onset of food allergy symptoms was predominantly noted in adulthood (80%, n=32), while 20% (n=8) of the patients reported a childhood onset. Regarding treatment history, 40% (n=16) had used allopathic medicine, while a smaller percentage opted for homeopathic treatments exclusively (15%, n=6). Notably, 14 subjects utilised both allopathic and homeopathic remedies, indicating a preference for integrative approaches.

Allergen exposure analysis identified prawns and Brinjal as the leading allergens, each affecting 35 patients. Other prevalent allergens included eggs (n=32), dal (n=17), and cow milk (n=8). These findings point to specific dietary risks associated with allergy development in the studied

#### population.

## **Co-morbidities and Exacerbating Factors**

Co-morbid allergic conditions were common, with bronchial asthma (n=22), hay fever, and eczema (each n=10) being the most prevalent, suggesting a pattern of overlapping allergic diseases. Exercise and drug-induced allergies were less common but present among the patients, highlighting the need for awareness of less frequent allergy triggers.

## **Influence of Familial and Stress-Related Factors**

A family history of food allergies was reported by 45% (n=18) of the patients, with an additional 35% (n=14) having a family history of other allergic diseases, underscoring the potential genetic contribution to allergy susceptibility. Stress factors, including severe stress during the mother's pregnancy (27%, n=11) and stress or illness prior to allergy onset (20%), were identified as possible influences on the development of allergic conditions.

## **Implications for Allergy Management**

These results underscore the complex interplay between genetic, environmental, and lifestyle factors in allergy development and management. They suggest that a comprehensive, multidisciplinary approach to treatment, incorporating patient education and preventive strategies, is crucial for effective management of allergies.

The homoeopathic management of these patients included a range of individualized remedies, with Natrum Muriaticum and Sulphur being the most frequently prescribed, each given to 5 patients. Other remedies such as Sepia, Calcarea carbonica, Natrum sulphuricum, and Pulsatilla were also utilized, reflecting the personalized nature of treatment protocols. In terms of potency, a significant number of prescriptions (63%) utilized fifty millesimal potencies, while the remaining 37% were treated with centesimal potencies. This distribution highlights the homoeopathic principle of individualization, not only in remedy selection but also in the choice of potency, tailored to the specific needs of each patient.

## **Future Directions for Research**

- 1. Detailed investigations into regional dietary habits and allergen exposure to understand local influences on allergy prevalence.
- 2. Genetic studies aimed at delineating the heritable aspects of allergy susceptibility within this demographic.
- 3. Longitudinal research to evaluate the impact of early-life stressors on the manifestation and severity of allergic diseases.

These research directions will be essential in developing targeted interventions and informing clinical practice to improve patient outcomes in allergy care.

## Discussions

The present study conducted at the National Institute of Homoeopathy (NIH) in Kolkata offers a comprehensive analysis of food allergy within the framework of homeopathic medicine, affirming Samuel Hahnemann's holistic approach to health and disease. The findings reveal a tapestry of factors—genetic, environmental, psychological, and historical—that interact in the pathogenesis of food allergies, aligning with the miasmatic theory proposed by Hahnemann.

Genetic and Environmental Interplay in Food Allergy Pathogenesis: Food allergies are a quintessential example of complex disorders where both genetic predisposition and environmental exposures play critical roles. In the study, a significant proportion of patients exhibited a familial history of allergies, suggesting a hereditary component. This observation supports the idea of a miasmatic undercurrent, where a genetic predisposition-reminiscent of Hahnemann's miasms-predisposes individuals to allergic reactions. Environmental factors, such a past medical history, stress, severe acute diseases and vaccinations are enquired to understand the possibility of further modification in the pathogenesis of food allergy.

## **Psychological Factors and Stress in Allergy Development**

The homeopathic emphasis on psychological well-being is substantiated by the study's findings that stress, particularly during the antenatal period, may influence the health outcomes of the child, a view that aligns with modern epigenetic understandings. This recognition of the importance of maternal stress during pregnancy and its potential impact on the neonate's immune development is a point of convergence between classical homeopathic teachings and contemporary medical research. The data suggest that antenatal stress could indeed modulate the child's susceptibility to allergies, underscoring the need for a supportive environment during pregnancy.

## The Role of Past Medical History in Current Health

According to the principles of Homoeopathy, the history of a patient—including past diseases, treatments, and vaccinations—can leave an imprint on their vital force, affecting future health outcomes. Our study observed that the history of allergic reactions, co-morbid conditions, and even responses to past treatments could inform the current state of allergic disease. These findings echo Hahnemann's assertions that seemingly unrelated past medical events, when viewed through the lens of pathogenesis, may be integral to the current manifestation of disease.

# Prognostic Variations Based on Hereditary Predisposition

The research further explored whether a hereditary predisposition to allergies could influence the prognosis under homeopathic treatment. The varying clinical presentations and responses to Homeopathic remedies observed in the study suggest a nuanced interaction between inherited tendencies and individualised treatment outcomes. This underscores the importance of individualisation in Homoeopathy, where treatment is tailored not just to the disease symptoms but to the patient's unique constitution, history, and circumstances.

## Implications for Homeopathic Case-Taking and Analysis

Our findings reinforce the homeopathic principle that effective case-taking and disease analysis must transcend the narrow focus on physical symptoms to include a patient's full biopsychosocial context. This approach is not only consistent with Hahnemann's teachings but also aligns with the contemporary model of personalised medicine, which advocates for healthcare tailored to individual genetic profiles, environments, and lifestyles.

under the identical terms.

#### Conclusion

This study validates the relevance of Hahnemann's comprehensive approach to understanding and treating food allergies. It emphasises that Homoeopathy, with its detailed case-taking and consideration of misaims, offers a valuable perspective in managing complex diseases like food allergies, which are influenced by an interplay of multiple factors. Further research is recommended to elucidate the mechanisms by which these myriad factors influence disease development and treatment outcomes in Homoeopathy. These findings contribute to the discourse on the integrative approach to allergy treatment and the application of Homoeopathy in contemporary clinical practice.

## Reference

- Allen K. Clinical aspects of paediatric food allergy and failed oral immune tolerance. In: Food Allergy; c2010. p. 391-401.
- 2. Allen K. The Epidemiology of Food Allergy. Year of Publication; Volume Number (Issue Number).
- 3. Bousquet J. Mechanisms of the Development of Allergy: An integrated approach from phenotypes to systems medicine. Allergy; c2011. p. 596-604.
- 4. Boyce J. Guidelines for the diagnosis and management of food allergy in the United States: Report of the NIAID-sponsored expert panel. J Allergy Clin. Immunol; c2010. p. 126.
- 5. Ferrando M. Personalized Medicine in Allergy. Allergy Asthma Immunol Res; c2017.
- 6. Hahnemann S. Organon of Medicine. UP: B Jain; c2002.
- Sushmetha V, Malarvannan S, Abarna V. Comparative studies on biophysical and biochemical basis of resistance in Brinjal and Chilli against aphid (*Aphis* gossypii). Int. J Biol. Sci. 2022;4(2):108-111. DOI: 10.33545/26649926.2022.v4.i2b.85
- Muraro A. Precision medicine in allergic disease-food allergy, drug allergy, asthma and immunology. Allergy; 2017. p. 1006-1021.
- 9. Sicherer S. Food Allergy. J Allergy Clin Immunol; c2010.
- Vieths S. Personalised medicine for the diagnosis and treatment of allergic diseases. Gesundheitsschutz; c2013.
- 11. Wills-Karp. The germless theory of allergic disease: Revisiting the hygiene hypothesis. Nat Rev Immunol; c2001. p. 69-75.
- 12. Zhonghua. Food allergy: Definitions, prevalence, diagnosis and therapy. Chinese Journal of Preventive Medicine; c2015. p. 87-92.
- Kelso J. Clinical Overview of Adverse reactions to Foods. In: J James, Food Allergy. Elsevier; c2012. p. 49-50.

#### How to Cite This Article

Krishna SBS. Integrating bio-psycho-social dimensions: A Homeopathic perspective on the aetiology of food allergies. International Journal of Homoeopathic Sciences. 2024;8(1):168-171.

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