# "To Study The Efficacy Of Homoeopathic Medicine For Typhoid Fever In Paediatric Age Group"

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#### **ABSTRACT**

Typhoid fever, caused by Salmonella enterica serotype .Children are disproportionately affected due to their underdeveloped immunity and increased exposure to contaminated food and water. Examine the clinical manifestations of typhoid fever in children, including common symptoms like fever, abdominal pain, weakness, and gastrointestinal disturbances such as diarrhoea and constipation.

The most affected age group and gender distribution among children with typhoid fever, with particular attention to those aged 0 to 16 years. Evaluate the role of homoeopathy in managing paediatric typhoid fever by administering individualized and observing their effectiveness in reducing fever and associated symptoms .

Assess safety of homoeopathic treatment in paediatric patients, especially in regions where antibiotic resistance or limited access to conventional medical care is a concern. Provide evidence for the potential of homoeopathy a safe, and effective alternative treatment for paediatric typhoid fever, contributing to the growing body of research on complementary and alternative medicine in paediatric care. This study is significant in light of rising antibiotic resistance and the global burden of typhoid fever, offering an alternative treatment approach that could potentially reduce the reliance on conventional antibiotics.

In this individualized study we had done on 30 patients with aim of understanding role of Homoeopathy in individualized cases of Typhoid fever in pediatric age group. 30 patients were taken

from outpatient department of the college hospital. All patients were orientated to avoid the causative factors or the triggering factors. 80% patients were treated with homoeopathic intervention.20% not improved. Each case studied to understand how every individual differs in presentation of Typhoid fever. Each follow up were studied in detail to study role homoeopathy in management of Typhoid fever. From this study, it is evident that homoeopathic management has good scope in treating individualized cases of Typhoid fever in paediatric age group. Typhoid cases management strategy should be based on individual cases presentation, susceptibility of individual, dominant miasm and posology.

**KEY WORDS** –Typhoid fever , miasm ,susceptibility ,homoeopathy for typhoid fever

### I. INTRODUCTION

Typhoid fever, also known as enteric fever, remains a significant public health challenge in many developing countries, particularly affecting children due to their vulnerability and underdeveloped immunity.<sup>2</sup> It is a systemic infection caused primarily by Salmonella enterica serotype Typhi, transmitted through ingestion of contaminated food and water, and is closely associated with poor sanitation and limited access to clean drinking water. <sup>1,14</sup>

In the paediatric age group, typhoid fever often presents with non-specific symptoms such as prolonged fever, abdominal discomfort, diarrhoea or constipation, loss of appetite, and sometimes

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delirium or apathy. Diagnosis in children can be more challenging due to atypical presentations and limited verbal communication, making clinical acumen and timely investigations essential for early identification and effective management. Diet plays important role in typhoid fever. 15

Conventional treatment typically includes the use of antibiotics, which, while effective, have led to the emergence of multidrug-resistant strains of Salmonella Typhi<sup>6</sup> This growing resistance poses a serious threat, necessitating alternative and complementary approaches to reduce antibiotic dependency, especially in recurrent or resistant cases.

The mainstay of allopathic treatment for typhoid fever is the use of antibiotics. First-line antibiotics historically included chloramphenicol, ampicillin, and trimethoprim-sulfamethoxazole. However, due to rising antimicrobial resistance, third-generation cephalosporins and azithromycin have become the preferred choices, especially in paediatric cases In areas with documented fluoroquinolone resistance, these drugs are avoided. Supportive care, including adequate hydration, antipyretics, and nutritional support, is also essential. In severe cases, hospitalization may be required. 10

Homoeopathy, a holistic system of medicine founded by Dr. Samuel Hahnemann, offers a promising complementary approach in managing typhoid fever, especially in paediatric patients.1 the Based on principle "SimiliaSimilibusCurentur" (like cures homoeopathy considers the individual's totality of symptoms, emotional and physical constitution, and susceptibility while selecting a remedy.<sup>8</sup> Remedies such as Arsenic album, Chia, and Bryonia alba have symptomatic shown effectiveness in the management of typhoid like fevers.9

This thesis aims to explore the role of homoeopathic medicine in managing typhoid fever in children, evaluating its effectiveness in symptom relief, reduction of complications, and overall improvement in patient outcomes <sup>12</sup>. It also seeks to compare homoeopathic management with conventional approaches, highlighting its benefits, limitations, and scope in paediatric care. <sup>10</sup>

#### II. METHEDOLOGY

Study design: Randomized Controlled trial.

**Study Setting**: Institutional OPD and peripheral OPD.

**Study Population**: Population of age group 0 to 16 years of both the sexes pre diagnosed or newly diagnosed with Typhoid fever

**Sample Size**: 30 cases (pediatric age group )

**Inclusion criteria**: Children aged 1to 16 years diagnosed with typhoid fever.

Patient of both sexes will be included.

#### **Exclusion criteria:**

- Diabetes
- Persons with known immune-compromised diseases were excluded.
- Patients with any diseased condition like juvenile diabetes or immune suppressive medicine were excluded.
- Patients who refused to give proper case history were excluded.
- Patient who are not cooperative and without any follow up were excluded.

## **Intervention group**:

• Patient receiving individualized homeopathic treatment based on their specific symptoms.

**Controlled group**: Patient receiving standard allopathic treatment.

#### **Outcome measures:**

- clinical improvement{reduction in fever, abdominal pain and other symptoms }
- Duration of the illness and over all recovery time .
- Quality of life assessment will also be conducted by using through case taking..

### **Expected Outcome:**

The study anticipated that homeopathic remedies will provide significant symptom relief improve recovery time conventional treatment has minimal side effect additionally.

Withdrawal Criteria: 2 Patient not giving follow ups on time

**Improvement:** 22 CASES IMPROVED

**Not Improvement**: 8 CASES NOT IMPROVED **Study instrument / Data Collection Tools :** 

- 1. History taking.
- 2.Case Record Format.
- 3. Materia Medica

### Method of Measurement:

Standard case format grading scale for typhoid fever fever scale: with grades 0, 1, 2, 3

	Grade 0	Grade I	Grade II	Grade III
Fever	Normal range 96-	99 -101 F	102 -103 F	104 -108 F
	98			

Fever scale 49



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### Method of Data Collection: MS Excel Data Management and Analysis Procedure:

Data would be compiled in MS excel and appropriate statistical test would be applied at the end for final diagnosis.

### **Data Analysis Plan and Methods:**

Data analysis done using fever scale by keeping daily records in a proper case format.

#### **Selection of Potency:**

Potency selected on the basis of symptom severity and susceptibility and sensitivity of patient.

Most common selected potency was 30C.

### **Repetition Schedule:**

Repetition done in every case according to symptom severity of patient.

### Dietetic & Hygienic Measures:

Patient were advised to avoid coffee, raw onion, raw garlic, as they tend to lower the action of homeopathic medicines.

#### III. RESULT

According to our study we applied T test . Aim : To test whether is statistically significant difference between before treatment grade and after treatment grade

T test

x diff = Before treatment
- after treatment
= 1.666
Standard deviation= 0.74

 $\sqrt{n}=30$ 

After substituting these values into the formula for *t* we have:

$$t = \frac{x \ diff}{\frac{standard \ deviation}{\sqrt{n}}}$$

$$t = \frac{\frac{\sqrt{n}}{1.666}}{\frac{1.666}{0.74}}$$

$$t = \frac{1.666}{0.135}$$

$$t = 12.34$$

Determine critical value for twith degrees of freedom = 12

In this critical value is 1.782.

The calculated texceeds the critical value (12.34 > 1.782), so the means are significantly different.

#### IV. DISCUSSION

From the above 30 cases of typhoid fever in paediatric age group cases selected from opd of college. Following are the points which we need to consider before concluding study .In the context of the paediatric population, managing typhoid fever with homeopathic remedies is an holistic approach

that focuses on individualized treatment .The reported improvement in 22 out of 30 cases with homeopathic treatment for typhoid fever in children is an interesting observation, which is in further discussion. Homeopathic remedies for typhoid fever can be chosen based on the child's individual symptoms, as well as their overall constitutional health and temperature. The study shows paediatric age group affected with typhoid fever are from 10 to 16 years of age showing 8 cases (27%) ,other were 6 to 10 years 20cases (67%) ,0 to 5 years 2 case (6%) .In this study found maximum no of cases in age group 6 to 10 in which 80% male and 20% females. Observed that this age group is more active and easily get infection through various infectious bacteria's which is presented everywhere also immunity of individual varies infection .In homeopathic treatment, remedies are selected based on the totality of symptoms, including physical, emotional, and mental state of the child's illness. The goal of treatment is to stimulate the body's own healing mechanisms, aiming to stop the infection and restore the child's health without causing harm

As sample size was 30 and patient were choose randomly it can't be concluded as a universal phenomenon. From the study ,it was found there were typhoid fever with grade I with 20 cases (67%) ,other were grade II with 8 cases (27%) ,gradeIII with 2 case (6%) was least found . Contaminated water and food: Typhoid fever is primarily transmitted through the fecal-oral route, meaning that poor sanitation, such as open defecation or untreated sewage in drinking water sources, increases the risk of infection. Children who consume food or drink contaminated by Salmonella Typhi are at risk.

In our study we have found many different symptoms but the gastrointestinal distribuance are the most most of the patient suffered from diarrhoea in this study out of 30 cases 28 cases where shows diarrhoea and 2 case with constipation .It was observed that causative factor like bacteria's showed all 3 grades and required 30C potency with frequent repetition due to increased susceptibility .Maximum number of cases showed psoro-sycosis miasm due to gastrointestinal problems and recurrenttyphoid. In the 30 cases of typhoid fever treated with homoeopathically various strategies were employed for management, individualization of each and every patient being the key to cure the patient, 18 patient were treated with constitutional treatment, were 12 treated with acute remedy .Frequently use remedies arsenic 6, Bryonia 6, china 6, rhustox 6and phosphorus 2, belladonna 4.



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Study showed that modality played a major role in individualizing the cases for selection of remedy. This also helped in understanding susceptibility at modality level. Aggravation-commonest modality was night and morning and other were while sleeping and warm weather, sweat. Amelioration- commonest were cold water, warm water, scratching and other characteristic were uncovering clothes, open air.

Widal test, although widely used, lacks sensitivity and specificity. CBC for platelate count and wbc count in which is varies individual some patient having low wbc count and some have raised wbc count due to infection .Some not improved patient also done Typhi DOT IgM test which is reactive after 2 month .Abnormally Leukopenia is seen in some cases of typhoid fever, contrary to the typical leukocytosis seen in other bacterial infections

In this study of 30 cases, we found 8 cases which didn't show any improvement inspite of retaking the case and changing the remedy. Case like typhoid fever due to eat unhygienic food, poor sanitation through which bacteria transfer couldn't be treated due to infection, and patient repeatedly contact with bacteria and not cured. This being an observation of just 30 patient, more studies are needed to be done to reach at any conclusion.

### V. CONCLUSION

This study assessed the effectiveness of individualized homoeopathic treatment in 30 paediatric cases of typhoid fever. All patients presented with fever ranging from 101°F to 105°F, along with common symptoms such as abdominal pain, weakness, loss of appetite, diarrhoea, and constipation. Diagnosis was confirmed through the Widal test, indicating Salmonella typhi infection.

The majority of cases occurred in the 6 to 10-year age group, suggesting that children in this age bracket are more prone to typhoid fever, where 8 cases of 0 to 5 age group, possibly due to increased exposure and lower immunity. The study also noted a male are more suffer from typhoid fever thefemale, which may be attributed to behavioural or environmental factors.

Out of the 30 cases, 22 children showed marked improvement within a short period of time after receiving individualized homoeopathic remedies in 30C potency. This potency was selected based on the acute presentation and intensity of symptoms. The rapid relief of fever and resolution of associated complaints highlight the potential of homoeopathy to provide effective, non-toxic

treatment in acute infectious conditions like typhoid.

These results emphasize the importance of homoeopathy as a safe and individualized therapeutic system, especially beneficial in the paediatric population where minimal side effects and gentle action are crucial. Homoeopathy does not contribute to the growing problem of antibiotic resistance no any side effects, making it a sustainable option in both acute care and public health.

The findings and establish the broader role of homoeopathy in managing paediatric typhoid fever. The results provide a positive indication of its potential value in integrative and supportive care settings.

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### Reference

- [1]. Radhakrishnan A, Als D, Mintz ED, Crump JA, Stanaway J, Breiman RF, Bhutta ZA. Introductory article on global burden and epidemiology of typhoid fever. The American journal of tropical medicine and hygiene. 2018 Jul 25;99(3 Suppl):4.
- [2]. Chen J, Long JE, Vannice K, Shewchuk T, Kumar S, Duncan Steele A, Zaidi AK. Taking on typhoid: eliminating typhoid fever as a global health problem. InOpen Forum Infectious Diseases 2023 May (Vol. 10, No. Supplement\_1, pp. S74-S81). US: Oxford University Press.
- [3]. 3 . Crump JA. Progress in typhoid fever epidemiology. Clinical Infectious Diseases. 2019 Feb 15;68(Supplement\_1):S4-9.
- [4]. Parry CM. Epidemiological and clinical aspects of human typhoid fever. Salmonella infections: Clinical, immunological and molecular aspects. 2006 Nov 15:1-8.
- [5]. 5 . Lin FY, Vo AH, Phan VB, Nguyen TT, Bryla D, Tran CT, Ha BK, Dang DT, Robbins JB. The epidemiology of typhoid fever in the Dong Thap Province, Mekong Delta region of Vietnam. The American journal of tropical medicine and hygiene. 2000 May 1;62(5):644-8.



# International Journal of Humanities Social Science and Management (IJHSSM) Volume 5, Issue 2, Mar.-Apr., 2025, pp: 1091-1095 ISSN: 3048-6874 www.ijhssm.org

- [6]. 6. Cvjetanović B, Grab B, Uemura K. Epidemiological model of typhoid fever and its use in the planning and evaluation of antityphoid immunization and sanitation programmes. Bulletin of the World Health Organization. 1971;45(1):53.
- [7]. Wain J, Hosoglu S. The laboratory diagnosis of enteric fever. The Journal of Infection in Developing Countries. 2008 Dec 1;2(06):421-5.
- [8]. .Keddy KH, Sooka A, Letsoalo ME, Hoyland G, Chaignat CL, Morrissey AB, Crump JA. Sensitivity and specificity of typhoid fever rapid antibody tests for laboratory diagnosis at two sub-Saharan African sites. Bulletin of the World Health Organization. 2011 Sep;89(9):640-7.
- [9]. Gupta A. Multidrug-resistant typhoid fever in children: epidemiology and therapeutic approach. The Pediatric infectious disease journal. 1994 Feb 1;13(2):134-40.
- [10]. White NJ, Parry CM. The treatment of typhoid fever. Current opinion in infectious diseases. 1996 Oct 1:9(5):298-302.
- [11]. Umashankara C, Kunchirmanb BN, Shindea CH. Homeopathic interventions against Salmonella typhi: A narrative.
- [12]. Pandharkar AC, Thote G. Approach to fever and its homoeopathic management. Journal of Medical and Pharmaceutical Innovation. 2021 Mar 24;8(40):4-10.
- [13]. Thorne J, Vlachos A, Christodoulopoulos C, Mittal A. FEVER: a large-scale dataset for fact extraction and VERification. arXiv preprint arXiv:1803.05355. 2018 Mar 14.
- [14]. Brown J, Cairncross S, Ensink JH. Water, sanitation, hygiene and enteric infections in children. Archives of disease in childhood. 2013 Aug 1;98(8):629-34.
- [15]. Purnamasari A, Prima A, Harahap D, Andas AM. The relationship between body temperature and diet on typhoid fever among toddlers aged 3–5 years. The Journal of Palembang Nursing Studies. 2022 Sep 11;1(3):101-6.