ISSN: 2347-6567

International Journal of Allied Medical Sciences and Clinical Research (IJAMSCR)

IJAMSCR |Vol.14 | Issue 2| Apr - Jun - 2026

www.ijamscr.com

DOI: https://doi.org/10.61096/ijamscr.v14.iss2.2026.1152-1160

A Study on Clinical Profile, Diagnosis, Therapeutic Outcome, and Seasonal Variations of Fever in Patients Admitted to a Multispecialty Hospital in Tambaram, Chennai, and Tamil Nadu

Dr. Pandideva Theyvendiran[1], Dr. Ruckmani A[2*], Ms. Monica Immanuel[3], Aarudhran. G. K[4], Vignesh. K[4], Swaathy. S[4], Sharon Shirley Grace. A[4], Keerthana. J[4]

Assistant Professor[1], Research Adviser[2], Principal[3], Intent[4]
Department of Clinical Research, Deepam Hospitals and Deepam Academy

Corresponding Author: Dr. Ruckmani A
Email: pandideva23@gmail.com

Published on: 30.06.2026
Published by: Futuristic Publications
2026| All rights reserved.

Creative Commons Attribution 4.0 International License.

Abstract:

Background: Fever is one of the most common clinical presentations in hospital settings and a major cause of morbidity in tropical countries like India. Acute febrile illnesses (AFIs) arise from diverse etiologies, including Viral, Bacterial, Fungal, and Parasitic infections. In endemic regions, Dengue and other viral fevers contribute significantly to disease burden, with incidence influenced by climatic and seasonal variations. Although malaria was historically prevalent in Tamil Nadu, no cases were reported during the present study period.

Objective: To analyze clinical characteristics, diagnostic patterns, seasonal variation, and therapeutic outcomes among inpatients presenting with fever, along with demographic information in a tertiary care hospital, Tambaram, Chennai.

Methods: This prospective observational study included 203 patients aged **18–68 years** admitted with fever, conducted over one year. Sample size was calculated based on the expected prevalence of febrile illness using an appropriate statistical method. Clinical laboratory and treatment data were recorded. Fevers were categorized into diagnosed and undiagnosed fevers. Diagnosed fever will include dengue, chikungunya, respiratory viral diseases, as well as chickenpox, Covid-19 and others. Undiagnosed fevers will be collectively grouped as Acute Undiagnosed Febrile Illness (AUFIs). Seasonal trends, gastrointestinal symptoms, and therapeutic outcomes were analyzed.

Results: The mean age was 35.04 ± 13.56 years, with male predominance (60.6%). AUFIs (57.1%) and Dengue (36.5%) were followed by undiagnosed fever. Seasonal variation showed higher case distribution during winter (42.9%), followed by summer and monsoon, though not statistically significant. Most patients showed favorable therapeutic outcomes, with short hospital stays and clinical improvement at discharge.

Conclusion: Febrile illnesses were mostly of origin, with dengue and AFI being the leading causes. Despite the known history in this region, malaria was absent in this cohort. Seasonal variation and gastrointestinal symptoms were the attributable variables observed, while the overall therapeutic outcomes were favorable.

Keywords: Acute febrile illness, Dengue, viral fever, seasonal variation, therapeutic outcome.

INTRODUCTION:

Acute febrile illness (AFI) is characterized by the sudden onset of fever associated with symptoms such as headache, body pain, lethargy and anorexia. One of the most common clinical presentations is fever, which is the major cause of morbidity and healthcare utilization worldwide. Fever is associated with a wide spectrum of infectious and non-infectious conditions in a tropical country like India. AFI is widely prevalent and has significant diagnostic and therapeutic challenges due to various etiological agents, which include viral, bacterial, parasitic, fungal and rickettsial infections as well as non–infectious conditions like autoimmune disorders and malignancies (1,2). The burden is high in urban and suburban settings due to rapid population growth, environmental changes, and inadequate sanitation. In Tamil Nadu, especially in Chennai, frequent outbreaks of febrile illnesses occur, which include vector-borne and water-borne diseases. Dengue fever is a common vector born febrile illness with a major health concern, with increasing incidence over the past decades and increased hospital admissions (3, 4). The epidemiology is strongly influenced by climatic factors such as rainfall, temperature, and humidity, which favors vector breeding and increase the disease transmission (5). However, in recent years, including the present study setting, its incidence has significantly declined due to improved vector control measures, early diagnosis, and effective treatment strategies.

Seasonal variation plays a major role in the epidemiology of febrile illnesses, especially vector-borne diseases. In some studies, it is demonstrated that there is a marked increase in cases during monsoon and post-monsoon, which coincides with favorable environmental conditions for the vector (6). Increased vector density during rainy seasons may also contribute to the transmission dynamics of diseases like dengue and malaria (5). Likewise, water-borne infections like enteric fever will show seasonal trends that are linked with environmental conditions.

The clinical profile of fever varies widely depending on etiology and ranges from mild to high-grade complications like dengue hemorrhagic fever and shock syndrome. Common clinical features may include high-grade fever, headache, myalgia, joint pain, skin rashes, abdominal pain, vomiting and bleeding, along with laboratory abnormalities like thrombocytopenia and elevated liver enzymes (3,6). The overlapping clinical presentation may often complicate the diagnosis and require a systematic approach that integrates clinical evaluation with laboratory investigations.

Accurate and timely diagnosis is important for effective management and improves patient outcomes. In clinical settings, treatment is initiated due to diagnostic uncertainty, which contributes to inappropriate antibiotic use and antimicrobial resistance (7). Delayed diagnosis of severe infections may lead to increased mortality and morbidity, which highlights the need for a better understanding of clinical and diagnostic patterns. Despite the high burden in India, there is limited comprehensive data that integrates clinical profile, diagnosis, therapy, and its outcomes with seasonal trends in the healthcare settings. Most studies focus on individual diseases rather than providing a holistic overview. Therefore, the present study aims to evaluate the clinical profile, diagnostic spectrum, therapeutic outcomes, and seasonal variations of fever. The findings are expected to aid in early diagnosis, rational treatment, and improved healthcare planning in hospital settings.

AIM:

To collect data on the demographics, clinical signs and symptoms, therapeutic outcomes, and seasonal patterns of fevers, enabling healthcare providers to make informed decisions and optimize patient care.

OBJECTIVES:

- To analyses the clinical characteristics and diagnosis of inpatients presenting with fever.
- To determine the age, gender and medical history of patients presenting with fever.
- To identify the common signs and symptoms associated with fever in these patients.
- To assess seasonal variations in the incidence of specific fevers.
- To evaluate therapeutic outcome and effectiveness of the treatment regimen.

METHODOLOGY:

The prospective, institution-based observational study was conducted at Deepam Hospital and Wellness Enterprises, Tambaram, Chennai, Tamil Nadu, in collaboration with the Clinical Research Department of

Deepam Academy, over a period of one year. The study included all adult patients admitted with fever who fulfilled the inclusion criteria.

Fever was operationally defined as an axillary or oral temperature ≥38°C. Patients aged 18–68 years of either gender who provided written informed consent were eligible for inclusion. Pregnant and lactating women, patients with known pre-existing chronic illnesses like Diabetes, Hypertension and Cardiac illness or associated complications that could confound the clinical presentation, and those unwilling or unable to provide consent were excluded. Consecutive sampling was employed to minimize selection bias.

Data were collected prospectively using a predesigned and standardized case record form to ensure uniformity and completeness. Variables recorded included demographic characteristics (age, gender, occupation, educational status, and locality), clinical history (onset, duration, and pattern of fever; associated symptoms such as headache, myalgia, vomiting, skin rashes, and bleeding manifestations; exposure history; and prior medication use), and physical examination findings (vital signs and systemic examination). Laboratory investigations, including hematological, biochemical, and microbiological parameters, were performed as clinically indicated to establish etiological diagnosis, which was categorized into viral, bacterial, parasitic, and other causes. Seasonal variation was assessed by categorizing patients based on the month of admission into pre-monsoon (March, April and May), monsoon (June, July, August, September), and post-monsoon periods (October and November).

The primary outcome measures included the etiological spectrum of fever and its seasonal distribution. Secondary outcomes included clinical profile, treatment patterns, duration of hospital stay, time to defervescence, and clinical status at discharge (recovered or improved). Treatment details such as type of therapy, duration, and any modifications during hospitalization were documented.

The sample size was calculated using a standard prevalence-based formula: $n=Z^2 * p* (1-p)/ d^2$. Where Z = 1.96 (95% confidence interval), p = expected prevalence of febrile illness (assumed 50% due to variability), and d = margin of error (7%). The calculated sample size was approximately 196, and considering feasibility, a total of **203 patients** were included.

Efforts were made to minimize bias by using standardized definitions, consistent data collection procedures, and inclusion of consecutive eligible patients. Missing data, if any, were managed using appropriate statistical methods and excluded from specific analyses where necessary. Data was entered into Microsoft Excel and analyzed using Statistical Package for the Social Sciences (SPSS) software (version XX). Continuous variables were summarized as mean ± standard deviation or median with interquartile range, depending on data distribution, while categorical variables were expressed as frequencies and percentages. Associations between variables, including seasonal variation and disease patterns or outcomes, were assessed using the Chi-square test or Fisher's exact test for categorical variables and Student's t-test or analysis of variance (ANOVA) for continuous variables. A p-value of <0.05 was considered statistically significant.

The study adhered to ethical principles in accordance with the Declaration of Helsinki. Ethical approval was obtained from the Tambaram Indian Medical Association Ethics Committee prior to initiation of the study. Written informed consent was obtained from all participants before enrollment. Confidentiality of patient information was maintained by anonymizing all collected data, and participation was entirely voluntary. Participants were informed of their right to withdraw from the study at any stage without any impact on their standard medical care.

RESULTS:

A total of 203 patients with febrile illness were included in the study. The mean age of the participants was 35.04 ± 13.56 years (range: 18–68 years), with the majority belonging to the 18–27 years (35.0%) and 28–37 years (33.5%) age groups. Males constituted 60.6% of the study population, while females accounted for 39.4%. Most patients were from urban areas (99.0%), with only 1.0% residing in rural settings. A sizable proportion of patients (89.7%) had no prior comorbidities, whereas Diabetes Mellitus and combined Diabetes with Hypertension were observed in 2.0% of patients, and Diabetes Mellitus alone in 2.0%. Hypertension alone in 1.0%, and other comorbidities in 5.4%. The mean maximum recorded temperature was 100.84 ± 1.88°F (range: 97.4–105.4°F), and the average duration of hospital stay was 3.43 ± 3.28 days (range: 1–30 days). Most patients showed favorable therapeutic outcomes, with clinical improvement at discharge and a mean hospital stay of 3.43 ± 3.28 days. (Table 1).

Table 1: Demographic details of the patients

CHARACTERISTICS	N (%) N=203 PATIENTS
Age in Years	
Mean ±SD.	35.04 ± 13.56
(Min-Max)	(18-68)
Age in Years	
18-27	71 (35.0)
28-37	68 (33.5)
38-47	23 (11.3)
48-57	21 (10.3)
58-68	20 (9.9)
Gender	
Male	123 (60.6)
Female	80 (39.4)
Locality	
Rural	2 (1.0)
Urban	201 (99.0)
Past Medical History	
No associated medical illness	182 (89.6)
Diabetes mellitus	4 (2.0)
Hypertension	2 (1.0)
DM + HTN	4 (2.0)
Other comorbidities	11 (5.4)
Maximum Temperature	
Mean ±SD.	100.84 ± 1.88
(Min-Max)	(97.4- 105.4)
Hospital Stay in days.	
Mean ±SD.	3.43 ± 3.28
(Min-Max)	(1-30)

AFI was the most common diagnosis, accounting for 57.1% of cases, followed by dengue (36.5%), while viral fever (3.4%), typhoid/enteric fever (2.0%), and other infections (1.0%) were uncommon.

Among Dengue patients, NS1 antigen positivity was the most frequent serological finding (59.5%), followed by IgG (21.6%) and IgM (12.2%), and with fewer cases showing combined serological markers. Intermittent fever (48.3%) and absence of a documented fever pattern (49.3%) were the most reported, whereas continuous (2.0%) and remittent fever (0.5%) were rare. Systemic symptoms such as chills and tiredness were the most prevalent (44.8%), pain including headache and myalgia (16.3%), and respiratory symptoms (10.3%), while skin rashes or icterus were rarely observed (0.5%), vomiting and loose stools (28.1) were a significant component of clinical presentation.

Viral etiology predominated (99.0%) compared to bacterial causes (1.0%). Seasonally, cases were most frequent during winter (42.9%), followed by summer (31.0%) and monsoon (26.1%) (Table 2).

Table 2: Distribution of Diagnosis, Serological Markers, Fever Pattern, Symptoms, Etiology, and Season among Patients with Febrile Illness

DISTRIBUTION OF VARIOUS FACTORS	N (%) N=203 PATIENTS
Diagnosis	
Dengue	74 (36.5)
AFI	116 (57.1)
Viral Fever	7 (3.4)
Typhoid / Enteric Fever	4 (2.0)
Other infections	2 (1.0)
Dengue (N=74 Patients)	
IgG	16 (21.6)
IgM	9 (12.2)
IgM and IgG	3 (4.1)
IgM and NSI	2 (2.7)

NSI	44 (59.5)
Fever types	
Continuous	4 (2.0)
Intermittent	98 (48.3)
Negative	100 (49.2)
Remittent	1 (0.5)
symptoms	
Respiratory (Cold/Cough)	21 (10.3)
Pain (Headache/Myalgia)	33 (16.3)
Gastrointestinal (Loose stool/Vomiting)	57 (28.1)
Systemic (Chills/Tiredness)	91 (44.8)
Rash/Icterus	1 (0.5)
Etiology	
Bacterial	2 (1.0)
Viral	201 (99.0)
Season	
Monsoon	53 (26.1)
Summer	63 (31.0)
Winter	87 (42.9)

Patients were evaluated for common febrile illnesses, including AFI, viral fever, and enteric fever. Although malaria was considered in the differential diagnosis based on endemic history, no confirmed malaria cases were identified during the study period. On systemic examination, none of the patients exhibited cyanosis, clubbing, edema, or ascites. Abdominal examination was normal in 48.8% of patients, and abdominal tenderness was observed in 2.0%, while findings were unavailable in 10.3% and categorized as other findings in 38.9% (Table 3). Hematological and clinical parameters revealed a mean temperature of 100.96 ± 1.78°F and a mean respiratory rate of 20.94 ± 2.26 breaths per minute. The mean hemoglobin level was 13.57 ± 1.95 g/dL, packed cell volume was 46.70 ± 4.00%, and total leukocyte count was 7305.55 ± 2638.40 cells/mm³. Differential counts showed neutrophils at 57.62 ± 13.39%, lymphocytes at 30.33 ± 5.95%, eosinophils at 3.25 ± 1.76%, monocytes at 5.60 ± 2.55%, and basophils at 0.14 ± 0.20%. The mean platelet count was 264,103.44 ± 115,741.79/mm³, erythrocyte sedimentation rate was 14.27 ± 5.26 mm/hr, and C-reactive protein was 47.36 ± 15.30 mg/L, mean corpuscular volume at 86.40 + 4.77, mean corpuscular hemoglobin concentration at 32.75+ 2.17, and mean corpuscular hemoglobin at 33.19+ 1.08 (Table 4).

Table 3: Systemic Examination Findings of the Study Participants

SYSTEMIC EXAMINATION	N (%) N=203 Patients
Cyanosis	
Negative	203 (100.0)
Positive	0 (0.0)
Clubbing	
Negative	203 (100.0)
Positive	0 (0.0)
Edema	
Negative	203 (100.0)
Positive	0 (0.0)
Ascites	
Negative	203 (100.0)
Positive	0 (0.0)
CNS	
Moving all limbs (Normal)	18 (8.9)
NFND	82 (40.4)
S1S2 present	103 (50.7)
Normal abdomen	99 (48.8)
Abdominal tenderness	4 (2.0)
Not available	21 (10.3)
Other	79 (38.9)

Table 4: Hematological and Clinical Parameters of Study Participants

CLINICAL PARAMETERS	N (%) N=203 Patients
Temperature	100.96 ± 1.78
Respiratory rate	20.94 ± 2.26
HB	13.57 ± 1.95
PCV	46.70 ± 4.00
TC	7305.55 ± 2638.40
P %	57.62 ± 13.39
L %	30.33 ± 5.95
E %	3.25 ± 1.76
M %	5.60 ± 2.55
B %	0.14 ± 0.20
MCV	86.40 ± 4.77
MCH	33.19 ± 1.08
MCHC	32.75 ± 2.17
ESR	14.27 ± 5.26
RBC	4.19 ± 0.39
PLT	264103.44 ± 115741.79
CRP	47.36 ± 15.30

There was no statistically significant association between gender and clinical diagnosis (Fisher's Exact test, p = 0.36), indicating a similar distribution of diagnoses among males and females (Table 5). However, a statistically significant association was observed between age group and diagnosis (Fisher's Exact test, p = 0.011), with dengue being the most prevalent in the 28–37 years age group (41.9%), and AFI most common among individuals aged 18–27 years (37.9%). Viral fever cases were observed in the 28–37 years group (71.4%), while typhoid/enteric fever cases were observed in the 48-57 years group (50.0%), which was more frequently distributed among older age groups (Table 6).

No statistically significant association was found between season and diagnosis (Fisher's Exact test, p = 0.29), with dengue being the most prevalent in winter (39.2%), and AFI cases were observed in winter (47.4%). Viral fever cases were observed in summer (57.1%), and Typhoid/ Enteric fever cases were observed in summer (50.0%), although both Dengue and AFI were more commonly observed during winter (Table 7). Statistically significant therapeutic outcome (rho = −0.0611, p = 0.3864) was found (Table 8).

Table 5: Association between Gender and Clinical Diagnosis

DIAGNOSIS	FEMALE N=80 PATIENTS	MALE N=123 PATIENTS	TOTAL N=203 PATIENTS	P- VALUE[F]
Dengue	28 (37.8)	46 (62.2)	74 (100.0)	0.360
AFI	44 (37.9)	72 (62.1)	116 (100.0)	
Viral Fever	4 (57.1)	3 (42.9)	7 (100.0)	
Typhoid / Enteric Fever	2 (50.0)	2 (50.0)	4 (100.0)	
Other infections	2 (100.0)	0 (0.0)	2 (100.0)	

%-Row Percentage; F-Fisher's Exact Test; p>0.05

Table 6: Association between Age and Clinical Diagnosis

DIAGNOSIS	AGE IN YEARS						P-VALUE[F]
	17-27	28-37	38-47	48-57	58-68	TOTAL	
Dengue	27 (36.5)	31 (41.9)	8 (10.8)	5 (6.8)	3 (4.1)	74 (100.0)	**0.011**

AFI	44 (37.9)	29 (25.0)	13 (11.2)	14 (12.1)	16 (13.8)	116 (100.0)	
Viral Fever	0 (0.0)	5 (71.4)	2 (28.6)	0 (0.0)	0 (0.0)	7 (100.0)	
Typhoid / Enteric Fever	0 (0.0)	1 (25.0)	0 (0.0)	2 (50.0)	1 (25.0)	4 (100.0)	
Other infections	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (100.0)	

%-Row Percentage; F-Fisher's Exact Test; Bolded p-values are significant ($p<0.05$)

Table 7: Association between Season and Clinical Diagnosis

DIAGNOSIS	MONSOON N=53 PATIENTS	SUMMER N=63 PATIENTS	WINTER N=87 PATIENTS	TOTAL N=203 PATIENTS	P-VALUE[F]
Dengue	26 (35.1)	19 (25.7)	29 (39.2)	74 (100.0)	0.290
AFI	24 (20.7)	37 (31.9)	55 (47.4)	116 (100.0)	
Viral Fever	1 (14.3)	4 (57.1)	2 (28.6)	7 (100.0)	
Typhoid / Enteric Fever	1 (25.0)	2 (50.0)	1 (25.0)	4 (100.0)	
Other infections	1 (50.0)	1 (50.0)	0 (0.0)	2 (100.0)	

%-Row Percentage; F-Fisher's Exact Test; $p>0.05$

Table 8: Therapeutic outcome among Study Participants

Therapeutic outcome	Rho	P-value
Hospital stays	-0.0611	0.3864

S-Spearman Rank Correlation; $p>0.05$

DISCUSSION:

The prospective observational study includes 203 febrile patients admitted to a multispecialty hospital in Tambaram, Chennai, which presents a comprehensive analysis of clinical and diagnostic patterns of febrile illnesses in tropical, urban settings. Our findings reaffirm the clinical burden of non-specific febrile disease, particularly AFI, and dengue fever, which together account for more than 90% diagnosis (9,13). This aligns with previous studies reporting a predominance of viral etiology among febrile cases in the hospital. Most participants were young male adults, with a mean age of 35 years. Such demographic trends are consistent with prior studies, which are economically active age that demonstrates higher exposure risk due to increased outdoor activity and environmental factors (10,11). Urban predominance in our study reflects patterns of healthcare access and referral, which raise public health concerns related to vector dynamics in urban ecosystems (12). The overall favorable therapeutic outcomes observed in this study, characterized by short hospital stays and clinical recovery, indicate effective management strategies and early intervention in the study setting.

Dengue fever accounts for one-third of patients, with NS-1 positivity being the most common serological finding. Regional epidemiology where NS-1 antigen detection is a key tool, and dengue continues to represent a significant cause of hospitalization (10,11). This may reflect improved public health interventions, vector control strategies, and initial treatment practices. The symptoms are heterogeneous, including undocumented fever that predominated, emphasizing the challenge of relying solely on symptoms for diagnosis, symptoms such as chills, myalgia, gastrointestinal upset and mild respiratory complications, which were non-specific and overlapped across diagnostic groups, which is in accordance with reports on the broad clinical spectrum of fever (9,13). Abdominal pain and vomiting are observed in a considerable proportion of patients, highlighting the systemic involvement of viral infections and dengue, reinforcing their diagnostic relevance in febrile illness. In contrast, age groups demonstrate more differences in diagnostic distribution, with Dengue more prevalent among young adults, whereas AFI is broadly distributed. This suggests variations in exposure and immunological response across age cohorts with epidemiological evidence from endemic regions (12, 13).

Although seasonal variation is classically associated with vector-borne disease – Dengue and Malaria incidence during monsoon and post monsoon periods (12, 13) – our study did not find a statistically significant association with diagnostic categories. This is attributed to the third-round transmission potential of several pathogens in climates and the complex interplay of microclimatic, socio-behavioral, and environmental factors that may influence disease spread. Although seasonal variation did not show statistical

significance, a higher proportion of cases during winter suggests evolving epidemiological patterns influenced by environmental and behavioral factors. Hematological assessments show expected patterns for fever, and correlation analysis will not reveal a significant association between leukocyte count and either morbidity or CRP level increase. This suggestion may not be a reliable marker for disease severity or clinical outcomes in heterogeneous febrile populations. Early and accurate diagnosis remains pivotal for appropriate management and antibiotic stewardship, particularly in settings where empiric therapy is often initiated due to diagnostic uncertainty. Limitations of the study include the single-centre design and exclusion of specific chronic conditions, which may restrict broader generalizability. Future multi-centric research incorporating pathogen-specific diagnostics could enhance etiological precision and support evidence-based therapeutic pathways..

CONCLUSION:

The present study demonstrates that AFI in a suburban tertiary care setting in Tambaram, Chennai, are viral, with AFI and dengue fever constituting most cases, particularly among young adults. Clinical presentations were non-specific, with systemic symptoms such as chills, fatigue, gastrointestinal disturbances, and myalgia predominating, while classical signs like rash or icterus were uncommon, and fever patterns were mostly intermittent or undocumented. Laboratory findings, including hematological and serological markers, supported viral etiologies, with NS1 antigen positivity being the most frequent marker among dengue patients. Although gender did not significantly influence disease distribution, age group was significantly associated with diagnostic patterns, and seasonal trends suggested a higher burden during winter without a statistically significant association with specific diagnoses. Its single-centre design, exclusion of pediatric and chronic disease populations, and lack of advanced molecular diagnostics, which may affect the generalizability and etiological precision of the findings, limit the study. Future research should focus on multicenter studies, broader age groups, high-risk populations, and the incorporation of molecular assays and vector surveillance to enhance diagnostic accuracy, elucidate seasonal transmission dynamics, and guide evidence-based clinical and public health interventions in endemic urban and peri-urban settings.

LIMITATIONS:

This study was conducted at a single centre, which may limit generalizability to other regions. Chronic comorbidities and pediatric populations were excluded, potentially underestimating disease burden in vulnerable groups. Advanced molecular diagnostics, such as PCR-based pathogen detection, were not employed, limiting the precision of etiological confirmation. Additionally, environmental and vector density data were not incorporated, which could have provided further insights into seasonal transmission dynamics.

FUTURE DIRECTIONS:

Multi-Centre, longitudinal studies incorporating broader age groups and high-risk populations are recommended to improve epidemiological understanding. The inclusion of advanced molecular diagnostics and vector surveillance could enhance etiological specificity and clarify seasonal patterns. Further research on clinical prediction models integrating laboratory and demographic parameters may facilitate early triage, risk stratification, and tailored therapeutic interventions in tropical febrile illness management. Such data could support evidence-based public health policies aimed at reducing the burden of febrile illnesses in urban and peri-urban India.

REFERENCE:

1. Steele GM, Franco-Paredes C, Chastain DB. Noninfectious causes of fever in adults. The Nurse Practitioner. 2018 Apr 19; 43(4):38-44.
2. Neupane DP, Dulal HP, Song J. Enteric fever diagnosis: current challenges and future directions. Pathogens. 2021 Apr 1; 10(4):410.
3. El-Radhi AS. Fever in Common Infectious Diseases. Clinical Manual of Fever in Children. 2019; 85-140. Published 2019 Jan 2. Doi: 10.1007/978-3-319-92336-9_5
4. Mir T, Nabi Dhobi G, Nabi Koul A, Saleh T. Clinical profile of classical Fever of unknown origin (FUO). Caspian J Intern Med. 2014 winter; 5(1):35-9. PMID: 24490012; PMCID: PMC3894469.
5. Garg, Ravinder; Aggarwal, Simmi1; Singh, Harpreet2; Kajal, Krishan Singh2; Garg, Ramneesh3; Pal, Ranabir4. Study of the relation of clinical and demographic factors with morbidity in a tertiary care

teaching hospital in India. International Journal of Critical Illness and Injury Science 3(1): p 12-17, Jan–Mar 2013. | DOI: 10.4103/2229- 5151.109411

6. Maze, M., Bassat, Q., Feasey, N., Mandomando, I., Musicha, P., & Crump, J. (2018). The epidemiology of febrile illness in sub-Saharan Africa: Implications for diagnosis and management. Clinical Microbiology and Infection, 24(8), 808-814. https://doi.org/10.1016/j.cmi.2018.02.011
7. Salh GK, Gupta V, Kaur H, Ahluwalia S, Ahluwalia S. Clinical profile of fever in patients admitted through the outpatient department in a North Indian tertiary care teaching hospital. Journal of Clinical and Scientific Research. 2021 Oct 1; 10(4):227-32.
8. Dwivedi A, et al. Aetiological profile of fever in pediatric population in a tertiary care hospital. Int J Contemp Pediatr. 2019. doe: 10.18203/2349-3291.ijcp2019xxxx
9. Karoli R, Fatima J, Siddiqi Z, Kazmi KI, Sultania AR. Clinical profile of dengue infection at a teaching hospital in North India. J Infect Dev Ctries. 2012; 6(7):551–554. doi:10.3855/jidc.2010
10. Mohan K, Malaiyan J, Nasimuddin S, et al. Clinical profile, and atypical manifestations of dengue fever in Chennai, India. J Family Med Prim Care. 2020; 9(2):111–117. doi: 10.4103/jfmpc.jfmpc_1009_19
11. Singh J, Dinkar A, Atam V, et al. Clinical profile of dengue fever and coinfection with chikungunya. Tzu Chi Med J. 2018; 30(3):158–164. doi: 10.4103/tcmj.tcmj_53_17
12. Sharma RS, Kaul SM, Rastogi RM. Seasonal fluctuations of dengue vector Aedes aegypti in India. Southeast Asian J Trop Med Public Health. 2005; 36(1):186–190.
13. Goudar SR, et al. Clinical profile and outcome of dengue fever during monsoon season in South India. Int J Adv Med. 2021. doi: 10.18203/2349-3933.ijam2021xxxx