



COMMUNITY RESPONSE TO DENGUE: A SURVEY ON TREATMENT PRACTICES IN PICHANDAMPALAYAM, ERODE, TAMILNADU

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ABSTRACT

Background : Dengue-an acute viral illness caused by RNA virus belonging to Flaviviridae family, capable of infecting humans and causing diseases. These infections maybe asymptomatic or may lead to classic dengue fever (DF) or dengue Haemorrhagic fever (DHF) or dengue shock syndrome. Aedes aegypti acts as the primary vector. Recently DF and its severe forms have become major global public health concerns. Proper management of the disease becomes an inevitable factor. This article focuses about the survey of siddha in the management of dengue outbreaks among the peoples of Pichandampalayam.

Materials and Methods: A Public survey was conducted with 450 people during October to November 2021. Information regarding the socio-demographic details and medication practices used during dengue outbreaks were collected by using semi - structured questionnaire.

Result: Among the 450 participants, 63.3% of people were in between the age of 10-35. 56% of the people preferred siddha medications, 37.9% preferred allopathy, 2% took Homeopathy, and 4.1% Ayurveda treatment. 21.1% of people took allopathy along with siddha medicines. 72.6% people took precautionary medicines in siddha like Nilavembu kudineer.

Conclusion: Survey shows that many people preferred siddha medication and most of the non -affected people took precautionary medications showing that, Siddha medicine play a very crucial role in management of DF. Still many people need awareness about the management of DF in Siddha system of medicine.

KEYWORDS: Dengue fever, Survey, Siddha medication, Precautionary medicine, Management, Communicable disease.

INTRODUCTION

Dengue fever, the world's fastest spreading mosquito-borne viral illness, poses a significant health risk in India. This RNA virus, belonging to the Flaviviridae family, has four serotypes – DEN 1, 2, 3, and 4. While all four exist in India, DENV 1 and 2 are currently most prevalent [1,2]. Dengue infections can range from asymptomatic to life-threatening, manifesting as classic dengue fever (breakbone fever), dengue hemorrhagic fever (DHF), or dengue shock syndrome (DSS) [3].

The Aedes aegypti and Aedes albopictus mosquitoes are the primary culprits transmitting the virus. According to the World Health Organization (WHO), an estimated 50-100 million people contract dengue annually, with 5 million cases progressing to DHF. Globally, 3.9 billion people in 128 countries face the risk of infection, with over 100 countries experiencing endemic dengue and DHF [4,5].

India faces a particularly steep rise in dengue cases due to several factors. Urbanization, with its unplanned growth, creates

ideal breeding grounds for Aedes aegypti mosquitoes, which thrive in small pockets of clean water [6]. Improper water storage practices in rural areas further exacerbate the problem. Additionally, a lack of awareness among the public contributes to outbreaks. Dengue is now endemic in 35 Indian states, with a fatality rate of 0.16%. Tamil Nadu leads the nation in reported cases, followed by Kerala, Karnataka, Punjab, and West Bengal [7,8].

This article explores the growing threat of dengue fever in India, examining the epidemiological factors driving its spread and the role Siddha medicine, a traditional Indian medical system, can play in managing the disease [9].

However, in the fight against this disease, traditional medical systems like Siddha are playing an increasingly important role [10].

Siddha, a highly popular traditional medical system in South India, boasts a rich history of treating various ailments,



including fevers. Siddha texts classify fevers into 64 distinct types based on causative factors, symptoms, and imbalances in the body's three humors (thirithodam). Dengue, in particular, is often compared to "pitha suram" within the Siddha framework[11].

This article aims to delve into the contribution of Siddha medicine to community health, specifically its role in treating and preventing viral fevers like dengue[12]. We will examine the case of Tamil Nadu, where the government actively promoted Nilavembu kudineer, a Siddha herbal formulation, as a preventive measure during dengue outbreaks. Furthermore, we will explore the core principles of Siddha medicine, including its emphasis on developing potent polyherbal formulations with long shelf life and its focus on promoting cell regeneration and longevity[13,14]. By examining these aspects, we can gain a deeper understanding of how Siddha medicine can be a valuable tool in managing the ongoing threat of dengue fever[15,16]. This article focuses about the survey of siddha in the management of dengue outbreaks among the peoples of Pichandampalayam.

MATERIALS AND METHODS

A Public survey was conducted with 450 people during October to November 2021. Information regarding the socio-demographic details and medication practices used during

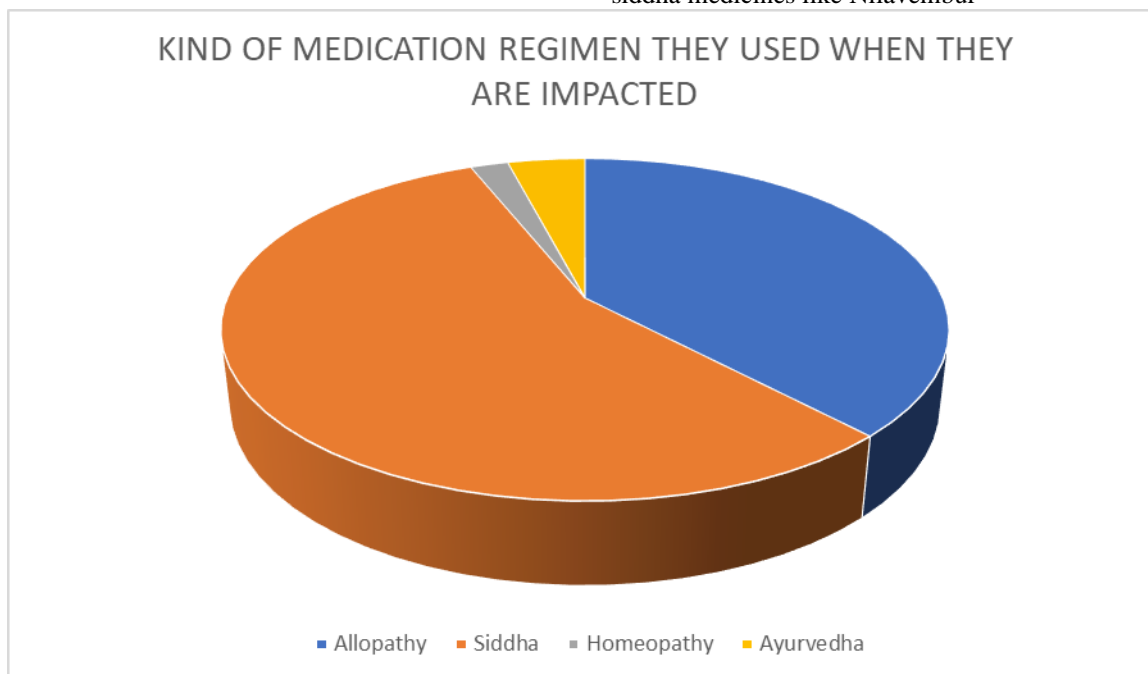
dengue outbreaks were collected by using semi – structured questionnaire.

STUDY AREA

It is a village located in Erode District in Tamil Nadu. Its elevation is 272meters above the sea level. Its humidity is 87%. Wind E at 5km per hour. its normal temperature ranges from 26 to 28degree celcius. The first 2 months of the year has pleasant monsoon but in march the temperature begins to rise persisting till the end of may. By the month of september, the monsoon rains begin to fall. The north east monsoon sets vigorously during october and november which is the peak period for dengue as they provide suitable condition for breeding of mosquitoes.

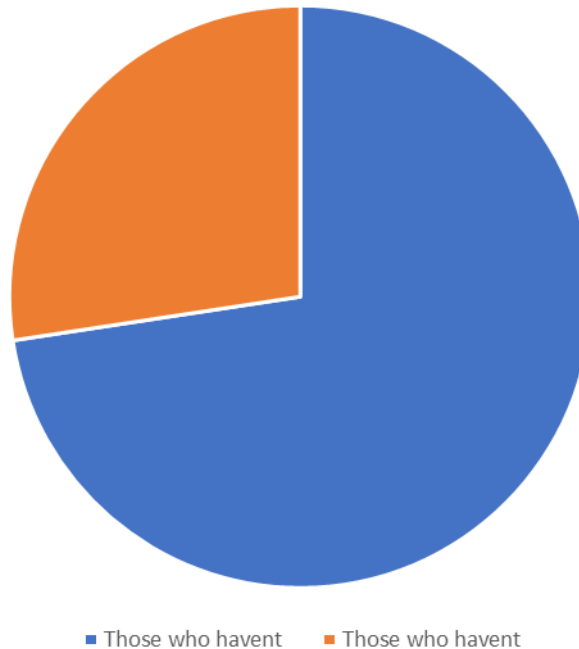
DESCRIPTIVE ANALYSIS

A public survey was conducted in the village Pichandampalayam. Its population is about 2800 and 450 people participated in this survey. The age group between 0-10years is 1.2%, 10-20years is 34.6%, 20 -30years is 30.2%, 35-50years is 19.5% and above 50years is 14.5%. Among the number of participants 37.1% is male 62.3% is female and 0.6% is transgender. Type of system of medicine when they got affected are allopathy- 37.9% , siddha – 56%, homeopathy – 2% and ayurvedha – 4.1%. 21.1% of people took allopathy along with siddha medications. 72.6% people took precautionary siddha medicines like Nilavembur

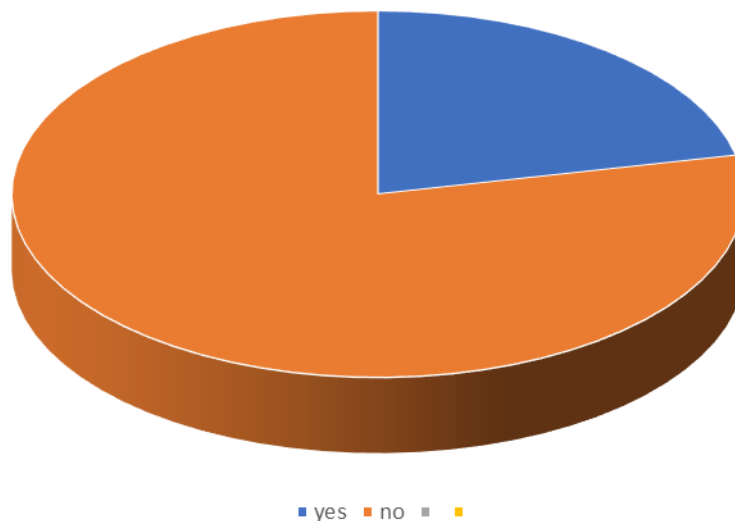




PEOPLE TAKEN PRECAUTIONARY MEDICINES



PEOPLE WHO TOOK SIDDHA MEDICATION ALONG WITH OTHER MEDICINES



RESULTS

The survey revealed a predominance of young adults, with 63.3% of participants falling between the ages of 10-35. Interestingly, 56% of the respondents favored Siddha medications for managing dengue, followed by allopathy (37.9%), homeopathy (2%), and Ayurveda (4.1%). Notably,

21.1% opted for a combination of allopathic and Siddha treatments. Furthermore, a significant 72.6% of those unaffected by dengue reported using preventive Siddha medicines like Nilavembu **kudineer**.



DISCUSSION

The survey highlights a strong preference for Siddha medicine in managing dengue outbreaks within the Pichandampalayam community. A significant portion of the unaffected population also utilizes preventive Siddha remedies, suggesting a belief in their efficacy. These findings underscore the crucial role Siddha medicine plays in dengue management for this community [17].

However, the study also suggests a gap in awareness. While many residents embrace Siddha treatments, a portion of the population still relies solely on allopathic medicine. Further efforts to educate the community about the potential benefits of Siddha in managing dengue, particularly its preventive applications, could be highly beneficial.

LIMITATIONS

This study is limited by its focus on a single community, potentially affecting the generalizability of the findings. Further research on a larger scale is needed to gain a more comprehensive understanding of Siddha's role in managing dengue across different populations.

In conclusion, this study sheds light on the significant role Siddha medicine plays in dengue management within the Pichandampalayam community. It also highlights the need for increased awareness about the potential benefits of this traditional system of medicine in combating this widespread public health concern.

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