



Understanding Acute Sporadic Diseases Among The Paediatric Population In Kanyakumari District - An Observational Study

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Abstract: Acute sporadic diseases are those which are caused by meteoric and telluric influences or injurious agents in some people here and there when the individual is susceptible to receive the disease phenomena. These conditions can significantly impact the health and well-being of paediatric patients, often leading to medical consultations and interventions. Children are most prone to contract acute illnesses since the susceptibility is high during their early stages of life. In children, the immune system still remains in the developing stage and hence the active defense mechanisms is not fully established. Homoeopathy is the only system that considers the patient's susceptibility in selecting the appropriate remedy and potency in both acute as well as chronic diseases. This observational study aims to investigate the occurrence of acute sporadic diseases among paediatric patients treated with homoeopathy in Kanyakumari district. A sample of 30 children under 18 years, diagnosed with acute sporadic diseases, were analyzed. The study highlights that these diseases were more prevalent among early adolescents, predominantly males, especially in the mountainous region of Kulasekharam. The findings also reveal that environmental factors contributing to the acute sporadic diseases in children were exposure to cold air or rain. Acute rhinitis and bronchitis were the common ailment prevalent among the children of Kanyakumari district as acute sporadic diseases. The homoeopathic remedies Rhus tox and Bryonia were frequently used in such cases, and 200 CH potency being the most common which was selected after considering the susceptibility criteria. This research contributes to identifying and understanding the patterns of acute sporadic diseases in children of Kanyakumari district through homoeopathic approach.

Keywords: Acute Sporadic Diseases, Homoeopathy, Paediatrics, Children, Kanyakumari district.

Introduction:

Acute diseases are those that arise from rapid, abnormal processes affecting the vital force, tending to run their course in a relatively short time. In Aphorism 73 of the book Organon of medicine, Hahnemann describes various types of acute diseases. He explains that some of these diseases affect multiple individuals sporadically, influenced by atmospheric or environmental factors, and only a few people are susceptible to being affected by these harmful influences at a given time.^[1] Acute sporadic diseases among the paediatric age group include a range of illnesses, from viral infections such as the common cold and influenza, to acute gastrointestinal, and respiratory disorders.^[2] Understanding the epidemiology of acute sporadic diseases in paediatric populations is crucial for improving preventative measures and treatment strategies. The burden of these diseases on both healthcare systems and families is considerable, leading to missed school days, frequent medical visits, and in some cases, hospitalization. The environmental factors that act as the

triggering factors in such acute diseases include increased air pollution, more extreme weather events, heat waves, cold weather, rainfall, reduced water quality, food shortages, and greater toxic exposure, leading to higher risks of mental disorders, malnutrition, infections, allergies, and respiratory diseases.^{[3][4][5]} Homoeopathy is based on the principles of individualization and the use of highly diluted remedies to stimulate the body's healing processes. In homoeopathy, susceptibility refers to an individual's inherent sensitivity and response to external and internal stimuli, which can include diseases, environmental changes, and emotional factors. In the process of healing, the homoeopathic remedy acts on the patient's susceptibility to restore balance. By matching the remedy to the totality of the symptoms and the individual's susceptibility, the remedy stimulates the vital force and re-establishes harmony in the organism. A successful homeopathic cure is one that respects and addresses the patient's inherent susceptibility. Individuals with high susceptibility, often seen in acute diseases or in children, respond well to higher potencies (200C, 1M, and above).^{[1][6]} This study aims to identify the occurrence and characteristics of acute sporadic diseases among children treated with Homoeopathy in the Kanyakumari district. By analyzing a sample of paediatric patients, the study seeks to provide insights into the demographics, common ailments, contributing factors, and frequently indicated homoeopathic remedies and potencies in acute sporadic diseases.

Materials & Methods:

Study setting: OPD, and IPD of Sarada Krishna Homoeopathic Medical college, Kulasekharam, Kanyakumari district.

Sample Size: 30 cases

Study Design: Observational study

Methodology: An observational study was conducted targeting the paediatric patients under 18 years of age, diagnosed with acute sporadic diseases in Kanyakumari district. The inclusion criteria specified participants aged below 18 years, diagnosed with acute sporadic conditions, and residing in Kanyakumari district. Exclusion criteria included individuals above 18 years, those with chronic diseases, other acute diseases of individual or epidemic nature, and those from outside the Kanyakumari district. The data was collected through direct observation and analysis of the medical records of paediatric patients, focusing on demographic details, clinical diagnosis, epidemiological determinants and homoeopathic treatment approaches. The homoeopathic remedies were prescribed based on the symptom similarity (Similia Similibus Curentur) and the potency was selected according to the susceptibility of the individual.

Data analysis: The data collected were analyzed thoroughly and subjected to descriptive statistical evaluation. The results were obtained after the correlation and interpretation of the descriptive statistics.

Observation & Results:

Demographics:

Age: The age group most affected by acute sporadic diseases was 10-14 years, with early adolescents comprising 12 out of 30 cases (40%). This was followed by 7 cases (23%) in early childhood (7-9 years), 7 cases (23%) in toddlers (1-3 years), 3 cases (10%) in preschoolers (4-6 years), and 1 case (4%) in infants under 1 year. No cases were found in late adolescents (15-18 years).

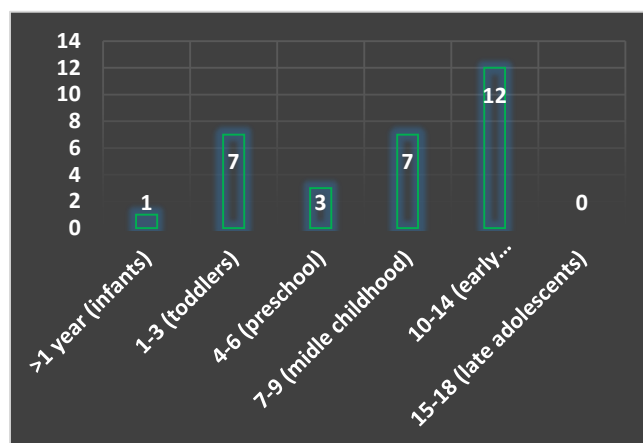


Figure 1. Distribution of cases according to different age group among the paediatric population

Sex: A clear male predominance was noted, with boys being more frequently affected than girls. Out of 30 cases, 57% (17) were males and 43% (13) were females.

Geographic Distribution: The mountainous region in and around Kulasekharam had the highest incidence of acute sporadic diseases, with 20 of the 30 cases from this area, suggesting environmental factors may influence these conditions. Of the remaining cases, 6 were from town areas (Thuckalay and Kuzhithurai), and 4 were from coastal areas (Karungal and Vaniyakudi).

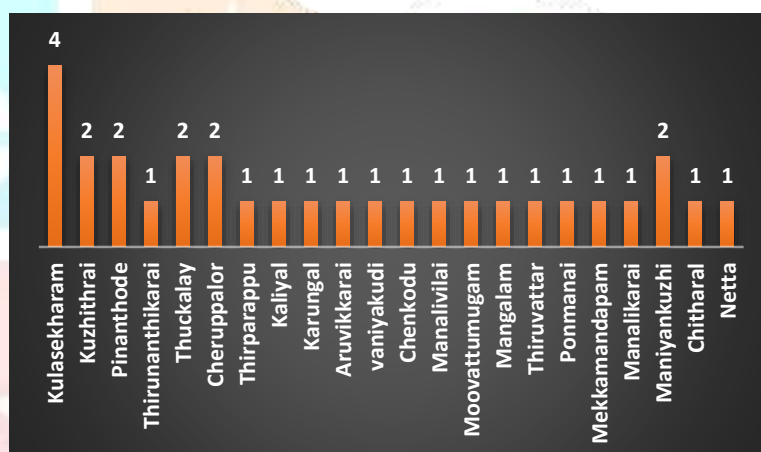


Figure 2. Distribution of cases according to different locality of the affected children in kanyakumari district

Ailment Factors: Cold air exposure was the most common environmental triggering factor for acute sporadic disease, in 12 of 30 cases (40%), showing its role in causing respiratory issues in children. Other factors included rain (11 cases, 37%), climate change (3 cases, 10%), rainy weather (2 cases, 7%), and 1 case each (3%) from hot and cold weather.

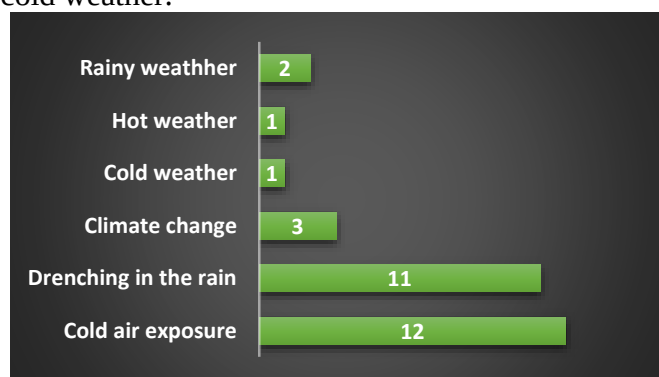


Figure 3. Distribution of cases according to environmental triggering factors.

Common Disease Conditions: The study identified Acute Rhinitis as the most prevalent acute sporadic diseases among the paediatric population. Of the 30 cases, 12 (45%) were Acute Rhinitis, 11 (42%) were Acute Bronchitis, 3 (10%) were Acute Tonsillitis, and 1 (3%) was Acute Suppurative Otitis Media.

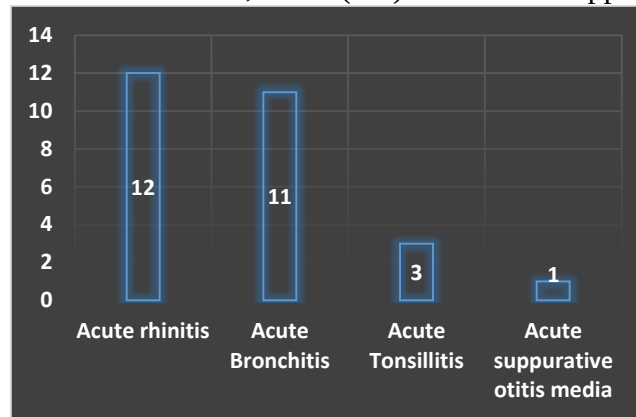


Figure 4. Distribution of cases according to common disease condition affecting children sporadically.

Homoeopathic remedies: The study found that the most commonly used homoeopathic remedies for managing acute sporadic diseases were Rhus Toxicodendron (Rhus tox) and Bryonia, both known for their anti-inflammatory and respiratory benefits, respectively. Each was used in 5 cases (17%). Other remedies included Arsenicum Album in 4 cases (14%), and Pulsatilla and Belladonna in 3 cases each (10%). Additionally, Merc sol was used in 2 cases (7%), while Natrum sulph, Hepar sulph, Sanguinaria, Antim tart, Tuberculinum, Sabadilla, Nux vomica, and Ars iod were each used in 1 case (3%).

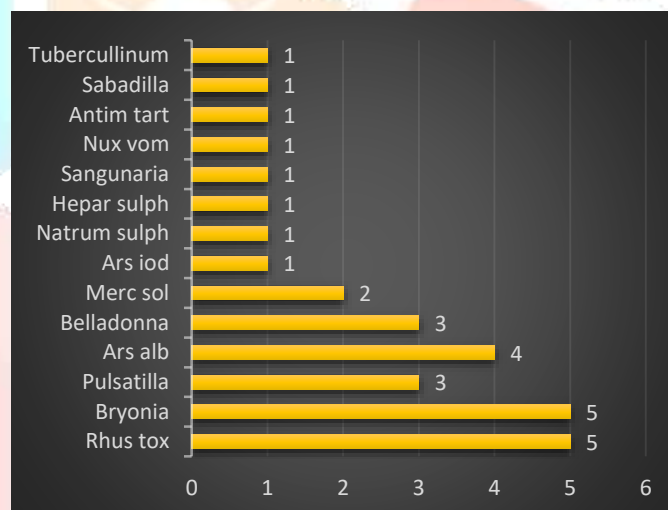


Figure 5. Distribution of cases according to common homoeopathic remedies used in acute sporadic disease among children.

Potency: The study found that 200 CH was the most frequently used potency, applied in 22 out of 30 cases (74%). Additionally, 1M potency was used in 4 cases (13%), 30 CH in 3 cases (10%), and 0/6 potency in 1 case (3%).

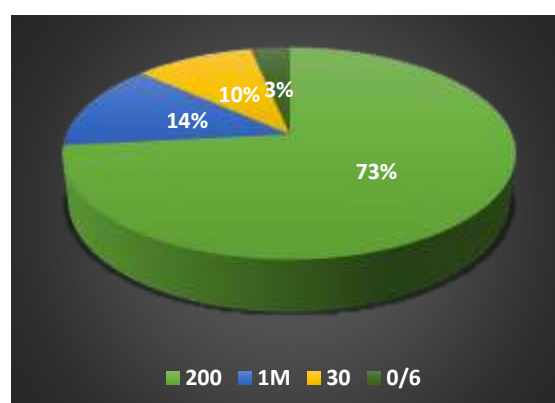


Figure 6. Distribution of cases according to the potency used for treating acute sporadic diseases in children.

Discussion:

The findings of this observational study indicate that acute sporadic diseases are prevalent among the paediatric population, particularly affecting early adolescents between 10-14 years of age (Fig.1.). A previous study conducted in United Kingdom found that outbreak of influenza cases leading to hospitalization and mortality were particularly seen in the school-aged population between 5-17 years of age.^[7] Acute sporadic diseases were more commonly noticed in boys showing a male predominance in this observational study. In a previous study conducted among the preschool children belonging to the slums of Lucknow, India found that boys had a higher prevalence of respiratory infections during the winter months.^[8] The association between cold air exposure and the incidence of respiratory conditions highlights the importance of environmental factors in acute illness (Fig.3.). The results of a previous study indicated that cold weather was significantly associated with increased rates of upper and lower respiratory tract infections, particularly viral infections. Children were shown to be at higher risk due to increased indoor crowding and poor air ventilation in colder weather.^[9] In this study there was a predominance of acute rhinitis and bronchitis in this paediatric population. (Fig.4.). A study emphasized that viral infections, particularly those affecting the respiratory tract, are among the most common causes of acute illnesses in children under 12 years of age.^[10] The observational study found that acute sporadic disease was more prevalent among children in the mountainous regions of kulasekharam, kanyakumari district, Tamil Nadu. A similar study examined the prevalence of childhood bronchial asthma in Kanyakumari District, Tamil Nadu, using data from 44 cases treated at Sarada Krishna Homoeopathic Medical College in 2021. The study found that children over 10 years are more prone to asthma, with Arsenicum album (0/6 potency) being the most commonly indicated homeopathic remedy.(Fig.2.)^[11] The results suggest that Homoeopathic remedies Rhus tox and Bryonia selected based on the law of similars can play a valuable role in treating these conditions in children. (Fig.5.). In a previous study Bryonia was found to be useful in managing acute tracheobronchitis.^[12] As the susceptibility of children for acute diseases is high, it demands a higher potency. This study indicates the use of 200CH potency in the majority of cases. (Fig.6.). A study conducted previously among the paediatric age group suffering from acute bronchitis suggests that 200CH potency was most effective in centesimal scale.^[13]

Conclusion:

This observational study provides valuable insights into the occurrence of acute sporadic diseases among the paediatric population in Kanyakumari district treated with Homoeopathy. The data indicate a significant prevalence of respiratory ailments, particularly in early adolescents and males, with environmental factors such as cold and rain exposure contributing to the incidence of these conditions. The homoeopathic remedies, particularly Rhus tox and Bryonia, were effective in managing these acute sporadic diseases. Since the children are highly susceptible, 200CH (high) potency was used in majority of the cases. However, further research, including larger sample sizes and controlled studies, is necessary to substantiate these findings and explore the long-term usefulness of homoeopathic treatment for acute sporadic diseases in children and plan for their preventive measures.

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Ethical Considerations:

Informed consent from parents or guardians was obtained.

