Impact of Siddha Medical System among the Tribal Populations of Mokokchung, Nagaland, India

Samraj Karunanithi*, Eugene Wilson

Deparment of Clinical Research, Siddha Clinical Research Unit, SVIMS Campus, Alipiri Road, Tirupati, Andhra Pradesh, INDIA.

ABSTRACT

Background: The Siddha Medical System, originating from South India, was introduced in Nagaland to assess its efficacy, strength, and affordability. The Ministry of AYUSH (Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy), Govt. of India, organized the State Level Arogya Fair to showcase the best and latest developments in the field of AYUSH. Materials and Methods: It conducted a cross-sectional analysis in the Mokokchung district of Nagaland to include all who attended the Siddha Medical camp and awareness programmes from 12th and 15th of December 2017. Results: A total of 172 patients consulted and received Siddha treatments for their illnesses, and they were provided with internal medicines, Varmam and other external procedures to aid in their recovery, more than 80% of them were affected by Gastrointestinal Tract (GIT) disorders, others are Ophthalmic complaints and musculoskeletal disorders. The Mokokchung district is predominantly home to the 'Ao' tribe. Interestingly, researchers have found that there are similarities between the environment in which the Ao-Nagas live and the environment in Kuriñci. This suggests that the Siddha medical system may have valuable recommendations for the people living in Mokokchung, and the entire Nagaland community. Conclusion: The Siddha Medical system has a significant chance of being effective for all ethnicities, including the Naga tribes, who have reported receiving significant benefits from Siddha drugs and Varmam management. The major challenge is the lack of accessibility of Siddha outside the South India, which has hindered the adoption and development in other parts of India.

Keywords: AYUSH, Arogya Fair, 'Ao' Tribes, Nagas, Dravidians, Tamil medicine.

Correspondence:

Dr. Samraj Karunanithi

Research Officer, Siddha Clinical Research Unit, SVIMS Campus, Alipiri Road, Tirupati-517507, Andhra Pradesh, INDIA. Email: samraj.mailme@gmail.com

Received: 29-06-2024; **Revised:** 10-07-2024; **Accepted:** 06-10-2024.

INTRODUCTION

The 12th and 15th of December 2017, saw history being made as the Siddha Medical System delved into the tribes of Nagaland, in a bid to explore the efficacy, strength and affordability of the AYUSH system of medicine. This was made possible by the Ministry of AYUSH, Govt. of India, in collaboration with the Department of Health and Family Welfare of Nagaland state. State Level Arogya Fair, took place at Assam Rifle ground, Mokokchung, Nagaland, aimed to showcase the best and latest developments in the field of AYUSH. It featured a range of exciting activities, including free consultation, free medicines, interaction with people, free distribution of IEC materials, Live Yoga demonstrations, and much more. The fair saw the participation of nearly 40 doctors from all five AYUSH systems of medicine, who participated and worked tirelessly to create awareness and serve the tribes. Notably, the Central Council for Research in Siddha (CCRS) nominated a

DOI: 10.5530/jyp.20251343

${\bf Copyright\ Information:}$

Copyright Author (s) 2025 Distributed under Creative Commons CC-BY 4.0

Publishing Partner: Manuscript Technomedia. [www.mstechnomedia.com]

team of research officers cum doctors and the supporting staff to help execute the program. It's noteworthy that conducting such an awareness program was no mean feat, given the region's diverse population of tribals with distinct lifestyles.

MATERIALS AND METHODS

The event had two major activities, namely the Siddha Medical Camp and Siddha Awareness programmes. In Siddha awareness programmes, scientific awareness speeches were delivered by our team members. Dr. Eugene Wilson presented the "Overview of the Siddha System of Medicine", and Dr. K. Samraj presented the "External Therapies of Siddha System of Medicine" in the scientific sessions. On behalf of CCRS, various kinds of Siddha literature were presented to Dr. Akaba, Chief Medical Officer, Mokokchung for their Library. Siddha Awareness was created through local and national Media. Finally, Information Education Communication (IEC) materials about Siddha Medicine and Lifestyle disorder management were distributed to the public.

The study aimed to include all those who attended the Siddha Medical camp, which was inaugurated by Mr. Ramakrishnan IAS, Principal Secretary, Department of Health and Family Welfare and Science and Technology, Nagaland on the first day of the





Arogya Mela. During the Siddha Medical Camp, a total of 172 patients received consultation and Siddha treatments for their illnesses. They were provided with internal medicines, Varmam, and other external procedures to aid their recovery. The people of Mokokchung district in Nagaland were exposed to the Siddha system of medicine for the first time, and the Siddha treatment, including the Varmam treatment, was welcomed by them.

RESULTS

The satisfaction of the patients with the Siddha treatment was so high that they brought their friends and relatives to the camp on the third and fourth days, demonstrating the effectiveness and positive reception of the treatment provided. With 50% of the patients communicating in English and the other 50% speaking the 'Ao' dialect, volunteers from the organizing committee provided translation services to ensure that all patients received the necessary care and instructions without any communication hindrance.

A total of 172 patients were consulted and treated (Figure 1), with over 80% suffering from Gastrointestinal Tract (GIT) disorders. Additionally, a significant number of patients had ophthalmic complaints and musculoskeletal disorders, likely due to their geographical location, dietary habits, and lifestyle factors. Each patient received personalized counselling to promote healthy living and improve their quality of life. They were educated on the benefits of oil baths, given specific dietary recommendations to address and prevent health issues, and provided with strategies to prevent constipation, a common complaint among them. Overall, the camp was successful in not only providing Siddha treatments but also in educating patients on maintaining a healthy lifestyle through personalized counselling sessions, ensuring holistic care that addressed both immediate health concerns and long-term well-being.

DISCUSSION

According to the 2011 Census, the Mokokchung District is home to a predominantly tribal population, with 91.7% belonging to the scheduled tribes, most notably the 'Ao' tribe. The district boasts an impressive average literacy rate of 91.6%, with the majority of its inhabitants residing in rural areas.² The Aos are one of the major ethnic groups of the Naga people, who are native to the district.³ Interestingly, some experts claim that the term 'Naga' derives from the Sanskrit word for 'snake'. The renowned Indian jurist and social reformer, Dr. B.R. Ambedkar, wrote that the people inhabiting the Dravidian land area, extending from Kumari to the Himalayas, and from Moganjdaro-Harappa in the west to Meghalaya-Nagaland in the east, are known as Dravidians. They are often referred to as 'Nagars', and their mother tongue is believed to be Tamil.⁴

Japanese scientist Hideo Matsumoto (2009) said that populations in India and nearby regions are Caucasoid, with some of them having Mongoloid admixture, such as Hindus in India, Tamils in South India, Sinhalese in Sri Lanka, Brahmins in Assam, Nepalese in Nepal, and Kalitas in Assam. Matsumoto said that only some populations in India and nearby regions are Mongoloid with Caucasoid admixture, such as Muslims in Bangladesh, and Ahom in Assam.^{5,6}

The Nagas was a diverse group of people with many branches, including the Einars, Auhayars, Aruvalas, and Bharatavas. Among them, the Mara branch was considered the strongest and most formidable, with the Naalai Kizhavan Nagan serving as minister and commander of King Koman Pandya. This indicates a compelling relationship between the Ao-Nagas and Dravidians. Ethnologists like Sir George Abraham Grierson have delved deeper into this relationship and found that the hill tribes of the Northeast Frontier are primarily of the Tibeto-Mongoloid stock, with a sprinkling of Austric and Dravidian blood. This highlights the complexity of the Nagas' origins and their deep connections to various ethnic groups across India.⁷

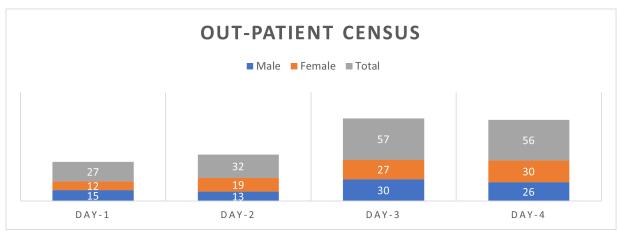


Figure 1: Day-wise out-patient census.

The Siddha system of medicine is an ancient system of healing that originated in South India and is considered the indigenous medicine of Dravidians. It offers a holistic approach to healthcare that takes into account the physical, mental, and spiritual aspects of a person's well-being. One interesting aspect of the Siddha system is its knowledge of the *Kuriñci* region, which is known for its mountainous terrain and unique environmental characteristics. This knowledge includes information on lifestyle recommendations, environmental risk factors, and infectious and non-infectious disease management of people living in the *Kuriñci* region.⁸

Interestingly, researchers have found that there are similarities between the environment in which the Ao-Nagas live and the environment in Kuriñci. This suggests that the Siddha medical system may have valuable recommendations for the people living in Mokokchung, Nagaland, and the entire Nagaland community. Furthermore, the Siddha medical system has shown significant health outcomes and drug responses with the Nagas and their communities. This underscores the potential benefits of integrating the Tamil Medical system with Naga's indigenous medical system to create a more valuable and potent resource for research. Given the strong relationship between Nagas and Dravidians, researchers recommend that Siddha research institutions focus on indigenous integration research in the northeastern part of India. Additionally, the affordability of Siddha medicine in the northeast may help fulfil the healthcare needs of the community while also preserving their ethnic lifestyle.

India is a country with a rich and diverse cultural heritage, marked by a variety of social and biological behaviours that are characterized by noFIG genetic heterogeneity. With more than 4500 anthropologically distinct populations representing different castes, tribes, and religious groups, the country is considered a treasure trove for geneticists. These diverse groups differ based on their cultural practices, languages, and genetic architecture, making India an excellent laboratory for genetic research. ¹⁰

The Siddha system of medicine has a personalized medicine approach based on an individualized clinical practice that incorporates the Tēka ilakkaṇam (Siddha Body Constitution), mukkuṛram (Three humoral theory), aṇd aimpūta cērkkai (Five elements theory). 11,12 Siddha medicine covers all aspects of pharmacogenomic comprehension in personalized clinical practice to optimize the selection and dosage of therapeutics. By doing so, it aims to minimize Adverse Drug Reactions (ADRs) and maximize the efficacy of the drug. 13

CONCLUSION

The Siddha Medical system, which is an ancient traditional medicine system that originated in South India, has gained widespread recognition for its prevention, management, and treatment of all ailments. It is believed that the Siddha Medical system has a significant chance of being effective for all ethnicities, including the Naga tribes, who have reported receiving significant benefits from Siddha drugs and Varmam management. Further pharmacogenomics studies on the relationship between Siddha/ Dravidian medicine and Naga tribes should be conducted. However, despite the many benefits of Siddha medicine, one of the major challenges that the system faces are the lack of accessibility outside of South India. This lack of accessibility has hindered the development and widespread adoption of AYUSH healthcare in India. Addressing this issue is crucial if we are to fully realize the potential benefits of the Siddha Medical system and promote the overall development of AYUSH healthcare in India.

ACKNOWLEDGEMENT

The authors are thankful to their organization Central Council for Research in Siddha (CCRS), Ministry of Ayush, Govt. of India, for their technical support.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ABBREVIATIONS

ADR: Adverse Drug Reaction; **AYUSH:** Ayurveda, Yoga, Unani, Siddha, Homeopathy, **CCRS:** Central Council for Research in Siddha; **GIT:** Gastro-Intestinal Tract; **IAS:** Indian Administrative Services; **IEC:** Information Education Communication.

REFERENCES

- Morungexpress.com. Dimapur: public space, state level Arogya mela: A brief preview; Dr. Imlikumba; Updated 2017 Dec 11; [cited Feb 22 2024]. Available from: Https://Morungexpress.Com/State-Level-Arogya-Mela-Brief-Preview.
- Kanato Chophy G, Chaudhuri Sk. The cultural Heritage of Nagaland. 1st ed. Taylor & Francis; 2022.
- 3. Nic. Mokokchung. In: Mokokchung, Nagaland: Government of Nagaland; Updated 2024 Feb 01. District at a Glance; [cited Feb 22 2024]. Available from: Https://Mokokchung.Nic.In/District-At-A-Glance/.
- Ambedkar BR. The untouchables who were they and why they became untouchables?
 1st ed Dr. Babasaheb Ambedkar: Writings and Speeches,. Dr. Ambedkar Foundation;
 2014; Vol. 7.
- Matsumoto H. The origin of the Japanese race based on genetic markers of immunoglobulin G. Proc Jpn Acad Ser B Phys Biol Sci [Internet]. 2009;85(2):69-82. doi: 10.2183/pjab.85.69, PMID 19212099.
- Walter H, Gilbert K, Lindenberg P, Malhotra Kc MB. Genetic Variation of Five Blood Group Polymorphisms in Ten Populations of Assam, India. Das Bk. Int J Anthropol. 1987;2(4).
- 7. Vikaspedia. Nagargal; Mariyappan M. In: Centre for Development of Advanced Computing (C-DAC); 2018 [Updated 2023; [cited Feb 22 2024]. Available from: Https://Ta.Vikaspedia.ln/Education/.
- 8. John SS. Traditional knowledge of folk crafts in Tamil Nadu. Indian J Trad Knowl. 2010;9(3):443-7.

Karunanithi and Wilson: Impact of Siddha Medicine in Nagaland

- 9. Wald P. Wald P. Blood and stories: how genomics is rewriting race, medicine and human history. Patterns Prejudice. 2006;40(4-5):303-33. doi: 10.1080/00313220601
- Anonymous. Overview of Indian healing traditions | History and science of Indian systems of knowledge [Internet]; 2017. Ncbs.Res. Available from: Https://Www.Ncbs. Res.In/Historysciencesociety/Content/Overview-Indian-Healing-Traditions.
- Muthiah K, Ganesan K, Ponnaiah M, Parameswaran S. Concepts of body constitution in traditional Siddha texts: A literature review. J Ayurveda Integr Med. 2019;10(2):131-4. doi: 10.1016/j.jaim.2019.04.002, PMID 31138488.
- 12. Karunanithi S, P SR, Nandhagopal K, DMk, Vinod NP, Sathyarajeswaran P, et al. Survival Analysis Based on the Siddha Body Constitution of Asymptomatic SARS-CoV-2 Patients Under Integrative Management of Hydroxychloroquine (HCQ) and Kaba Sura Kudineer (KSK): a Retrospective Cross-sectional Case Series from Tirupati. Curr Trad Med. 2021;7(6). doi: 10.2174/2215083807666210810113120.
- Gupta PD. Pharmacogenetics, pharmacogenomics and Ayurgenomics for personalized medicine: A paradigm shift. Indian J Pharm Sci. 2015;77(2):135-41. doi: 10.4103/0250-474x.156543, PMID 26009644.

Cite this article: Karunanithi S, Wilson E, Impact of Siddha Medical System among the Tribal Populations of Mokokchung, Nagaland, India. JYoung Pharm. 2025;17(1):239-42.