TRADITIONAL MEDICAL PRACTICES OF MAPPILAS: AN ETHNOGRAPHIC STUDY ON THE MAPPILA COMMUNITY IN THE MALABAR REGION OF KERALA

A thesis submitted during the year 2025 to the University of Hyderabad in partial fulfillment of the requirements for the award of

DOCTOR OF PHILOSOPHY (Ph. D)

In

Health Sciences

(Public Health)

By

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CERTIFICATE

This is to certify that the thesis entitled "**Traditional Medical Practices of Mappilas: An ethnographic study on the Mappila community in the Malabar region of Kerala**" submitted by **Muhammed Shareef CK** bearing Reg. No. **19MUPH01** in partial fulfillment of the requirements for the award of Doctor of Philosophy in Public Health is a bonafide work carried out by him under my supervision and guidance.

This thesis is free from plagiarism and has not been submitted previously in part or in full to this or any other university or institution for the award of any degree or diploma. The student has the following publications before submission of the thesis for adjudication, and has produced evidence for the same

1. Ck, M., & Shamanna, B. (2022b). Profiling the healing practices of Malabar Mappila community of Kerala: A review. *JOURNAL OF RESEARCH IN TRADITIONAL MEDICINE*, *0*, 1. https://doi.org/10.5455/jrtm.2022/80526
2. K, P., K, M. S. C., & Shamanna, B. R. (2025). Health-seeking Behaviour of Tribal Population in India: A Review. *Journal of the Anthropological Survey of India*, *0*(0). https://doi.org/10.1177/2277436X251336594
3. Muhammed Shareef CK, & Amal Sana Faizal. (2022). Transference of medical lore; the pedagogy of ethno medicine among traditional healers of kerala. *Lissah Journal*, *3*(2), 48. https://lissah.com/admin/uploads/journal/Journal_Booklet.pdf#page=9

4. Reproductive spatial praxis and spatial capital : uneven rates and maternal healthcare disparities in India – Abstract accepted for special issue for planning practice and research journal, and currently under 'out for review'

The student has presented a paper at the following conference during the years 2019-2025.

1. Muhammed Shareef C K presented a paper titled "Profiling Malabar Mappila Healers: Health, Culture and Religion" in the Two-Day National Young Scholars Meet, organized by Farook College (Autonomous) and sponsored by RUSA, focusing on *Empowering Youth for Sustainable Development: Strategies and Approaches*, held on 18–19 December 2023.
2. Muhammed Shareef C K presented a paper titled "Reviving Community Medicine in Pandemic: A Study on Malabar Mappila's Traditional Medicine Practices" in the 50th Annual National Conference of Kerala Sociological Society on the theme *Conflict and Resilience: Sociological Perspective*, held online on 21–22 March 2024 and offline on 23 March 2024 at Bishop Chulaprambil Memorial College, Kottayam.

The student has passed the following courses towards the fulfillment of coursework requirement of the Ph.D.

Course ID	Course name	Credits	Result
PU810	Capacity building for doctoral research	4	pass
PU811	Basic Epidemiology	4	pass
PU812	Qualitative research in health sciences	4	Pass

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DECLARATION

I, Muhammed Shareef CK , hereby declare that this thesis entitled "**Traditional Medical Practices of Mappilas: An ethnographic study on the Mappila community in the Malabar region of Kerala**" submitted by me under the guidance and supervision of Prof. B. R. Shamanna, School of Medical Sciences, University of Hyderabad, is a bonafide research work. I also declare that it has not been submitted previously in part or in full to this University or any other University or Institution for the award of any degree or diploma. A report on plagiarism statistics from the University Librarian is enclosed. I hereby agree that my thesis can be deposited with the Shodhganga/INFLIBNET.

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SUSTAINABLE DEVELOPMENT GOALS

Thesis title: **Traditional Medical Practices of Mappilas: an ethnographic study on the Mappila Community in the Malabar Region of Kerala.**

Student reg. No: **19MUPH01.**

Supervisor(s): **Prof. B. R. Shamanna.**

School: **School of Medical Sciences.**

Among 17 goals (https://sdgs.un.org/goals), under which sdg the work incorporated in the thesis will be addressed: *SDG 3 - good health and well-being, and SDG 10 reduced inequalities*

The United Nations' Sustainable Development Goals (SDGs), adopted in 2015, envision a world where health and equality are universally attainable by 2030. My PhD thesis, **Traditional Medical Practices of Mappilas: an ethnographic study on the Mappila Community in the Malabar Region of Kerala,** directly aligns with SDG 3 (Good Health and Well-being) and SDG 10 (Reduced Inequalities), advancing the agenda for inclusive, culturally grounded healthcare systems in India. Rooted in centuries of Islamic, ecological, and community-based wisdom, the Malabar Mappila healing system encompasses herbal, ritual, and spiritual modes of care. Despite its sustained social legitimacy, it remains marginalized from the formal AYUSH structure reflecting systemic inequities in knowledge recognition and healthcare accessibility. Guided by the social determinants of health and health inequities framework, this ethnographic study documents 108 healers and 156 medicinal plants across nine body systems, bridging traditional epistemologies with scientific validation. By proposing a framework for mainstreaming these practices, the study operationalizes SDG 3's call for universal, equitable access to health services while advancing SDG 10's mandate to empower marginalized communities and reduce epistemic and structural inequalities. The findings argue that pluralistic health systems those inclusive of traditional, spiritual, and biomedical knowledge can strengthen community resilience, enhance preventive care, and ensure that no cultural or medical tradition is left behind in the pursuit of global health equity by 2030.

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ABSTRACT

This study explores the traditional medical practices of the Malabar Mappila Muslim community in Kerala and examines how these practices can be recognized, documented, and potentially integrated into India's broader health policy frameworks. Through ethnographic fieldwork conducted between 2021 and 2023, the research investigates how faith-based, plant-based, and ritualistic healing systems form an integral part of Mappila life and identity. The study aims to understand the social hierarchies, ritual customs, gendered healing practices, and ethnobotanical knowledge that sustain this living medical tradition, while analyzing the community's marginalization within the formalized systems of AYUSH and biomedicine. Methodologically, the research employs a qualitative ethnographic design grounded in Community-Based Participatory Research (CBPR). Data were collected through participant observation, in-depth interviews, and an ethnobotanical survey covering 156 medicinal plants belonging to 59 botanical families. The study is theoretically anchored in the Hierarchy of Resort model and the World Health Organization's Social Determinants of Health (SDH) and Health Inequities framework, allowing a critical understanding of how social stratification, caste hierarchies, and epistemic injustice shape access to and legitimacy of traditional healing.

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1. INTRODUCTION

Traditional medicine has a long and established past, which includes a wealth of knowledge, practices and skills based on cultural beliefs, values, and wisdom from ancestors. Traditional medicine is not simply 'healing medicine', but rather, it is embedded in the culture of most communities and societies, and is traditionally used not only for curing disease, but also in efforts to maintain health overall, physically and mentally. 'Traditional medicine' encompasses terms such as 'complementary medicine', 'alternative medicine', and 'folk medicine', and are often used interchangeably, though generally traditional medicine is differential from a country or region's mainstream healthcare system and often related to a cultural sector, whether it is identified, practiced, religiously or traditionally, and involves beliefs, skills, and/or knowledge that off-set or augment that which the legitimate healthcare sector provides. While we may assess the role of traditional medicine concerning modern medicine, it is important to acknowledge that traditional medicine often interacts, fragments and/or produces tension with existing healthcare in its multiple contexts.

This research continues the tradition of examining traditional medicine and its role in contemporary and future medicine through analysis of the Malabar Mappila community's traditional medicine practices . Through literature analysis, the debate has been recorded especially in regard to the continued debate about the use, legitimacy and integration of traditional medicine . In relation to Integration with Modern Medicine, Proponents of traditional Chinese medicine (TCM) promote a more comprehensive, preventative model as a counterbalance to the symptom-based approach of biomedicine. There is increasing interest in assessing how a blended Eastern/Western approach may enhance both individual and public health strategies, particularly in the areas of chronic illness management and mental well-being. The World Health Organization (WHO) has seemed eager to bring attention to the possible benefits that traditional medicine may contribute to public health; however, those opposing express concern over the many traditional approaches that lack thorough scientific rigor. This renders them unsafe when being utilized in the formal healthcare system, which could lead to inappropriate implementation, misdiagnosis, or unsanctioned and unregulated practices that may lead to serious complications. There are many legitimacy, regulatory and standardization issues to consider with respect to the uncertainty faced when traditional practices are implemented into a formal practice that could jeopardize the process of integration. Regarding

validation through science, traditional medicine must be scientifically investigated to be integrated into more formal healthcare systems. Many herbal and spiritual treatments used by communities have shown potential through clinical investigations, especially those addressing digestive health or post-partum recovery. Formal studies are starting to appear, funded by government or institutional support. However, due to the lack of large-scale studies, no definitive conclusions can be made about their efficacy and safety across diverse multicultural contexts. This leaves room for the scientific community to remain sceptical due to the limited anecdotal evidence available for making medical recommendations. There is newfound global talk about patenting and commodifying traditional knowledge. While both governments and pharmaceutical companies are looking into bio-prospecting traditional cures, communities struggle to protect their intellectual property. The issue is that traditional knowledge can be inventoried and archived, but cannot be patented, thus limiting its commercial application, and opens up ethical questions regarding biopiracy and the exploitation of indigenous knowledge and resources without compensation or revenue sharing. In regard to sustainability of Indigenous Medicine and the Transfer of Knowledge; One aspect sometimes overlooked, is the sustainability of the knowledge of traditional medicine itself. With socio-cultural lives changing in the modern world with rapid urbanization, transmission of related medical knowledge through the family and community structures are weakening as well. By understanding that younger generations may be seeing what their family has done as being archaic, these processes are waning with time loss; thus, loosing another potential strand of indigenous medical knowledge. The continued reliance on oral tradition also leaves deficiency in survival aspects, that is, transformation into a formalized knowledge structure. (Chacha et al., 2023; Aldharman et al., 2022; Barnes et al., 2023; Patel & Sharma, 2024; Li et al., 2024; Moyo & Gqaleni, 2025; Zhang & Liu, 2023)

Based on WHO's statistical data (figure below), traditional medicine is a significant healthcare resource for communities and households across the globe. from the statistical exploration of the usage of traditional medicine, it has been identified that it is practiced in almost 170

countries, and the most prevalent method is acupuncture, used in approximately 113 countries. Statistics from 2012 also indicate that close to half the population in a number of industrialized nations routinely employs some type of traditional and complementary medicine (T&CM). For instance, usage levels were 42% in the United States, 48% in Australia, 49% in France, and up to 70% in Canada. Moreover, extensive T&CM use is encountered in other regions of the globe, such as 71% in Chile, 40% in Colombia, and up to 80% in some countries of Africa (World Health Organization, 2019).

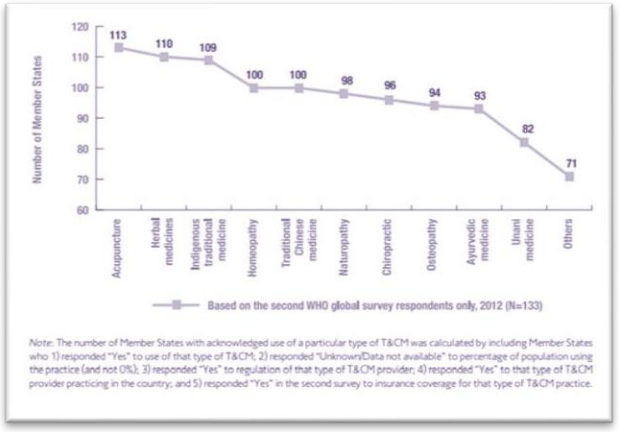


Fig 1: types of traditional medicine used by the state population in decreasing order

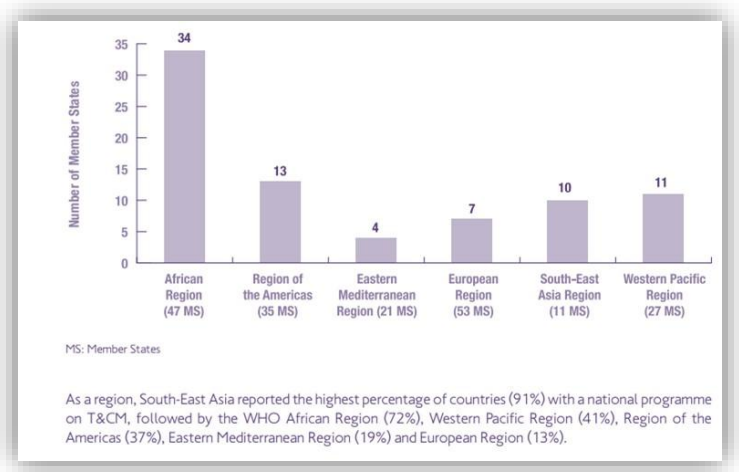


Fig 2: Member state of WHO with a national program for traditional medicine

The figure on the left shows the global distribution of world health organisation Member States that have organised the national programs for all forms of traditional medicine Traditional, Complementary, and Integrative Medicine (T&CM) as of 2018. The South-East Asia Region leads with the highest percentage of countries, 91%, actively supporting T&CM in their healthcare systems. This is followed by the African Region, where 72% of countries have national programs, indicating a strong reliance on traditional medicine. The Western Pacific Region reports 41%, and the Region of the Americas shows 37% involvement. In contrast, the Eastern Mediterranean Region, at 19%, and the European Region, at 13%, fall behind in integrating traditional medicine into public health systems. This difference among regions shows varying levels of support and establishment of traditional medicine around the world.

It was discovered from this study that following the worldwide need for traditional medicine documented by about 90% of WHO Member States, the World Health Organization (WHO) initiated the Global Traditional Medicine Centre (GTMC) in 2022. It was made possible with the major support of the Government of India, and the Centre is located in Jamnagar, Gujarat. The GTMC is based at the WHO Headquarters under the Division of Universal Health Coverage and Life Course. The Centre seeks to bridge the gap between the ancient traditional wisdom and contemporary scientific research. Its priorities are to develop research, facilitate the exchange of knowledge, preserve biodiversity, and build partnerships that can help improve the health and well-being of both humans and the Earth.

Image 1 : India and WHO signs agreement for Global traditional medicine centre GTMC in 2022

1.1 India

In India, the National Policy on Indian Systems of Medicine and Homeopathy (2002) is responsible for guiding Traditional and Complementary Medicine (T&CM) policy . The Ministry of AYUSH, established in 2014, is the central regulatory and supervisory agency for traditional medicine systems, that is, Ayurveda, Yoga, Unani, Siddha, and Homeopathy (AYUSH). India's national records show that the country has more than 771,468 registered practitioners of T&CM, working out to a rate of about 6.4 practitioners per 10,000 population. Of these, Ayurveda has 419,217 practitioners, followed by Homeopathy (293,307), then Unani (48,196), Siddha (8,528), and Naturopathy (2,220) practitioners.

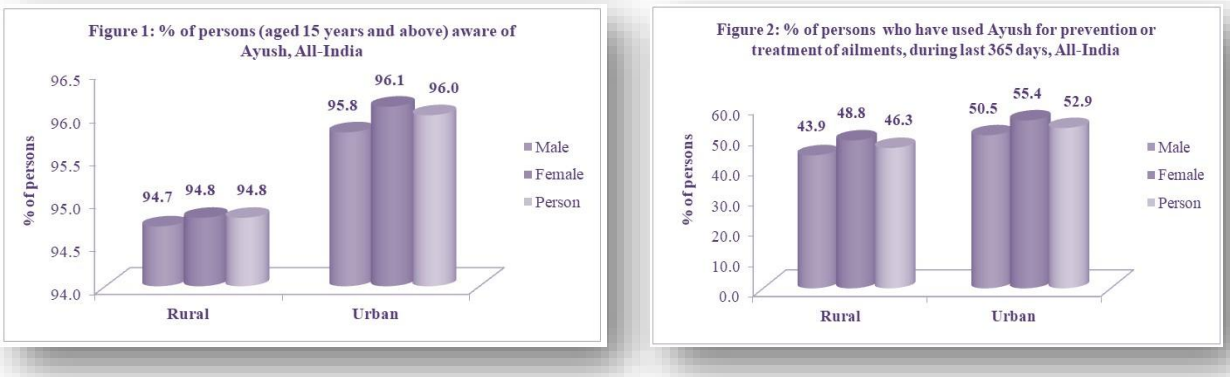


Fig 3: Results of 79th round of the National Sample Survey (NSS) on AYUSH in India

The 79th round of National Sample Survey (NSS) sheds more light on the prevalence of traditional medicine in India. Conducted throughout the Indian Union except for a few scattered villages of the Andaman & Nicobar Islands, the survey collected 181,298 household interviews, both rural (104,195) and urban (77,103).The survey showed that 95% of rural and 96% of urban respondents knew about AYUSH systems. Besides, in approximately 85% of the rural and 86% of the urban households, there was at least one member who was aware of medicinal plants, home remedies, or local health traditions. Patterns of usage indicated that 46% of the rural and 53% of the urban populations had used AYUSH practices for either treatment or prevention of disease during the previous year. Interestingly, Ayurveda came out as the most frequently applied system, especially for rejuvenation and preventive medicine, a testimony to its integral role in India's traditional healthcare systems

1.2 Kerala

Kerala's conventional medical environment is influenced by a vibrant blending of various cross-cultural forces, ranging from Aryan, Buddhist, Islamic, and indigenous tribal ones. The process has given birth to a distinctive health system with codified as well as uncodified practices existing side by side. Muslim doctors, or Hakims, contributed importantly to this integration by combining Unani medicine with local systems such as Ayurveda and Siddha, and practicing Tibb-e-Nabawi or Prophetic Medicine based on Islamic tradition. Kerala's traditional health practices also specialized in areas like Balachikitsa (pediatrics), Unmada Chikitsa (psychiatric treatment), and Vishachikitsa (toxicology), showing a wide range of medical knowledge

Local healing practices in Kerala are particularly remarkable for their concurrent usage of herbal medicines, incantations, and magic that mirror the strongly rooted belief systems among the populace. Although traditional Sanskrit texts such as Charaka Samhita and Sushruta Samhita are known, local medical texts such as *Sahasrayogam, Aharakalpam, Vaidyamanorama, Chikitsamanjari, Yogaratnaprakashika, Yogamrutam,* and *Sarvarogachikitsaratnam* are utilized more prominently and adhered to. This is indicative of a choice of regionally contextualized knowledge over the pan-Indian classical literature.In addition, Kerala's health systems are segmented between the formal traditions of Ayurveda and Siddha, crafted by the urban elite with rigorously developed theoretical frameworks, and informal, folk traditions that continue to be unofficial yet full of community-based healing lore.

Combined, they are a dynamic balance of formal medical science and popular healing wisdom, making Kerala an important place in which to examine traditional medicine in India. (*Deva Matha College Kuruvilangad*, n.d.)

1.3 Purpose of the study

The Malabar Mappila community's healing traditions, influenced by Kerala's Middle Eastern and indigenous influences, are sidelined in standardized systems such as AYUSH. In light of WHO's (2002) acknowledgment of the contribution of traditional medicine to community health, the research critically analyses these healing practices, their social and cultural status, and their marginalization from formal health systems. By exploring and understanding the traditional medical practices, this research provides information and knowledge into possible consideration to formalize this into mainstream public health frameworks whereby it aims to bridge gaps in policy and promote inclusive healthcare models as per the needs of the end user preferences.

The study seeks to record the Malabar Mappila traditional system of medicine, examine the social pattern of healing practices, and investigate its medical ecology. Though not a clinical trial, this qualitative study is an organizing step that lays the groundwork for future attempts to incorporate these practices into general healthcare models. Accordingly this two-phased research is designed with two research questions and followed objectives

RQ 1: *How do we understand the traditional healing practices of the Malabar Mappila Muslim community, and how do these practices relate to broader health policies in India (AYUSH and privatization) and Kerala*

1.1 To Explore the unrecognized healing practices of the Malabar Mappila community.

1.2 To understand and unpack the hierarchy of healers within the Malabar Mappila community.

1.3 To delineate the health-associated customs and rituals of the Malabar Mappila community

RQ 2: *What role do the traditional healing practices of the Malabar Mappila Muslim community play in the broader delivery of healthcare services within this ethnographic context*?

2.1 To document and detail the traditional healing and health care practices of the Malabar Mappilas for recognized body systems based on mainstream phytochemicals used in popular medicine.

2.2 To explore reproductive health among Malabar Mappilas.

2.3 To provide a framework for mainstreaming traditional practices of the Malabar Mappila community within the broader health care systems in Kerala.

1.4. Structure of the Thesis

The thesis is composed of six main chapters, apart from the methodology and conclusion chapters, to explore systematically the Malabar Mappila community's traditional medical practices and health-related customs.

- **Chapter 1: Exploring the Unrecognized Healing Practices of the Malabar Mappila Community;** This opening chapter offers an in-depth analysis of the informal and lesser-known healing strategies common to the Malabar Mappila community.
- **Chapter 2: Unpacking the Social Hierarchy of the Malabar Mappila Community** The second chapter is focused on the hierarchies and alligned healing activities within the community. the chapter brings out how these social structures affect access, and transmission of medical knowledge.
- **Chapter 3: Documenting Traditional Medicine of Malabar Mappilas for Recognized Body Systems Based on Mainstream Phytochemicals Used in Popular Medicine;** This chapter is a documentation of Malabar Mappila community's traditional medicinal knowledge, particularly treatments according to accepted body systems respective to the recognised body system. the chapter starts with an introduction of the different perspective of body system prevailing in the community.
- **Chapter 4: Demarcating the Malabar Mappila Community's Health-Related Customs and Rituals;** Chapter four explores the religious traditions, health rituals, and cultural customs related to health and wellness among the Malabar Mappilas. These customs are placed in the overall context of social and spiritual life.

- **Chapter 5: Reproductive Health;** This chapter focuses on reproductive health of Malabar Mappila community, by documenting its traditional practice, beliefs, and medical treatment associated with the reproductive realm [fertility, giving birth of men and women.

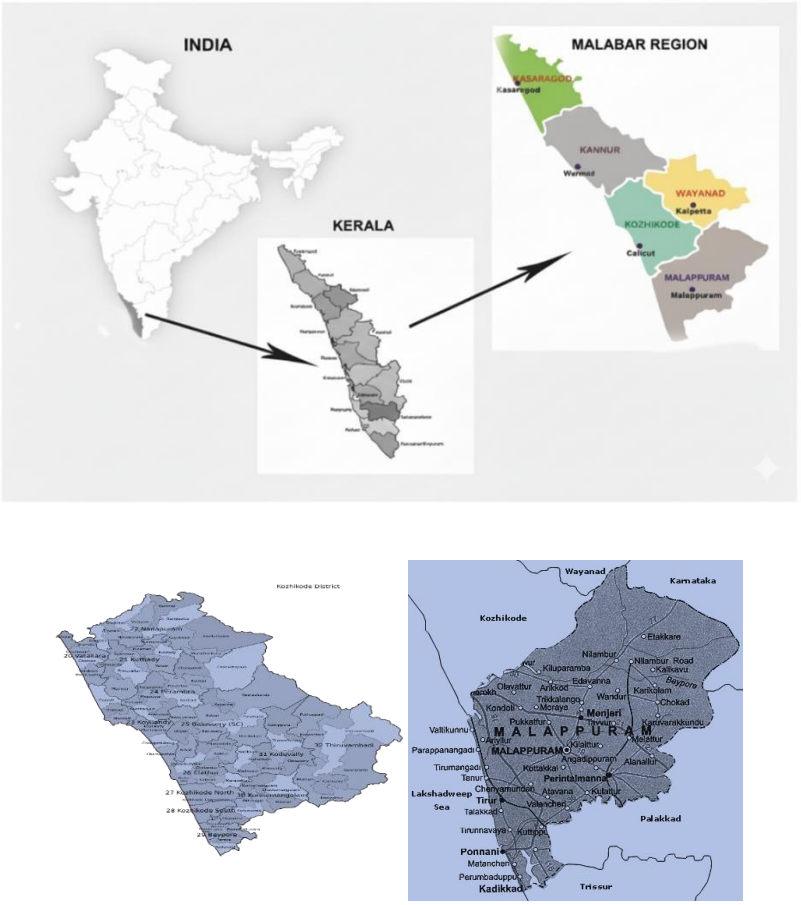
- **Chapter 6: Theoretical Analysis of the Study;** The chapter provides a theoretical examination of the research findings by using Hierarchy of Resort and Social Determinants of Health (SDH) and Health Inequities framework.
- **Chapter 7 : Pathways to mainstreaming traditional medicine of Malabar Mappilas ;** This chapter documented the recommendations for long term mainstreaming of Malabar Mappila's traditional medicine

This systematic evolution enables the thesis to advance from empirical recording to subjectively critical theoretical discourse, offering an in-depth understanding of traditional medicine and health practices among the Malabar Mappila community.

2. METHODOLOGY

All information collected was subjected to qualitative analysis using thematic coding, content analysis, and interpretive comparison. Field notes, interview records, and observations were digitally transcribed and analyzed using NVivo. Automated text analysis facilitated the detection of recurring phenomena, key concepts, divergences, and relationships across the different aims of the study. Data gathered through ethnographic observation and interviews were analysed inductively and theoretically by applying theoretical frameworks for coding for caste, hierarchy, intersectionality, and social stratification. Ethnobotanical information was classified according to plant species, therapeutic purposes, and preparation techniques and then cross-checked with ancient medical literature for verification. Thematic analysis was employed in participants' accounts of food consumption, reproductive health, and spiritual healing to highlight the culturally embedded and gendered sociocultural structures. The value and depth of the analysis was enhanced and triangulated through interrelation composites.

Figure 4: Geographic Map of Fieldwork Sites



In the Malabar region, data collection was conducted in different stages between 2021 and 2023. The Covid-19 pandemic greatly affected the fieldwork's first stage, requiring the use of phone and virtual interviews to keep the data gathering process going. As restrictions loosened, later stages included direct ethnographic immersion, participant observation, in-depth interviewing, and ethnobotanical surveying in selected community spaces, religious centers, healing centers, and homes.

2.1 For objective one

Since this research was intended as an ethnographic study, it naturally incorporated elements of Community-Based Participatory Research (CBPR). This approach was necessary due to the scarcity of documentation on Malabar Mappilas' health practices, despite their cultural legacy being extensively studied. Additionally, some data were collected during the COVID-19 period, requiring the use of telephonic interviews to ensure continuity in research. The researcher stood in a flexible reflexive stance responsive to the community context.

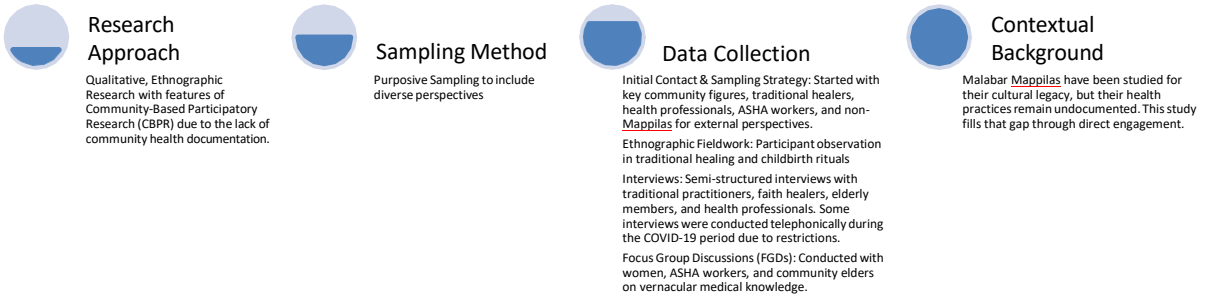


Figure 5 : flowchart of data collection for objective one

2.2 For objective two

This research was grounded in the theoretical domains on caste and social stratification. Louis Dumont's Homo Hierarchicus and G.S. Ghurye's Caste and Race in India laid the bases on hierarchy and purity. Kimberly Crenshaw's intersectionality theory offered a lens to think about the caste/class/gender/religious affiliation nexus within Mappila social structure. Imtiaz Ahmad's study on Caste and Social Stratification among Muslims in India also delivered

unique insights with regard to the caste-based considerations in Indian Muslim societies, insights which were directly relevant for this study. The table below represent the key concepts from the analytical framework and its application in the research context

Framework	Key Concepts	Application to Malabar Mappilas
G.S. Ghurye – Caste Characteristics	Segmental Division: Society is divided into hereditary groups.	- Thangals, Kurikkals, Ossans, and Pusalans form distinct social groups with limited mobility.
	Hierarchy: Ranked social structure.	- Thangals at the top due to religious status; Ossans & Pusalans are lower-status groups.
	Civil & Religious Privileges: Access to religious authority.	- Thangals hold spiritual leadership, Pusalans & Ossans have restricted access to religious spaces.
	Endogamy: Marriages occur within caste-like groups.	- Thangals and Kurikkals prefer intra-group marriages to maintain status.
	Occupational Specialization: Hereditary occupations.	- Kurikkals as bone setters, Ossans as circumcisers, Pusalans in fishing.
	Social Intercourse Restrictions: Food and ritual exclusions.	- Lower-ranked groups face restrictions on sharing meals with higher groups.
Louis Dumont – Hierarchy & Purity	Hierarchical Ordering of Status	- Thangals claim superior status through Islamic spiritual lineage, reinforcing their legitimacy.
	Purity & Pollution Concepts	- Ossans seen as 'impure' due to their association with bodily fluids (barber/midwifery work).
Imtiaz Ahmad – Caste Among Muslims	Persistence of Caste-Like Hierarchy Among Indian Muslims	- Thangals, Kurikkals, Ossans, and Pusalans maintain rigid social stratification despite Islamic egalitarianism.
	Islamic Justifications of Social Stratification	- Hierarchy is reframed in terms of religious devotion (e.g., Thangals' spiritual authority).
Intersectionality (Crenshaw)	Overlapping Identities of Caste, Class, and Religion	- Pusalans face double marginalization as converts from Hindu fishing castes.

Figure 6: Analytical framework for objective two

2.3 For objective three

This is the third objective-one that explores spirituality, dietary practices, and food-based therapies in Malabar Mappila healing traditions. An ethno-methodological approach was adopted since this is eminently cultural and embodied in nature. The study first addressed cultural representations such as oral narratives, literature, rituals, healing performances, and social practices around food and prohibited foods, with an emphasis on the intersection of spirituality and food in health and sickness narratives. This was conducted through field immersion and participation in community healing events and spiritual gatherings, such as Maulid

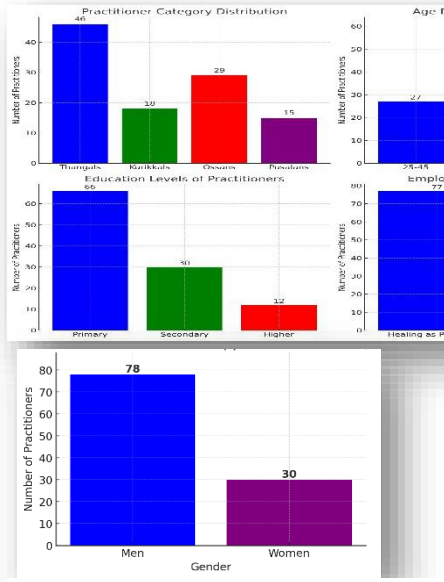


Figure 7: Demographic Characteristics of Malabar Mappila Practitioners Included for the Study [108]

recitations, Uroos, and Dua practices, which at times aid the healing process in Mappila communities.

Interviews were held with traditional healers: Thangals, Ossans, Kurikkals, and Pusalans, who described spiritual prescriptions, religious invocations, and food regimens that are associated with the process of healing. Besides, women caregivers and patients were also interviewed to describe embodied experiences of healing as well as gendered aspects of food and ritual in everyday health concerns. These narratives were recorded, transcribed. Extended documentation considered the recording of therapeutic foods, their ingredients, and methods of preparation, focusing on spiritual injunctions and bodily symptoms. Recipes, healing food rituals, as well as the mode of consumption of these foods, were cataloged together with spiritual instructions to offer a comprehensive synthesis describing the harmonic relationship between dietary and religious practices and localized healing.

Demographic Characteristics Of Malabar Mappila Practitioners Included For The Study [108 numbers]

- Practitioner Category – The largest group among participants are *Thangals* (N=46), followed by *Ossans* (N=29), *Kurikkals* (N=18), and *Pusalans* (N=15).
- Age Distribution – Most practitioners under study fall in the 45-65 age group (N=61), followed by those aged above 65 (N=20) and 25-45 (N=27).
- Education Levels – The majority of practitioners under study have *primary education* (N=66), followed by *secondary education* (N=30), while only a few have *higher education* (N=12).
- Employment Type – A significant number of practitioners under study (N=77) practice healing as a profession, whereas (N=31) provide healing as a community service.
- Gender/Sex – the majority of the practitioners participated in study are men [78] and remaining women [30]

2.4 For objective four

To investigate the transmission, transformation, and conservation of Malabar Mappila healing knowledge from generation to generation a targeted ethnobotanical survey was undertaken. This included recording 156 medicinal plants belonging to 59 plant families, employed exclusively for curing purposes by the community. The data were gathered from traditional healers through semi-structured interviews as well as through direct and participatory

observation of the processes involved in the making and dispensing of herbal remedies for major systemic illnesses. Special focus was paid to the methods of dosage and treatment, transmission of knowledge which in many cases relied on oral teaching and apprenticeship

Cross-verification of the identities of plants and healing purposes through Ayurveda and Unani classical manuscripts and Islamic medical texts further enriched the fieldwork. Narratives of healers were also supplemented by comparing their preparations with the ones presented in prominent ethnobotanical reference books, such as Medicinal and Aromatic Plants of the Middle-East (edited by Zohara Yaniv and Nativ Dudai, 2014) and Ethnobotany and Medicinal Plants of Indian Subcontinent (edited by J.K. Maheshwari, 2003). These sources offered comparative information on transregional convergence in phyto-therapeutic knowledge and assisted in positioning Mappila healing within a wider west Asian-South ethnomedical matrix. Through this multi-faceted methodological framework grounded in lived ethnography, plant-based research, and intertextual validation the research traced not only the medicinal plants used, but also epistemic changes in the ways plant knowledge is categorized, transmitted, reshaped, and digitalized across generations of healers.

2.5 For objective Five

The researched reproductive health practices of the Malabar Mappila community based on a famous female traditional healer's information and deemed 40 pregnant women as key contributors. These women were interrogated during their second and third trimester mosque visits to seek for smooth deliveries in prayer halls that are culturally and socially suitable spaces. The interviews focused on dietary customs, spiritual rites, knowledge about pregnancy attuned to the body, and various therapeutic practices relating to pregnancy. The women's husbands were also interviewed to gain a fuller understanding, offering male views on family-based healing and reproductive care support. Nevertheless, collecting information from practitioners and traditional healers about their reproductive care activities faced considerable difficulties, particularly in explaining a gendered division of labor, responsibilities, and care. Coupled with this was the socio-cultural gender framework of lack of physical access to the site of study, which required the researcher's gendered situatedness to be taken into account. To address these gaps, a female field investigator was hired who, because of her previous work with the community, had developed relationships with the people that made it easier to access delicate stories about pregnancy and healing.

2.6 Note on methodology – for Chapter 6 and Chapter 7

The choice of Hierarchy of Resort and Social Determinants of Health (SDH) and Health Inequities framework was guided by ethnographic patterns revealed in earlier chapters, where community members' pathways to care demonstrated structured hierarchies of trustworthiness, accessibility, and social influence. Through framing field observation within these theoretical lenses, research was then able to systematically explore social, economic, gendered, and cultural determinants' impact on both health-seeking behavior as well as perceived legitimacy of Malabar Mappila traditional medicine. This theoretical base then informed Chapter 7, guiding identification of practical means of mainstreaming such as participatory documentation, culturally appropriate registration, ethics training, integrated clinics, and policy inclusion while also ensuring recommendations continued sensitivity to local epistemologies, community priorities, as well as structural inequities.

3. CHAPTER- I

Exploring The Unrecognized Healing Practices Of Malabar Mappila Community

3.1 Introduction

Earlier studies on medical practices and treatment modalities have shown that public tend to give an inherent superiority to western medicine. On the behalf of this statement, there is a vibrant debate happening throughout world and academic field regarding the play of ‘power’ in medical system. Analysing the power dynamics in medical system, especially in Indian setting where pluralism in medical practices is efficiently employed has not only limited to dominator-subordinator debate but also include the problem of ‘recognition’ and ‘unrecognition’. Through simply employing a perspective that analyse on first dimension of power in medical practices will help in comprehending the domination of western medicine and subordination of other medicines. But such a perspective does suffer from incorporating the types and kinds of medicine which is not even considered to be in the list of subordinated. For instance, Folk medicines and the traditional healing practices possessed by different communities in India and other countries were kept ignored and not even given the status of ‘subordinate’ list of medicine. Moreover, such medical practices have never been considered as a form or genre of ‘healing practice’ nor believed in its medicinal potential. Most of the time, these types of healing practices have never been a ‘subject’ of discussion. Such an ignorance is better understood when we employ the three dimensions of power by like Steve Luke’s. Bachrach and Baratz developed Lukes' two-dimensional theory of power’ as an elitist alternative to the one-dimensional pluralist approach (Lukes, 1974). This two-dimensional perspective admits the observed power of Dahl's theory but claims that power is exerted when topics are structured deliberately such that some are not mentioned (Lukes, 1974). Conflict that can be seen is totally avoided by keeping contentious matters off the agenda, but it is still obvious that "power over" is being used (Lukes, 1974). The first dimension would only examine the fight over issues that were actually permitted on the agenda and the appearance of open discourse, missing the more subtle displays of dominance (Lukes, 1974). This analysis of

Luke's aids in analysing the politics behind the selection of subject to be discussed in the public. Hence, from the discussion and debate platforms of medical and healing practices the rivalry topics are mostly designed as western medicine versus Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy where the existence of other folk medicine is completely ignored. In a society like India, where diverse communities and groups from different ethnicities, caste, class and even inter-ethnic, inter-racial and inter-country people exists, is also a hub of diverse practices. Whether it is in terms of religious, customary, ritualistic or medical / healing practices do show the essence of this diversity. Hence, including and incorporating the diverse Indian healing practices into the curriculum of discussing larger sphere of 'medicine and treatment' is a requirement to achieve 'inclusiveness'. Ignoring and being partial in giving 'legitimacy' to a few or selected genre of healing system point towards the politics of recognition. The idea of politics of recognition has its philosophical foundations in Georg Hegel, who proposed that the construction of an individual identity involves the reciprocal acknowledgement of other individuals or subjects. As a result, the formation of one's sense of self depends on social acceptability. In the struggle for the rights of marginalised sexual, ethnic, linguistic, or religious minorities inside a nation-state, politics of recognition, as defined by political theorists like Charles Taylor and Nancy Fraser, played a significant role. Even though Mappilas in Malabar area of Kerala are the majority in those part, become a minority when we consider India and Kerala in general. Hence, it is not an exception regarding them being falling under the larger debate of recognition versus unrecognition. As the focus of this paper is to explore the unrecognized medical practices of these Malabar Mappilas habituating in Kerala, the primary focus has been given on their traditional healing practices. On this premise, researcher by locating on the traditional healing practices of Malabar Mappila's of Kerala, applied the same 'politics of recognition' in a macro basis specifically in a larger, plural sphere of healing traditions.

3.2 The requirement for recognition

In Malabar, traditional and folk medicine continues to be crucial for sustaining and enhancing health. Traditional medicine and folk medicine have described by the World Health Organization as "diverse health practises, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicine, spiritual therapies, manual techniques and exercises applied alone or in combination to maintain well-being, as well as to treat, diagnose, or prevent illness" (WHO 2002, p.7). The percentage of the population utilising traditional medicine/ folk medicine is said to be as high as in India, China, and Africa, and policies for its

integration into public health care systems have been developed in different countries to varied degrees (WHO 2001). People's treatment-seeking behaviour is defined by the usage of multiple therapy kinds either sequentially or concurrently as a result of the pluralistic nature of health care systems (Weller et al., 1997; Ryan 1998). Many research on treatment-seeking behaviour in developing nations simply take into account subjects' initial treatment preferences (Ahmed et al. 2000a; Pillai et al. 2003; Pokhrel and Sauerborn 2004). The true patterns of traditional medicine use may only be revealed by incorporating numerous resources; hence it is important to include many resources in studies in order to completely grasp the significance of traditional medicine/ folk medicine.

Malabar Mappila's traditional healing practices/ folk medicine is the use of manual methods, exercises, spiritual treatments, and medications derived from plants, animals, and minerals either alone or in combination to cure, diagnose, and prevent ailments or preserve well-being. Traditional medicine/ folk medicine is frequently employed to cure or prevent illnesses, especially chronic conditions, therefore enhancing quality of life. It holds a significant position in the health care systems of emerging nations. According to estimates, traditional healing practices provide care for more than 80% of the population in these nations (Birhan, W. 2011). An educated individual or a layman who claims to have a healing capacity to treat illnesses is referred to as a traditional healer. He could have developed a reputation in her/his own town or abroad for treating particular sorts of symptoms or afflictions. Traditional healers/ folk healers may get their abilities or methods from their faith, the paranormal, their experience, their training, or their ancestry. Traditional/ folk medicine and complementary/alternative medicine use has increased globally during the past ten years, in both industrialised and developing nations. Cultural acceptance, perceived efficacy, price, accessibility, and psychological comfort are the motivating factors in emerging nations. The other problems include the lack of adequately qualified contemporary health professionals, inaccessibility of modern health services in terms of distance, money, or time. Encouraged by these motivating factors as well as inadequacy problems, Malabar Mappila's healing tradition become a significant mode of treatment in Kerala. Even though they kept ignored from considering it as a genre of medical / healing system, public in Malabar tend to follow their own community medicine at prime facie. Any other treatment practices are perceived as secondary and the same possess a great role in maintaining 'good' health within the population. Through possessing a vital role in maintaining the health sphere of Malabar, the need of the time is to recognize the traditional healing practices of Malabar Mappila

3.3 Malabar Mappila's healing tradition and the politics of unrecognition

Complementary and alternative medicine has gained significant attention during the past ten years in Malabar. According to current estimates, a significant section of the population in many areas of Kerala state relies significantly on traditional healers and medicinal herbs to address basic healthcare needs. Although there may be access to modern medicine in Malabar, herbal medicines, or phytomedicines, have frequently maintained their appeal due to historical and cultural factors. In parallel, a lot of individuals in Malabar and other areas of Kerala state have started using supplementary or alternative medicines, including herbal remedies. According to World Health Organization (WHO), the global market for herbal medicines and herbal products is now valued at US$ 62 billion and is expected to reach US$ 5 trillion by the year 2050. The market is expanding at a 7% annual rate (The Times of India, 7-4-2000). The majority of traditional medicine (TM)/complementary and alternative medicine (CAM) systems, which include Malabar Mappila's healing practices, share the holistic approach of promoting health, preventing disease, and assisting the individual in treating disturbances by controlling his or her physical, emotional, and mental aspects as well as the environment in which they live. According to the traits and principles of Malabar Mappila's healing tradition, it may be utilized to control, enhance, and promote human body function in addition to treating disease and easing symptoms. Among the plants used for such healing traditions, only a small number of plant species that produce therapeutic herbs have undergone scientific evaluation for potential medical use. Even fewer plants, their extracts and active components, and the preparations incorporating them have safety and effectiveness evidence available. A crucial challenge nowadays is ensuring the efficacy, safety, and purity of medical plants and herbal products. Healthcare professionals and the general public both require up-to-date, reliable information on the efficacy and safety of medicinal plants. The creation of national laws and regulations on TM/CAM has grown to be a major issue for both health authorities and the general public as a result of the widespread use of TM as well as CAM and the quick expansion of worldwide herbal medicine marketplaces. Regulations that can guarantee the safety of TM/CAM therapies and goods, encourage recognition of these systems and modalities, and further define their position in contemporary healthcare systems are being demanded by TM/CAM providers, other healthcare professionals, and customers alike. But such steps have not included all the complementary medicine available in each country. For instance, in the case of India itself, the major legal debate with regard to traditional medicine confined to

Ayurveda only. On this premise, healing traditions of Mappila's and such other subaltern medicines are struggling to get recognized. Another major conspiracy regarding the non-recognition of such medicine is the exclusionary attitude of mainstream medicine. When used improperly or by an inappropriate patient, complementary treatments have the potential to be harmful..

Table 1: General Attitude of Mainstream Medicine towards Subaltern Medicines

Conceptions / Aspects	Description
Poor quality of care	There is no legal necessity that a complementary therapist be qualified, trained, or experienced in the absence of regulation. A dishonest therapist may do harm to a patient.
Indirect harm	Relying only on complementary treatments may cause a patient's medical diagnosis and treatment to be delayed.
Delay in treatment	A delay might cause major problems or even death in the event of serious conditions like cancer.
Side effects	Using complementary medications may result in unintended and even harmful side effects. In pregnant women, the herb feverfew, for instance, can trigger uterine contractions and even miscarriage

These are the general attitude of mainstream, medicine towards subaltern medicine. Hence, instead of finding the potentiality of subaltern medicine, they are often treated as an abandoned category. Malabar Mappila's traditional healing practices which belong to this subaltern medicine thus kept under abandoned category. Consequently, Malabar Mappila's traditional healing system is not recognised as a medical practice. Regardless of its beneficiary potential and public health significance, the same has been ignored. The primary ignorance is visible from formal system, i.e the state. The non-recognition of state and denying it legitimacy is a serious issue that help us to comprehend why ethnomedicine/ community medicine like Malabar Mappila's traditional healing practices faces hindrance in its mainstreaming. This also created another problem, where their healing practices kept out of the boundary of 'Indian medicine'. This is visible from the changing definition of 'Indian medicine' and associated changes in the terminologies of public health policies. The majority of descriptions of health

care in modern India characterise "Indian medicine" as fundamentally consisting of institutionalised text-based medicinal systems, both indigenous (Ayurveda, Unani, and Siddha) and imported ("allopathy," or biomedicine, and homoeopathic). In reality, the majority of these "systems" include both trained professionals with college degrees and credentials and "traditional" suppliers who have learned their specialisations through informal apprenticeship. The "local health traditions" (or LHTs) mentioned in current policy texts are not always well defined in contemporary policy publications. In its study of facilities and usage, a nationwide survey by the NRHM on the "status and function of AYUSH and local health traditions" classified AYUSH as a single category and acknowledged LHTs as extending beyond Homemade treatments and knowledge of medicinal plants. Four groups were used to describe the "informal providers" of local health traditions: "Traditional Health Practitioners," "Folk Healers," "Faith Healers," and "Dais" (traditional birth attendants). However, only the gathering, testing, and marketing of medicinal plants are included as actual implementation tasks for local health traditions in NRHM policy papers. Local communities and primary health care providers whom are encouraged to "validate," "test," and "apply" these bioresources, which suggests that only some LHTs (those involving the use of medicinal drugs) are anticipated to have potential for integration with state-sanctioned treatment. The state's definition of LHTs omits a wide range of vernacular treatments, including those that use mantra or other ritualistic techniques, manual manipulation, or diet-based treatment.

"*The Department of AYUSH gladly supports LHT projects only if they are likely to uncover some practises not known in the AYUSH texts, which could be validated and added to the existing texts and AUS [Ayurvedic, Unani, and Siddha] pharmaceuticals. This emphasis could be interpreted to mean that commercialization of herbal knowledge is a potential goal. However, it is typically not thought of as a worthwhile goal to promote local usage or people's empowerment through the legitimization of their knowledge*." (Lampert, H 2018)

It is true from the fieldwork findings that Malabar Mappilas hold resemblance with AYUSH practices, most importantly unani. But that doesn't mean their mode of healing is completely a replication of these recognized traditional medicine like AYUSH. For instance, The Malabar Mappila's bonesetters or more precisely "bone physicians" are unlicensed but frequently hereditary medical professionals who focus in the treatment of musculoskeletal issues using both manual manipulation and herbal ointments. They are often referred to as "*kurikkals*" in Malabar and offer a well-respected, affordable alternative to state-approved medical care for fractures, sprains, and other musculoskeletal issues. They are the "experience-based

practitioners. Despite being Muslims, the practitioners participated in the research with frequently portrayed their methods of therapy as being similar to Ayurveda, but not exactly the same. These practitioners attributed their effectiveness in treating patients to the primarily homemade oils and herbal pastes they utilised. Hence denying its speciality and restricting it to 'known practice for AYUSH' is a clear politics of ignoring subaltern medicines. Later, in order to incorporate these '*kurikkals*' in to the mainstream a regulatory board were established. An MBBS-qualified doctor and a registered nurse were among the members of the regulatory board that met to evaluate the practical skills of bonesetters and other unlicensed practitioners. Other practitioners with recognised degrees in either Ayurveda or Unani were also present. This clearly indicates an officially sanctioned hierarchy among indigenous therapeutic forms and demonstrates how systematised medical traditions that offer standardised training and qualifications were in turn deemed hierarchically superior to noncodified medical traditions. A description of a recent attempt by the Kerala government to permit specific "groups" of unregistered practitioners to practise, such hierarchies are pervasive and persistent (Lampert , H 2018) . However, the history of interactions between a vernacular therapeutic specialisation and governance in Kerala, specifically Malabar shows that state regulation may have significant and unforeseen effects on the delivery of healthcare; in the case of the bone settlers or '*kurikkals*', the removal of registration opportunities did not cause their decline or disappearance as a source of treatment.

Another reason behind non-recognition is the problematising attitude by the mainstream. The scenario of Malabar Mappila *Ossans*, the barber-surgeons, provides another illustration of the politics surrounding recognition. Under this name, they do medicine and minor surgery in Malabar. Very few of them had degrees in unani medicine from colleges, while the some have belonged to homoeopath from, mostly from older generation. On their signboards, most of them listed their conventional titles, albeit few of them was hesitant to provide more information. An elderly local who knew several of the barber-surgeon families and whose father had been an accomplished Unani physician noted that barber surgery as a hereditary profession had all but gone and that most of these families had changed to other industries. The traditional function of barber-surgeons, according to him, has not only been neglected but also complicated. This complication is mainly based on the 'problematization' of their work. Since Muslim charity groups started offering this procedure, carried out by biomedically certified practitioners, barber-surgeons' traditional function as circumcisers has been rendered obsolete. However, according to two of the barber-surgeons participated in the study, they continue to

perform circumcisions and offer therapy and minor surgery for skin issues as part of their inherited profession. This brief comparison raises the possibility that certain vernacular experts may become professionals by pursuing degrees in other, codified indigenous medical practises, maybe in response to a fall in demand brought on by the replacement of part of their services by biomedicine.

To convince the state and to encourage public health policies that incorporate such ethnomedicine is only possible with academic researches. This is because, only an academic endeavour could bring Malabar Mappila's healing practices to the broader framework of 'Indian medical practices' and to the changing environment of indigenous medicines. Indian anthropologists who studied Kerala's healing practices have continued to record ethnomedical and ethnobotanical practises, mostly among "tribal" peoples, while emphasising a positivist scientific tradition that primarily focuses on physical and biological anthropology. However, the investigation of indigenous treatments practicing in different communities are declined. It has typically grown somewhat out of date in terms of vernacular (noncodified) customs. They have increasingly shifted their attention away from the study of " ethnomedicine" in recent years in favour of more universal issues, such as the pervasive and growing impact of the pharmaceutical industry, international bioscience markets, the trade in organ donors, maternal health, and the morality of reproductive surrogacy in India. Research on "medical pluralism" in India shows a progressive departure from investigating therapy as used in particular grounded contexts. From an early "village-based" approach, the emphasis of academic research has expanded first to the study of codified systems at the regional or national level then, more recently, to recording the effect of global biology. This move away from in-depth analyses of therapeutic traditions as they are practised skews perceptions of what constitutes medical diversity in modern India in two ways, although being important in showing the significance of extra local influences. Relationships between distinct therapeutic traditions and the setting-specific cultural activities (like circumcision) with which they have traditionally been related and in which they retain or lose local relevance. Second, a lack of focus on noncodified indigenous therapies and the local interactions between various medical forms has caused a lot of research on indigenous medicine in India and Kerala to agree with official policies that eliminate or stigmatise current informal therapeutic resources, tacitly accepting a modernist narrative of decline that postulates the eventual displacement and eradication of vernacular traditions without official legitimacy. This shift in academia and from state again contributed

to the rise of reluctance towards considering these subaltern medical practices like Malabar Mappila's healing tradition.

The need to empirically ascertain how various treatment modalities within a medically pluralist setting are configured, both historically and in relation to one another and to the state, is demonstrated by this comparison of the changes in the trajectories of the Malabar Mappila's healing traditions over time. It also demonstrates how when indigenous therapeutic forms are combined into unitary categories like "traditional (codified) medicine" and "folk medicine" or, in the case of current government designations as simply "local health traditions," and reflects power hierarchies .

3.4 Malabar Mappila in Kerala's healing traditions.

The archaeological and contemporary genetic data of Kerala reflects that Since prehistoric times, human groups have probably moved into the Indian subcontinent in general and to Kerala in particular. The first inhabitants were aware of the medical properties and applications of several plants and other substances. The large body of medical knowledge that has survived to the present day is the consequence of extensive development via trial and error and information exchanges happened across various societies and areas. As a result of trade and assimilation, conventional medical procedures thus required to conform to contemporary biomedical norms. Thus Ayurveda, Unani, and Siddha have entered the mainstream to complement biomedicine because of the rising understanding of the inherent worth of conventional medicine among the scientific community and the general population. To address the healthcare demands of modern society, the challenge today is to combine the finest elements of several therapeutic systems. Folk healers, who possess such a different element of therapeutic practices come from all social strata, although previously Sanskrit-based Ayurvedic medicine was only practised by specific sections of society. Even if they lack the intellectual air, folk practitioners from lower social classes are highly regarded for their expertise in particular therapeutic modalities. For instance, intellectual *Ashtavaidyas* frequently turn to traditional healers for assistance with child care, poison therapy, or mental illnesses. Through these contacts and exchanges with local folk traditions, classical Ayurveda has evolved throughout the years. There were many sources of medical knowledge on the subcontinent even before it was enshrined in the canonical texts of Ayurveda. People from all social strata who interact with their surroundings on a daily basis practise healing. They vary from simple home treatments for minor ailments and nutrition to more complex practises like midwifery, bone

setting, and the treatment of snake bites and mental problems. There were also professionals in physical medical procedures, bloodletting, and those with a deep understanding of medicinal herbs. Each of these folk practise locations has its own folklore that has maintained and passed on such expertise.

The history of Kerala's traditional medicine is not accurately documented. Folk medicinal practises are said to have started approximately 3,000 years ago in Kerala. Folk medicine's main source in ancient times was connected to places of worship. People typically sought treatment for their health issues after initially discussing them with clerics. In Kerala, these customs are still in use. Inducing vomiting, for instance, is a treatment for a variety of conditions, including asthma, psychiatric problems, the removal of poison, intoxication, etc. In a Shiva temple in Thiruvizha in the Keralan district of Alappuzha, this type of practice is still common. To cause vomiting, a medication made from Lindernia cruslacea (Scorphula riaceae) is utilised. In Ayurveda, "Vamana," one of the "Panchakarma" treatments, is closely related to this kind of treatment. The neurological, respiratory, and digestive systems' cleansing is the main goal of this type of treatment. In Kerala, there are two primary streams of indigenous health customs . Ayurveda and Siddha are two examples of ancient health traditions that are highly organised, categorised, and codified medicinal systems with profound conceptual and theoretical underpinnings and philosophical justification. The urban aristocracy developed these structures. Although the other stream is unorganised and uncodified, it is highly rich and diversified. However, it is a condensed understanding of the people's experience. Every village in Kerala has at least three traditional healers. More than 50,000 people will be among them. Even today, some of these traditional healers are so well-known that city dwellers travel to them for care. For instance, A *kurikkal* doctor from Malabar Mappila community from Kerala's Malappuram district sees 60 people on average each day and administers medication for a range of illnesses. He specialises in treating liver problems, various forms of nervous system illnesses, and asthma. He makes his own medication from the medicinal plants that are readily available in the area. He makes decoctions, medicated oils and powders, and do massages, etc. Some Kerala's folk/tribal healers are reputed to have treated a number of chronic ailments that even contemporary doctors had previously deemed incurable. Consequently, Kerala in general and Malabar in particular has a long history of healing/medical practices. This is why Kerala's health care system is still heavily relying on traditional medical practises. The development of Kerala's traditional medical system has been influenced by a variety of sources, including folk healers, the Vedas, Buddhism, Jainism, and the Arab medical tradition that was practised for

centuries in the coastal regions of Malabar. Another specialised area of Kerala's traditional medicine is the so-called Adivasi medicine of the tribal population. A vibrant intellectual environment evolved around temples in Kerala between the 13th and the 17th centuries, notably in the Nila valley region of Malabar, where scholarship and scientific study on medicine, mathematics, and astronomy achieved great advancements. When the Sanskritic literary tradition of ayurveda came in the sixth and seventh centuries, the Vaidya traditions were already well-established in the area. Later, the term "*Vaidya*" evolved to refer to both regional customs and Sanskrit ayurveda. The many strands of *Vaidya*, unlike elsewhere in India, remained the purview of certain castes and occupational groupings rather than a single caste of Vaidya's [ayurvedic physicians]. In Kerala, the traditional healers of Malabar Mappilas occasionally specialised in treating particular diseases. Examples of typical medicinal plants used to treat ailments by them are provided as follows ; They use Drynaria quercifolia (Marappanna)'s rhizome for treating jaundice, Moringa oleifera's (Muringa) tender leaves for eye disorders, pterospermum heyneanum(*Ellutipatta*) 's bark for bone setting, Aristolochia tagala (valia arayan)'s root for snake bite, Alangium lamarkii (Anakolam)'s root for dog bite, Chenopodium Ambrosoides (cheriya peechambam) plant for rabies, Eclipta alba (kaithonni) plant for Asthma, Cephalandra indica (Koval)'s root for Mental disorders etc The community of Mappila established a wide range of expertise in this area. They wrote several books in Arabi Malayalam and translated a large number of novels from other languages. The Mappila people began combining traditional scientific knowledge with ceremonial rituals in the 19th century. Clerics plays a significant influence in Muslim health concerns. Even yet, there was a wealth of information about medical procedures and therapeutic techniques in the Arabic and Arabi-Malayalam books penned by local experts. One of the Malabar Muslims' greatest traditions is the transfer of knowledge through Sufi Silsila's (Sufi Chains) and family heritage. Malabar Mappila's treatment of health issues also evolved into a ceremonial and customary practise as the entire way of life was entwined with religious practises. For instance, while we comprehend the practice of childbirth among Mappila Malabar, there do have a long-standing healing practice; Malabar Mappilas, particularly women, sought medical attention from *Musliyars, Thangals*, as well as *Dargas* and *Jarams*. The "*Pinjanam Ezhuth*" was the first action taken when a lady became pregnant. The *Musliyar* will next carry out a number of customary rituals, such as *Noolu Kettal, Uruk Ezhuthal, Burda Manthrikkal*, etc., all of which were thought to be essential for a simple delivery. The *Musliyar* will prepare something known as *Kalam Varach Thakseer Aakkiyath* when labour pains begin. *Vettila ezhuthikkal, vazhakai prayogikkal*, etc. will follow. If there is a problem with the delivery, they were required to

recite a particular passage from the Quran, known locally as "*Wassama'a othi padi kadakkal*." The indigenous midwife in Malabar was referred to as "*Vayttati," "Pettichi,"* or *"Ottachi*." They would visit the homes of expectant mothers who were close to giving birth. They may estimate the delivery time. They prepared medications and antiseptics using the local botanicals. Ayurvedic medications were prepared using pepper, turmeric, dried ginger, and garlic. During the delivery process, they used Quranic verses as well as other unique Mala Songs like *Nafeesath Mala*. The most prevalent and well-known *Mala* sang during childbirth was *Nafeesath Mala*. This *Mala* celebrated femininity. It actually served as a psychological therapy for expecting mothers to instil confidence and authority throughout the time of delivery. The song was said to empower women and help to prepare her for the discomfort and guarantee a safe birth. In some areas of Malabar, Muslims treated expected mothers during childbirth with holy water that was particularly gathered from *Thangals, mazjids,* or *Jarams* like *Mamburam* or *Puthanpalli*. A common practise known as "*Pinnjanamezhuth*" included writing verses from the Quran on a porcelain dish called a *Pinjanam*, pouring water over them, and asking the pregnant women to drink. In addition to all of these, pregnant women tied or wore "*Uruk*" and "*Elass*" to protect themselves from the influence of bad spirits during birth. *Musliyars* created a variety of homoeopathic cures for various illnesses. Egg, coconut, chicken, and flowers were the major components of this medication. If the illness was severe, additional ingredients were *Homam, vedi, bank, kuppi thookkal, palaka kettal, katheena,* and *thakid nikshepikkal*. Many ladies from wealthy households, including *Thangals* provided healing to others inside their homes. Within their own homes, they treat female patients. Women who study soul healing adhere to stringent religious practises and spend the most of their lives in a chamber where they treat their patients. They will spend hours reading the Quran and other surahs to pass the time. Some Muslim wealthy women have historically passed on their traditional remedies from mother to older daughter. While we locating Mappila's healing practices in Kerala in general and Malabar in particular, it's not only confined within the community. the beneficiaries were from across regions, religions and even districts. The strong influence of cultural islamisation lead to the opening of doors for beneficiaries from diverse backgrounds. Practicing healing techniques on the behalf of religion by Mappila's doesn't mean that they are completely depending on spiritual healing. Instead, the mode of practice and selection of medicine also include wide varieties ranging from dietary therapies to consumption of herbal medicines. Therefore, comprehending Malabar Mappila's traditional healing practices is thus not only a matter of delineating a religious practice, instead it does carry a strong precautionary and remedial potentiality that enthrals the public health perspective on the same.

3.4.1 Text based healing practices of Malabar Mappilas

A large number of our respondents discussed Islamic religious rituals that are based on text. References to herbs, dietary guidelines, and other healing practises in the Qur'an and prophetic traditions served as the foundation for particular therapeutic practises because they are the literary bases of the Islamic religion, together with hadith. Islamic worship rituals are influenced by the Islamic text domain since Islamic religious texts are the major source of these practises, which are also thought to have therapeutic qualities. However, we distinguish between therapeutic practises whose primary objective is healing from prayers and litanies, which are primarily for the purposes of worshipping God and secondary have a healing element. .Here, it is founded that a spectrum of therapies related to spiritual healing, medicinal herbs ,dietary prescriptions and applied therapy are included.

Spiritual healing; Muslims primarily draw their prayers for healing from the texts of the Islamic religion. The Qur'an, which is regarded as the literal word of God, and the teachings of Prophet Muhammad are viewed as potential sources of healing because our participants expressed a God-centric perspective on health and illness, which holds that God sends down illness and is ultimately responsible for its relief. A community member of Malabar Mappila's exemplified as follows

"*So my faith plays a big influence in how I feel when I'm sick... The first chapter of the Qur'an, sometimes referred to as "Sura-tul-shifa" or "the curing of ailments. There is also a Hadith (Prophetic tradition) that says "and treat your own and the ill with charity.*"

Medicinal herbs; Therapeutic Herbs Black seed, also known as Nigella sativa (L.), is one of the herbs used and is mentioned in the prophetic tradition as having medicinal properties. "I personally practise by consuming the black seed. Response from one of the beneficiary of Malabar Mappila's community medicine is given below

"*it has helped not just minimising colds but also my gynaecological condition, which no gynaecologist has been able to address. As a result, I maintain my health thanks to my beliefs and the medication I obtain from my culture"*

The use of therapy; Applied therapies are not a product of Malabar Mappila's healing practices, instead it is a recent trend highly motivated by cultural factors. For instance, *hijama*, or wet cupping. This technique, which is derived from prophetic tradition as well, involves suction blood collection from a tiny skin incision for medicinal purposes. But this is not a well-

established mode of treatment among Mappilas. The minimal use of these types of healing practice is started after the intense migration from Malabar to middle east countries and the result of associated cultural assimilations. The young practitioners among Malabar Mappila's who migrated to Gulf countries are responsible for making this therapy familiar within the community.

Dietary practices; The usage of foods like honey and olive oil, both of which are referenced in prophetic tradition and the Qur'an, was one of the diet-related therapies that our respondents used as a kind of self-care.

"*The Quran offered two cures, namely honey and olive oil, that people under-utilize.*"

3.4.2 Malabar Mappila's worship practices.

Participants in Islamic religion believe that Salat (prayer), Hajj (the pilgrimage to Mecca), and Du'a' have healing properties (Supplication). The following instances show how Salat, Hajj, and Du'a have therapeutic effects. Below are the participants' responses.

"*The search for wellness includes "anything from visiting... to spiritual holy sites, from Mecca and Medina*."

"I believe that many individuals perform dua (supplication) and recitation... I well recall how, when we were young, my grandma would make dua for us while we had a cool cloth on our heads to treat any fevers we might have had."

Here, Participants predominantly used techniques that may be categorised as spiritual treatments or spiritual healing in this sector.

Spiritual treatment; These rituals are performed in a similar way to religious leaders praying for the well-being of ill people or the items they consume. As an illustration, consider saying prayers over food, coconut, sugar, or water. Participants claim that recognised Islamic clerics in their community perform this type of healing by leading prayers on food or sweets, after which sick individuals consume such offerings. Zikr, or the recital of particular prayers over rosary beads or over fingers to permit counting, is another spiritual healing practise. The sick may either silently or openly chant specific prayers or supplications over the affected body part.

Mind body therapy; The ceremonial prayer, Salat, includes a series of physical postures as well as the recitation of certain passages from the Holy Qur'an as well as praise and adoration of God as well as supplications. Ritual prayer, in the opinion of our respondents, increased wellbeing. Each position used in the Islamic ritual prayer encourages both physical and mental well-being. This makes the Islamic ritual prayer a form of active meditation. The benefits of salat's physical postures were discussed by Malabar Mappila . one of the responses is given below

"*The prayer itself, the motions, I mean, there are things that assist you to grow better... Other individuals may never make some of the moves we make in their whole lives. They are exercises all by themselves. If someone uses things on a daily basis, his health will also improve*."

3.4.3 Malabar Mappila's Folk healing domain

Folk healing practices that are specific to a particular geographic area and are rooted in ethnic or cultural heritage. This domain encompasses a range of use patterns of therapies connected to spiritual healing, medicinal herbs, and applied therapy, much like the domains of Islamic religious literature and Islamic worship rituals. Herbs seem to be predominantly employed in culinary preparations and as a form of self-care, which shows how these activities have been included into the typical diet. Fennel, sage, and fenugreek are a few examples.

Participants used terms like "native medicine," "spiritual folk care," "folk medicine," "prophet medicine," and "traditional medicine" to describe traditional treatment methods. Some of these phrases did appear to be used interchangeably by our participants. Our interviews revealed that Malabar Mappilas use conventional medical methods in three major realms of treatment. When a connection with a healthcare provider is not yet established, traditional medicine is used as the primary form of treatment. According to one of the participants in study, the response related to the realm of treatment is as follows

"*I know with some people when they get sick, they really don't care much about seeking health and they said they sick for a long time, they don't know this kind of doctor, they don't do this kind of things and they prefer native-what we call native medicine*."

Traditional medicine may be used as a backup option for treatment if contemporary therapy is ineffective. The experience of one of the beneficiaries of Malabar Mappila's healing practice's is given below

"*English medicines have been able to administer birth control pills, which has negative effects, but I stopped them and (have) gone back to traditional medicine*,"

This reflects the nature of this decision. Finally, traditional medicine is utilised in concert with mainstream medicine as an integrated therapy option. Another person who has benefited from the Malabar Mappilas healing practice said,

"*We have turmeric every day... One doctor suggested that I take medications to aid with plantar fasciitis recovery, but we already consume that in our daily diet*."

3.5 Mappila's traditional healing practices as medical practices.

As like the introduction of this chapter stated, healing practices is not only limited to western medicine and its respective healing practices. it is also not limited to Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH). Instead, it has to incorporate the existing plurality of medical system in to the sphere of healing practices. As because there is a failure in doing so, many genres of medicines and healing practices has been ignored. Such an ignorance will lead to lack of understanding regarding public's health and health seeking behaviour of different community. The traditional healing practices of Malabar Mappila's is one among many such ignored and unrecognized healing practices. In its practices and beliefs Malabar Mappila do have resemblance with other Muslim communities. This is because of the influence of religion and Qur'an, the holy text of Muslims. As like global Muslim healers argue, that the primary reference of their healing practices is practiced with the recitations written in Qur'an, there also have a strong influence of culture in deciding the mode of practice and use of medicines for the healing practices. Belong to the group of Muslims, Malabar Mappilas, also influenced by their cultural aspects and geographical features of their habituating state, Kerala and those influences has been visible in their healing practices. Even though Malabar Mappila's healing system has shared throughout community, there do have few boundaries for subgroups for practicing certain mode of healing practices. Further, different modes of healing practices and decision regarding the practitioner are employed as per the requirement of the disease, sex or gender of the ill person, belief etc. Moreover, Mappila's also believe in the perspective of Islam on medicine. The same can be traced back to their healing practices. Islamic medicine throughout the pre-modern era mainly relied on local medical practises as well as texts that were translated from Greek. These factors contributed to the development of the medical sciences, particularly in the 11th and 12th centuries. Islamic views on illness and disease have been evolving for centuries, and the Quran

itself may be used to trace and comprehend these views. The holistic picture of the self is said to consist of four main elements in the Quran. The paradigm in the Quran is based on four interconnected elements: the soul (*rooh*), the *qalb* (connection between soul and body), the intellect (*aaql*), and the *nafs* (drives or cravings, merging through the *dahmeer*) (Consciousness). The Quran emphasised that all four components need to be in balance for one to be healthy, and that any imbalances lead to either bodily, mental, or spiritual disease. Islamic views on mental and physical sickness are consistent with the ICD-10 and DSM-4-TR, which are currently accepted diagnostic categories. Malabar Mappilas also recognise these diagnostic categories and also like Islam in general recognised a different sort of disease: spiritual illness, which is roughly split into two categories: *Sihr* (black magic) and *nazr/ayn al husood* (evil eye). Religious healers of Malabar Mappilas, however, use their own techniques of healing (Bulbulia & Laher 2013). As like the literatures referred for this study demonstrated, every society has its unique conception of health, illness, disease, and the mechanisms of healing. The Qur'an does not provide any explicit guidelines for the treatment of bodily ailments. In the tradition of Malabar Mappilas, balance and imbalance, or the Humoral Theory, were and still are thought to distinguish between health and sickness. In times of psychological and spiritual difficulty, Malabar Mappilas have historically turned to the Qur'an as a source of solace. They have historically been receptive to other religion's rites and medical treatments, even non-Muslim ones, when they experience physical disease. In order to motivate individuals to seek appropriate medical care when they are unwell, the following Prophetic sayings are often quoted by Malabar Mappilas. This shows the strong relationship of medicine and religion which had become the base of Malabar Mappila's healing practices;

"*The body has a right to take good care of itself*." Muslim as-*siyyam* 183, 193, Bukhari as-Sawm 55, an-Nikah 89, Nisai

"*The Prophet not only advised the ill to take medication, but he also invited specialists in medicine for this purpose*." D.o.H. page 50 and page 125 of As-Medicine *Suyuti's* of the Prophet

Malabar Mappilas have been willing to embrace, make use of, and build upon both pre-Islamic and non-Muslim healing rites. Many customs, including the use of homemade herbal and medical tonics, food restrictions, and amulets to ward off evil spirits, have been embraced and improved upon by them. They have also adapted techniques including ligaturing, bloodletting, cauterization, cupping, and male circumcision. Malabar Mappilas in the present time still place

a high emphasis on preventative care. In many circumstances, Malabar Mappila patients resort to their religious and cultural heritage to meet their spiritual, social, and cultural requirements even as they seek a healing procedure through surgical or medical techniques. Their preventive healthcare practises include maintaining good personal cleanliness, restricting the use of certain foods (such as pork and its by-products and alcohol), and abstaining from addictive behaviours like nicotine use or excessive food consumption. Different Muslim communities may react differently to illness and other life crises depending on their cultural upbringing. For instance, some Muslims can see a sudden death or sickness as a punishment from God or as a test. A Muslim immigrant family may also absorb certain aspects of their new cultural milieu when they settle in a broader non-Muslim culture. Regarding the customs around death and dying, however, the concept is often the same wherever people come from. Malabar Mappilas, who belong to one of the Muslim communities is also same in this regard. They also possess a strong religious view regarding life and death. They hold the view that life is precious and belonged to God. (002.164; 003:156). All beings are said to pass away at a period set by God (029:57 ; 003:185). So, euthanasia and suicide (002:195) are prohibited.

"*The complicated Islamic view on do-not-resuscitate orders has been articulated. A do-not-resuscitate order is in line with Islamic principles. In the case of a chronic vegetative state, the cessation of assistance is less evident."* (Davis and Naughton, 2001).

They hold a belief in the Qur'an, which implies an afterlife. The Qur'an underlines that passing from this world to another is only a shift for the soul (002:28; 002:56). They also trust in God's pardon and kindness (002:54; 004:96). Malabar Mappilas take comfort in prayer and meditation during times of illness, and they may find spiritual healing in reciting the Qur'an, especially if they believe their illness to be a test or punishment from God (003:17). Therefore, giving Muslim patients and their family a copy of the Qur'anic recites and access to a private space to pray daily could be extremely beneficial and reassuring. the concept of death is also viewed as an important process and it possess strong religious base. This religious perspective on life and death by Malabar Mappilas encourage them to consider health as an important arena to be taken care of and to protect from anomalies. Hence, for Mappila's practicing community-oriented healing practices is not only a necessity uprising in a situation of illness, but also a matter of religion they believe. However, Malabar Muslims have their own perspectives on disease and the medical system which is neither completely alien to global Muslim healing practices nor a complete replication of global Muslim healing practices. Even though, the base of healing practices among Malabar Mappilas are strongly influenced by religion, it should not

misunderstand as a mere psychological healing. Instead, it does possess a strong medicinal base with both strong healing capacity. Herbal remedies which are the major healing assistant among traditional healing practices of Malabar Mappilas are widely distributed throughout many plants, and do have a rich source of phytochemicals with a variety of pharmacological activity and little side effects. Active components found in medicinal plants help the body repair itself and restore its natural equilibrium. Different plants that are frequently utilised in conventional healing practices of Mappilas might affect different bodily systems. For the treatment of many sorts of difficulties as well as the drug development process, natural products are the main sources of efficient medications with innovative structures and distinctive mechanisms of action. They have an extensive knowledge of the pharmacological characteristics of many natural items, including their antibacterial, anticancer, antioxidant, antihypertensive, immunomodulatory, anti-inflammatory, and anti-diabetic effects. It has evident that a number of medicinal plants and nutraceuticals made from various natural resources, as well as their products including polyphenolic components, flavones, flavonoids, and antioxidants, offer notable protection against various diseases. Numerous traditional medicinal herbs used by Malabar Mappilas have potent disease-inhibiting effects. For instance, the healing practices of Malabar Mappilas also ensures treatment for cancer. They used a wide range of grains, cereals, nuts, soy products, olives, tea, coffee, and spices including cumin, turmeric, garlic, ginger, and black pepper and all those having anti-cancer properties. They also promoted the intake of vegetables. Numerous studies have also shown a link between a high intake of vegetables like tomatoes, apples, and grapes as well as fruits like cauliflower, broccoli, Brussels sprouts, and cabbage as well as a lower chance of developing cancer. Additionally, a number of therapeutic plants and herbs have been used to lower the risk of cancer. The methods used for therapy include crude extracts of plants in various forms, such as aqueous, alcoholic, hydroalcoholic, methanolic, and ethanolic, as well as fractions, sub-fractions, and isolated active chemicals. Traditional plants, in any form, are effective at slowing the spread of cancer or treating it. Both Allium cepa and Allium sativum, which are used as common dietary herbs, have demonstrated significant success in the treatment of cancer. They also used many plants, including *Anethum graveolens, Apium graveolens, Artemisia absinthium, Acorus calamus, Beta vulgaris, Cucumis melo, Zingiber officinal, Triticum aestivum, Thymus vulgaris, Nigella sativa,* and *Crocus sativus*, have been used for healing practices for a very long time. Currently, over 250 plant species are employed in traditional healing practices of Malabar Mappilas to treat variety of illnesses. Herbal teas, syrups, infusions, and ointments are all forms of using medicinal herbs. In Kozhikode and

Malappuram, a common plant called Nigella sativa sometimes known as black seed, is used for the prevention and treatment of several illnesses. It is historically used as both as herb and an oil. The black seed's capacity for healing is likewise treasured in prophetic tradition. Black seed benefits for the immune system, the stomach and intestines, and respiratory health (Sharma, Ahirwar, Jhade, & Gupta, 2009). Studies conducted in vitro and in vivo have demonstrated that black seed and its active ingredient, thymoquinone, have a number of therapeutic benefits, including anti-cancer, anti-microbial, anti-pyretic, contraceptive and anti-fertility, anti-oxytocic , antitussive, anti-inflammatory ,and antioxidant properties . In blood, pancreatic, liver, breast,lung, fibrosarcoma, prostate, and cervical cancer cell lines as well as in animal models of lung, kidney, skin, colon, and breast cancer, black seed has been found to have anticancer properties.

The use of dates is also common among Malabar Mappilas. This fruit do have a special recognition among Muslims based on their religious belief. Also, scientific studies have shown that date use is essential for antibacterial processes.it do have antibacterial, antiviral, anti-inflammatory, and anti-angiogenic activities (Siddique .2022). For Malabar Mappilas date usage is crucial for women who are pregnant or recently gave birth. Date consumption may help women's uterine muscles become stronger before and after giving birth. Date fruit consumption during the final four weeks before labour reduced the requirement for commencement and augmentative labour and improved the success of delivery. Date fruits appear to be the ideal superfood for today's health-conscious era due to their high fibre, iron, and trace element levels, as well as their high energy. Another important, but rare fruit included in the healing tradition of Malabar Mappilas are Fig (*Ficus carica)*. for them, it is a promising fruit which treats and cure illnesses of the immune system, scabies, and gonorrhoea as well as endocrine (diabetes), respiratory, cardiovascular, digestive (ulcers and vomiting), urinary, and reproductive (menstrual discomfort) disorders. Figs have a significant degree of folkloric significance and continue to draw researchers' interest due to their medicinal qualities for use in supplementary medicine. similar to Mappilas, the traditional medical systems of Ayurveda, Unani, and Siddha—have all recognised the therapeutic properties of fig. scientific researches on fig showed that several secondary metabolites, including phytosterols, anthocyanin pigments, triterpenoids, coumarins, alcohols, essential amino acids, phenols (proanthocyanins), essential fatty acids, and other volatile counterparts, were isolated from various parts of figs.

3.5.1 Home Remedies: Religion, Region, and Culture

Islamic *mantrams* are used to enhance the therapeutic procedures, such as the usage of homemade medicines that contain herbal constituents and have undergone a certain processing procedure. These therapeutic methods used in homes or neighbourhoods, as well as their method of knowledge transfer between generations, exhibit elements of what Sujatha (2003) refers to as the "medical lore" of their location and have connections to other regions' medical lore. Their knowledge and practises are not just a collection of folk remedies thrown together with magical beliefs; rather, they are the result of accumulated and modified living experience passed down through generations. Their knowledge and practises have persisted not just due to the tenacity of their beliefs but also because they are practical, efficient, and suitable for the conditions of today. In the *mahallu*, senior ladies discussed their experiences with the numerous medical treatments that were popular during their upbringing. Children's cold and cough issues are treated with *Aarootha* herb (rue), whilst senior patients are treated with *tulsi* (basil). Every family prepares a particular medication during the Malayalam month of *Karkkidakam* for the purpose of boosting the immune system and rejuvenating the body, which is specifically given for new mothers. The majority of the 101 ingredients in this particular yearly concoction for the moms are ghee, dried fruits, and the roots of several medicinal plants. The *kurunthotti* plant's root (sida netusa) is frequently recommended as a treatment for rheumatism. These medications, known as *ottamooli* (medical formulas), are made from local plants and are typically administered for illnesses that don't need a doctor's aid. They are used for conditions like typical fever, cold, diarrhoea, and minor ailments like *vayaru kadi* (stomach issue), *vay punnu, vay nattam* (poor breath), *kuzhi nagham* (nail swelling), etc. Numerous books on various *ottamulis* for ailments that may be treated at home are produced and distributed in the area. For instance, Muslim Ayurvedic doctor Dr. M P Abdul Gafoor wrote a book titled "treatment for all ailments" (*sarvaroka chikilsa vidhikal*) that outlines how to prepare *ottamoolis* for issues like mundi *neeru* and other common concerns. The book also discusses the applications for and therapeutic properties of the local plants. According to the Malayalam calendar, Muslims in the region must alter their diets in response to changes in the climate, environment, and their impact on the body. For instance, during *Karkkidakam*, the traditionally recommended diet is mush with fenugreek seeds rather than the drumstick, which is supposed to be beneficial for health but is poisonous during this time. As we can see, Kerala/Malayali health practises have a synergistic relationship with the ecosystem of medical lore. Women were spotted surrounding the heads of little newborns with green chilli and salt after dark (the time of Maghrib prayer). When questioned, they claimed that the routine procedure would

shield the infants from *shaitani* (demonic) issues including the evil eye and fever brought on by dread of both human and non-human people. The period after dark is thought to be when non-human beings commonly descend to Earth; during this time, their attacks grow intense, and infants are most susceptible to demonic ailments. According to a Prophetic saying I came across; moms should keep their kids inside the house when it becomes dark to protect them from devil-related issues. Angels are said to travel in groups to the earth during Maghrib. It was due to the significance of the hours following sunset that Sunnis, especially Sunni women, who believe in and practise Islam, were observed doing the isha prayer (night prayer). After *magrib* and before the *isha* prayer (night prayer), there are devotional hymns and litanies for the protection and well-being.

Along with the Quran, prayer guides such as the mawlid kitab, Sabina kitab, salat kitab, and dhikr kitab are kept in the bookcases of Sunni homes. The prayer book known as "*dalailul khairat*" (proof of virtues) was once commonly used. Now, as my sources stated, new prayer manual booklets with Malayalam meaning have entered the market. I have observed copies of these series in Sunni homes with the label "*manzil*," which means "home." Women from Sunni homes are the primary purchasers of these series. In response to my question, they stated that the prayers in the handbook, which are intended to be recited mostly by women, can be used as remedies for daily household problems, to ward off bad spirits, to promote health, and to produce excellent offspring. The older female family members who are illiterate in Malayalam could also be seen reading ancient manuals in Arabi-Malayalam, while the younger generation turned to the latest releases of Arabic prayer (with Malayalam meaning). Only those prayers that some organisation considers to be "authorised" and "genuine" are included in the manzil prayer handbook, according to the author, who claims that *dalil* (evidences from doctrinal sources) has authenticated all of them. The AP Sunni group has released a new *manzil* edition that adds many more phrases and prayers that are legitimate for them in response to the increased demand in the book market and to assert the legitimacy of "difficult" prayers. An investigation of these home remedies reveals that they combine Islamic aspects with local traditions to create tactics and content that are effective for healing. More of these practises are entangled with local religion and culture in the area of health.

3.5.2 Affliction patterns among Malabar Mappilas

Malabar Mappila Muslims have their own unique view of health, disease, and the healing process. They frequently choose religion healers over other medical systems to treat their health issues. Every community has a unique understanding of health and sickness. They don't just

think that a person's illness has biological or medical origins; they also think that there are some other supernatural factors at play. There are many influencing elements, including socioeconomic, political, cultural, religious, and environmental ones. In this study, too, a person in Islam is viewed as the mixture of four interacting parts: Aqal (mind), Jism (body), Nafs (self), and Ruh. This is similar to Murdock's "supernatural causation" (spirit). To keep the body in equilibrium, all four components, in their opinion, should interact with one another. When this equilibrium is upset, sickness and disease develop. A Muslim claims that Jinn or Shaitanic possession might upset the body's natural equilibrium (Shah 2011). The Quran gives a precise definition of this concept.

“take refuge with the Lord of the day breakfrom the evil of what he created, from the darkness when it gathers, from the evil of the women who blow knots, from the evil of an envier when he envies” (Abdussalam Bali, 2004)”

It was found in the study in Malappuram that the Mappila Muslims have their understanding and perceptions on various illnesses. They understand their health and illness within their socio-economic and cultural background. The Mappila Muslims of Malappuram considers a person to be healthy when he/she is mentally, socially and physically free from all kinds of illnesses. According to them the religion Islam help them to understand and interpret their health condition. They define illnesses in their own experiential understanding. Acceptability of the religious healing practice among Mappila Muslims of Malabar is found to be associated with the degree to which Quran and appeals to God (Allah) were part of the healing process. They also turn to religious healers for therapy because of things like stigma and secrecy. The majority of interviewees agreed that Mappila Muslims stigmatise mental illness, especially if the sufferer is a girl. As a result, people are reluctant to attend a general practitioner. They acknowledge that there is a stigma attached to seeing a psychologist or psychiatrist since doing so is seen as a sign of insanity, and there are societal expectations that emotional troubles (psychological disorders) should be handled on one's own. They also talked about how embarrassing it is for families when a child (the daughter) has mental or psychological issues. Patients often tended to conceal their disease or issues from both their relatives and their community. They contend that confidentiality is important in this situation. In his study, Sethi noted that a number of variables, including illiteracy, superstition, and women's hesitation, as well as social stigma and the poor prospects for marriage placement in our society, are important predictors of a person's conduct with regard to seeking health (Davar quoted Sethi, 1978). In societies that have progressed science, methods that have advanced science are used

to comprehend the condition and treat it. However, in today's culture, religious healing techniques are viewed as being ineffectual and illogical (McGuire, 2008). In a worldwide environment, Dein (2008) contends that "modernity" (as opposed to "tradition") does not inevitably alter views about the causes of sickness and its treatment. Following the previous unilinear evolutionary conceptions of Frazer and Tylor, some academics, like Keith Thomas (1971), have claimed that magic fades as contemporary science progresses. However, magic follows logical rules much like science. Magical thinking may be found anywhere and at any moment (Malinowski, 1948). Its abilities answer issues that science sometimes finds difficult to explain. Many academics now acknowledge that magic may coexist with science and can even be considered a component of it (Horton, 1982). Thus, although considered to be unscientific, self-reporting of one's health issues is the greatest proof. All faith healers rely on the "experiential" components of sickness, which are a significant aspect, and patients have sought therapy because of this since time immemorial, according to anthropological research.

4. CHAPTER- II

Unpacking The Hierarchy Of Malabar Mappila Community

4.1 Introduction

One of Islam's most sad ironies is the fact that many of its fundamental principles were abandoned by its own adherents, leading to societal stratification among Muslims. The two tenets of the oneness of God and the brotherhood of humanity served as the foundation for the revolutionary doctrine of Islam. It had a universalistic quality because it addressed the complete human species in its message. It did not distinguish between people based on their birth, race, or caste. It was the lslam's inclusiveness and equality, as well as its wide humanistic perspective which drew countless numbers of individuals into its ranks. However, as Islam spread throughout the globe, it absorbed many local environment elements and characteristics. The Indian subcontinent provides compelling proof of this truth. Islam, as understood and practised by Indian Muslims, is not a replica of the Islamic society that Muhammad imagined and gave concrete form; rather, it is greatly influenced by historical and sociocultural forces at play in the Indian environment, as A R Momin has stated in his review work on social stratification among Muslims (1). Malabar Mappila's who belong to Muslim community and founded great in numbers within Indian subcontinent also influenced by the historical and socio-cultural forces of Indian environment in general, and Kerala in specific. In other words, Indian Muslim society is the result of a protracted interplay between the Islamic Great Tradition and the Indo-Islamic Little Tradition, which is primarily founded on folk, unwritten traditions, conventions, and habits passed down through generations. A typical Indian Muslim's everyday activities and behaviour are governed more by the Indo-Islamic Little Tradition than by the Islamic Great Tradition. This fact may be supported by the presence of caste-like groups among Indian Muslims as well as numerous social and cultural traits that are not unique to the Islamic Great Tradition, as expertly demonstrated by Aziz Ahmad in 1964 (2). This is largely because the vast majority of Indian Muslims are descended from early followers of Hinduism, most of whom have kept many aspects of the older religion's culture. The same statement is much relevant in the context of Malabar Mappila community on the premise that Kerala is a state which has rich history of Hinduism. The converts of Malabar Mappila's have largely belonged to Hinduism and their relevant culture is has reflected the process of cultural Islamisation. The

work of Imtiaz Ahmed on the caste and social stratification of Muslims acted as a strong secondary source for availing data on this chapter whereas the fieldwork data supplemented various claims of Imtiaz Ahmed (3) especially with regard to strata on the basis of caste and its associated clutches. The very effect of caste among Muslims is not only limited to designing occupation. Its robust impact is evident in the very macro aspects to micro aspects of the practices of the society. The health and healing sector is one among the major sector of Mappila community where strong influence of caste can be traced. The caste not only designs the mode of treatment to be employed, but also interested in ensuring the specialisation of each caste in treating diseases, which automatically decides which practitioner should be consulted on the basis of the type of disease. Another interesting finding of fieldwork is that, caste do also play a role in choosing the ingredient for the preparation of medicines. Succinctly, in order to analyse the public health behaviours of Malabar Mappila's of Kerala, it become mandatory to engage in the practice of social stratification within the community.

4.2 The process of cultural Islamisation

Muslims of Kerala have had long-standing ties to Arabia, the region where Islam first emerged. Before the arrival of Islam, historians and archaeologists think that Kerala and the Arab people had close trade and religious ties. Not only did Kerala goods enter Arabia, but Indian ideas and deities were also transported by Arab and Indian traders to regions of Arab country where they were well accepted. Islam invaded the Indian Subcontinent as a socio-political force shortly after the Islamic revolution in Arabia in the 6th century A.D., first by the sea route of the south western coast and the southern tip of the peninsula and then through the land route of the north. Contrary to popular belief, the Muslim community in India is not uniform, this is same as in the case of Kerala Muslims as well. The division of Muslims is based on various theological beliefs, caste distinctions, and traditional practises. Prophet Mohammad foretold that there will be 73 sects among his adherents. And 132 sects have been registered thus far. The distinct rites and rituals of the Muslim people are a result of the ethnic and cultural blending of the alien strain with the indigenous strain (3). Even with previous invasions, 'racial purity' was progressively lost via mixing with the native populace. Despite claims to the contrary from a small number of families, the bulk of Indians, particularly those in Bengal and Southern India, exhibit a strain of indigenous features. The aforementioned account makes it clear that, despite their appearance as a monolithic community, Muslims of Kerala, are actually a diverse bunch of people from different cultures and ethnicities who are only united by their shared adherence to Islam. Muslims are divided into many sects and have a variety of schools of thought, and

these groups serve as a strong basis for distinction among Indian Muslims in general and Kerala Muslims in particular.

Despite the fact that the division among Muslims may seem overly simplistic to outsiders, especially given the religious undertone of egalitarianism, the reality reveals a very complex system that neither resembles the Hindu caste system nor the western class pattern, but nonetheless draws clear boundaries through diverse ethnicity and divergent religious ideologies (3). There is no specific ethnic or cultural group to which all Muslims in Kerala belong. Those Muslims who claim foreign ancestry can trace their roots back to the Arabs, Afghans, Persians, and Turks who immigrated to this nation one after another. However, it was highlighted that the majority of Muslims in India are of indigenous descent. The Kerala regions Muslims who converted from the native population kept elements of their social structure and jobs, which established the Hindu caste system as the opposite of Islam's social structure in India. Muslims as a minority have an influence on this caste-culture pattern, undoubtedly with distinct terminology. The origin of this effect may also be traced to Muslims' minority status, which encourages a subconscious desire to imitate the cultural norms of the majority. Because Hindu women who were raised in the caste society were concerned with and forced to follow that pattern in their social conduct, inter caste marriage also contributed to Muslims developing this inclination to some level. Second, they introduced the aforementioned pattern in the socialisation of their children. This socialisation process bounded with regenerating social hierarchy is vast enough to include the private and public aspects of Muslims. The features of previous caste they belong, including the rituals and manners were adopted and practiced within new religion. This is much more evident in the daily routine of new Islam, who are the groups converted from Dalit community and engaged in fishing works. Right from the beginning of their ancestors, the mainstream treatment facilities were not opened for these communities as because they are kept out from the mainstream society. Wherever the treatment is available, it has not been affordable and accessible for them. This condition gradually paved the way for developing their own way of treatment by including affordable and accessible ingredients mostly from nature. Accordingly, they mastered in single medicine therapy. After the conversion, the change in life culture and occupation culture lead to add new ingredients and mode of healing treatments to the curing mechanisms, while in some cases lead to eliminate some ingredients. For instance, using olive oils and dates in the dietary therapy is a new practice started after the conversion process, but, offerings and sacrifices of animals to the deities and considering thus obtained blood as holy were not encouraged in Islam. Thus, such

rituals were treated as alien by Muslims. Respondent A, who belongs to a new Islam of Malabar Mappila community gives a clearer analysis of the changes happened due to conversion

"*In our belief offering are only welcomed if it for consuming purpose. Earlier, before our conversion, I remember we do offerings to heal diseases not for consuming the meat. but now, offerings are not encouraged and sacrifices for deities are considered as a taboo*."

Another respondent from an upper caste Mappila Muslim in Kerala given another interesting account of the same.

"*Offerings are prevalent in Islam as well. offering a goat after delivering a baby is a sunnath in most of the Muslim Mappila families of Malabar. Here, the offering is not to please any deities, instead the goat is killed for consuming its meat which is historically considered as a good medicine for new mothers. It is mandatory to have a full goat (not at a single point of time) for new mothers. It not only helps the health of the new mom, but also provide good milk in mother's body which contribute to better health of the infant*"

From this explanation, it is clear that the offering animals is now more of health-oriented belief rather than spiritual oriented belief. So, the conversion is not just about changing the social status but also about reforming existing routine of daily life, eliminating older rituals and adding new, blending a new foreign culture with indigenous knowledge system, and finally and most importantly emerging a new genre of medical knowledge through the synthesis of folk knowledge and Arabic medicine.

4.3 'Social organization' and 'health' of Malabar Mappilas

The social organisation of Muslims in Malabar has been explicitly examined by D'Souza (1959, 1965, 1978) (4) and Mathur (2011) (5). These researchers attempt to explain the social structure of Muslim communities in Malabar in terms of the more comprehensive caste system of social organisation that is widespread in Kerala. They studied the same according to the prevailing theoretical framework used to study Muslim communities in India. While there are homogeneous tendencies among Muslims in terms of their religious beliefs (such as being primarily *Shafi* school of law followers), language, dress, and other characteristics, D'Souza (1959) observes that the Mappilas do not constitute a homogeneous group for a number of reasons related to ethnological and political diversities. According to D'Souza (1959),

"*Conversions were mostly to blame for the substantial growth in the community's population. As a result, there are both converts from among the locals and descendants of Arabs through local women among the Mappilas. Once more, the ladies the Arabs dated and the people they converted were from various Hindu castes. All Mappilas now share a newfound sense of camaraderie thanks to Islam, but the previous divisions still exist*."

In this context, we should also consider more recent research showing that Muslim castes can be hierarchically ranked on the basis of purity and pollution ideas, traditional occupation, foreign origin, and distinct life style. And that the Muslim caste system is part of the overall caste system in Kerala rather than a separate Muslim caste system (5). In this context, Mathur disagrees with certain scholars who oppose using the term "caste" to describe Muslim communities in light of Islam's egalitarian promises. He agrees with anthropologists who contend that Islamic doctrine and the socioeconomic and historical elements present in South Asian civilizations interact dynamically to produce the Muslim social order. Following this more general theoretical line, he would contend that the historical causes of the hierarchy among Muslim communities in Kerala are more socioeconomic realities than Islamic philosophy, especially in terms of its egalitarian character. Thus, Mathur (2011) draws the conclusion that there is a caste-based stratification system among Muslims in Kerala, even though there may be significant differences and it may not be an exact replica of the Hindu caste system. Like D'Souza, Mathur too makes the mistake of equating aspects of Muslim communities with those of Hindu ones, but he never asks why such socioeconomic disparities still exist within Muslim communities in Kerala despite Islam's egalitarian ideals. Both the studies mainly focused on the general hierarchy of Malabar Mappilas which kept aside the sector wise analysis of this stratification essence practicing in their society. Consequently, health which is in prime facie a matter of medical science abandoned from the discussion of Malabar Mappila's hierarchy. This is a serious concern to be analysed when comprehending the public health behaviour of the community. It is primarily because the hierarchical structure among Malabar Mappilas conveys that each of the subgroups among the community has its own realm of excellence over healing mechanisms and as well as they are asked to prescribe and suggest those healing mechanisms into out groups as well. Here lays the significance of the role of hierarchy with regard to public health arena of Malabar Mappilas.

The evolution of Traditional medicine in Kerala is a conglomerated journey assisted by medical and ritual knowledge of Buddhism, Jainism, Vedic followers, and Arabs. In the early days of colonization, the indigenous practitioners were extensively consulted and their medicines were

widely used by the British administrators in their quest for adapting to tropical climate.[6] Even though evidence-based medicine possesses top rank in the treatment hierarchy,[7] traditional healing practices are still in circulation in Kerala due to their holistic and individualistic approach. Among them, the Mappila community has a significant role in enriching Kerala's heritage in traditional medicine through incorporating medical knowledge from *Arabimalayalam* (The traditional Dravidian language of Muslim Mappila community) Texts. A subtle observation of Mappila's healing medicines in Malabar revealed that there are particular ways of treatment in different subgroups of Mappila's in Malabar. This feasible ground for cultural Islamisation made Muslim Mappilas to reflect those same cultural traits of the society in which they live.[8] Hence, the reflection of hierarchical features [9] is not an exception and the same has been reflected in their treatment and healing practices as well. Accordingly, the Muslim Mappila community in Malabar can be grouped into four subgroups based on their occupation, namely *Thangals* (the gnostic personalities of the community), *Kurikkals* (subgroup engaging in physically adventurous activities), *Ossans* (subgroup engage in customary works), and *Pusalans* (subgroup engage in fishing activities). They share common traits of Muslims in general where mind-body therapy (5 times prayer) occupies a significant position and the list extends up to fasting in Ramadan, giving Zakat (donation from one's wealth) and many more (Iman and Islam Traits). Cognizing over the healing practices of Mappila community, they can be generally categorized into three modes; Namely; 1, The healing practices assisted with spirituality; 2, The healing practices with herbal medicine; 3, The healing practices assisted with dietary therapy. This chapter attempts to profile the healing practices in the traditional medicine domain among the Mappila Muslim Community situated in north and Central Kerala in respect to their social orrganisation. All of these practices have an established status within each subgroup of the Malabar Muslim community, but it has not occupied a sanctioned status in mainstream Kerala or in general. Such an endeavour to popularise and validate these traditional practices have to be followed through two cumulative phases; the organisation phase and the undertaking phase. The first phase is to organise this scattered knowledge into a realm and to form an association that is adequate enough to initiate the credentials for the undertaking phase. The second phase deal with open discussions along with distribution of feedback on successful results and that would enhance the achievement status of the treatment. This will aid in assuring certification and standardisation of traditional healing mechanisms throughout Kerala. Along with this, employing systematic research in the field and particularly intervention studies will assist in validating this mode of treatment that would assure accuracy. In between the contested field of science and modernity, the traditional

medicine of the Mappila community has established itself as a significant part of the therapeutic practices of Malabar. Especially Ayurveda and homeopathy enjoy high level of confidence among people for specific illnesses. Based on a Government of Kerala survey around 40% of health care is serviced by traditional medical systems such as Ayurveda and Homeopathy.[10] These subjective medicines have also gained momentum when people inculcated the idea of the medicalization of human life.[11] When normalized things started being categorised as abnormal things, man have to explore the possibilities of cure whether the remedy hails from a folk medicine or scientific medicine. Along with geographical factors, stigmatizing attitudes and consumer driven policies of evidence-based medicine pull back people to depend on folk medicine. The benevolent approach of the practitioners hailing from the heritage of traditional medicine along with providing individual care and normalized attitude to the stigmatized person enthralled people to elect the services of the Mappila community. The non-differentiation of the prescriber and pharmacist in such a mode of treatment enhanced the trust bonds and a feeling of security. Malabar Mappila community who have accumulated all these qualities of being a traditional medical practitioner thus always treated with a favourable attitude within the community as well as outside the community. A sweep of modernization has not sacrificed the circulation of folk medicines instead it prepared them to stand for an alternative modernization. For instance, according to the World Health Organization sixty to eighty per cent of people in developing countries depend on traditional medicines for their health security which raise a need to provide 'traditional medicine of good quality.

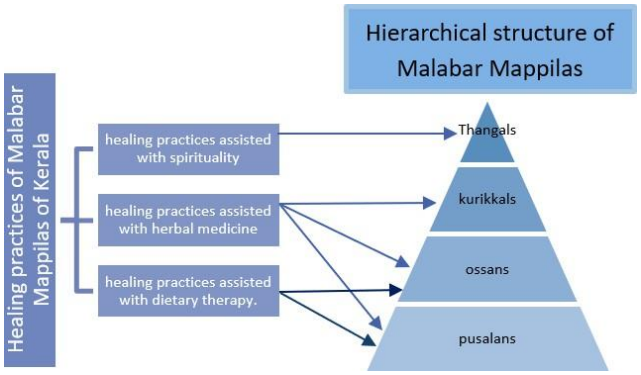


Fig 9; Healing practices respective to hierarchical order

4.4 Features of Social organisation among Malabar Mappilas

Caste divisions cannot adequately describe the social structure of the Malabar Mappilas since there are few rituals for purification and contamination among them and castes are less tightly structured. However, some sociological research has found that caste systems also exist among Indian Muslims. Two perspectives are presented in the sociological literature about this. According to one theory, Muslim civilization has caste systems that are modelled after Hindu caste systems. The proponent of this viewpoint is Ansari (1960) (12). In Uttar Pradesh, he notices four caste distinctions among the Muslims. They belong to the Ashraf and Muslim

Rajput occupational castes, respectively. Ashraf is further divided into Sayyad, Sheikh, Mughal, and Pathan groups by him. According to him, there are thirteen further groups that comprise the clean occupational castes: *Julaha, Darzi, Qassab, Nai or Hajjam, Kabariya or Kunjra, Dhunya, Faqir, Teli, Dhobi, and Gaddi*. The dirty castes are made up of *bhangis*.He adds that the Arzal caste is an unclean caste in the footnote with references to Risley and Levy. The opposing viewpoint holds that Indian Muslims exhibit traits that aren't caste-specific but rather caste-like. Ahmad views Muslim castes as a representation of the principle and feature often associated with Hindu castes rather than as a cultural or structural element. He (Ahmad) discovers further characteristics of Siddiqui Sheikh of Allahabad that he researched, including endogamy and rank mobility. In their various investigations, Momin, Bhattacharya, and Siddique note one or more characteristics of Hindu Caste among Muslims, mainly endogamy, hierarchy, and occasionally caste council. Even gotra is discovered by Aggarwal among the *Meo* Muslims of Rajasthan and Haryana.

Various features of caste discussed by sociologist and anthropologists of several times were visible in Malabar. According to a number of scholars, Muslims in India's caste system place a high value on hierarchy. Their fieldwork in various parts of India provides substantial support for their opinions. According to D'Souza (4)

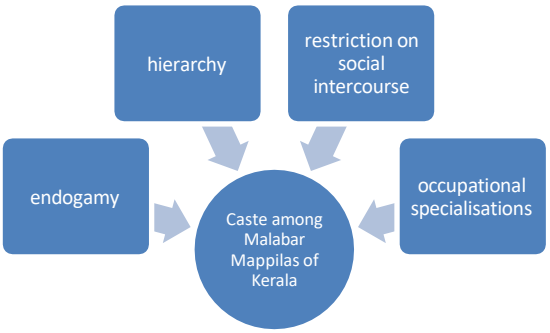


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Fig 10 : features of Malabar Mappila's caste system

there is a hierarchy of Muslim divisions in Kerala and Karnataka. However, he does not relate this distinction to purity and contamination. He enumerates the top four Muslim Mappila social ranking standards. These include social interaction limits, the amount of power that the husband must give to his wife in the case of a divorce, the usage of particular articles of difference and segregation, and hypergamy. Hypergamy, the type of work, and the relative position of the caste in the political-economic structure all play a role in Malabar Mappilas' social ranking. In determining the status of castes and people, such ranking criteria naturally provide a stronger interaction of money, prestige, and status honour. It is clear from the fieldwork that an upper

caste *Thangal* community and a new Islamic group like the *Pusalans* cannot form an alliance. There are many other customs accepted by the community's residents. Consequently, the request for alliances is likewise limited to the particular community. However, when someone is invited into a marriage, these constraints are not present. Every caste is welcome to receive an invitation to the wedding and participate on the wedding night by maintaining spatial distance. The criteria for obtaining a status position in hierarchy is not only limited to marriage alliances. Theories also put forward other factors contributing to the claiming rank in hierarchy.

Additionally, it is noted that ranking is determined by the group's relative numerical strength, ancestry, and profession. In addition to these non-ritual factors, the ordering of castes is also dependent on the seclusion of women (Purdah), the practise of ablutions after urinating, and the attendance of daily prayers. However, when it comes to Malabar Mappilas, descent is the foremost criterion for ranking in hierarchy. The grounds for social ranking are therefore primarily the source of the ancestry and its distance from Mohammad, as well as the level of Islamization of the group's customs and religious practises. This is considerably clearer when considering the *Thangal* group's dominance among Malabar Mappilas. *Thangal* community hold the right to take a final decision in any disputes within the community irrespective of the rank of the other group. As because *thangal* group are given sacred position among religion, they are considered as the gnostic personalities. In terms of health associated matters, they have sacred position with regard to the spiritual mode of treatment. Certain gospels and holy matters of the community rituals are primarily owned by them and restricted to other members of the community. These restrictions are not transparently voiced out, but are generally accepted as a community norm. From the childhood onwards, the children are socialised in a way to give respect to people from *thangal* families. Thangal group are recognised through their very attire and even those attires, specifically of Men are only wore by the men from the respective groups. Every occasion of the community is celebrated by the whole community members, but the position given for the *Thangal* group members hold high privilege. Their first rank is very visible through analysing the daily routine of the Malabar Mappilas. From the day of birth till the person's death, whatever be the rank of the person the role of a *thangal* member is significant. Every religious ritual that presents in a lower caste Malabar Mappila's life will not be completed without at least a minimal role of a member from a *Thangal* group. But, when it comes to the daily life of a *Thangal* member, his/ her religion sponsored rituals can be fulfilled without the requirement of a lower caste Malabar Mappila. So, the subgroup '*Thangal*' is not something that developed solely on the basis of occupation. It does have a strong role of clan

theory of caste. Malabar Mappilas developed a caste structure as a result of one family continuing a particular occupation, which was followed by subsequent generations, creating a caste based on that profession. This idea applies to *Kurikkals, Pusalans*, and *Ossans.* According to the second explanation, the caste system began among Muslims in India because of clan. When a great man passed away, the entire family was named after him, and as the family became bigger over the course of succeeding generations, it took on the form of a clan. This second notion mostly applies to the *thangal* caste.

Caste endogamy appears to be the most significant characteristic among Muslims, according to several research conducted in various parts of India. Hypergamous unions are also encountered sometimes. Likewise, another important feature of Malabar Mappila's are the endogamic nature of the group. The Malabar Mappilas adhere to endogamy and hypergamy laws, as noted by D'Souza (4). But in their typical inter-group interactions, there aren't any such obvious disparities as there are between *thangals* and the rest of the population or *Pusalans* and the rest of the population. The *Pusalans* are indigenous people who converted from a low caste of Hindu fisherman. As like we already mentioned, the Malabar people grant the *thangals* the highest status. The males of these *Tharavads* were major merchants and bankers in the past. Endogamic form of alliance led to the regeneration of the existing boundaries of the groups within the community and there by kept going the hierarchy and social rank practiced within the Malabar Mappila society. This is the primary reason behind restricting the access to knowledge possessed by each group. This closure system thus regenerates the disease oriented healing specialist in the previous group thereby increasing the dependency between community members for various medicines. Thus, the role of disease in Malabar Mappila community is a way for social interaction within the community itself. A serious account which lime lights the aforementioned analysis can be traced out from the Respondent belong to *Kurikkal* group of Malabar Mappila community.

"*We do have specialized knowledge when it comes to the disease related to bones. Hence, the primary solution among Malabarians for bone fractures and other associated illness is seeking our therapy. Through this, we could able to interact with Thangal families and also with people belong to other religion. Even though the source of interaction is somewhat unwelcoming, the same has paved the way for increasing our social contact and thereby popularising our Mastery in bone ailments both within and outside the community*"

The local reason primarily mentioned by the Malabar Mappilas behind the practice of endogamy is nothing but the concern over securing their hereditary medical knowledge and healing practices. Various other socio-cultural and economic reasons are also there behind the wide practice of endogamy, but the most cited reason was the quest for conserving their healing knowledge. It is much more evident from the practice of *thangal* and *ossan* subgroup of Malabar Mappilas. There were also exceptions where exogamy is practiced within the community. The practise of endogamy is dwindling as a result of industrialization, the expansion of modern education, and Islamization. The fieldwork also reveals that the upper groups have started marrying off their daughters to the lower groups, such as the k*urikkals*. Based on factors like money, level of life, education, and social standing, the relaxation is granted. During such situations the member who opted an alliance outside the group are only vested with the medical knowledge they received through acquaintanceship. They were not provided with the hereditarily transferred texts and scripts comprising the healing mechanisms and information related to medical knowledge. For instance, if a man from the *kurikkal* group married a woman from an *Ossan* group, he can only carry the knowledge he obtained till the time of his acquaintanceship with the elder *kurikkal* of his family. The successor right and the written scripts if any is transferred to the next male member of the family. This doesn't mean that he is outcasted, but that the person can practice and share his existing knowledge for the welfare of the community without seeking new knowledge. Endogamy within Malabar Mappila are not to maintain the purity of blood as like the common reason cited in Hinduism for the strict adherence to endogamy. As like it mentioned the Malabar Mappila's adherence to endogamy is more related to the cultural capitals they shared within the group. Among the cultural capital the significance of knowledge especially the healing mechanism and practices, spiritual knowledges seek the primary position. similar reason behind the adherence to endogamy can be traced back to Tamil Muslims as well. According to research by Mines (13) conducted among Tamil Muslims, people value subdivision identity highly while choosing a mate. Endogamy is a practise that is used to match spouses with similar economic origins, cultural backgrounds, and religious traditions rather than to ensure blood purity.

Marriage alliance outside the religion is strictly prohibited within the community members. Marrying a women or men from outside religion by a *thangal* Member of Malabar Mappila are not at all encouraged. Doing such acts lead to abolishing his or her spiritual rights and disabling any healing practices assisted with spirituality. The member who committed the act are no more accepted as the gnostic personality of the community, hence his or her right to serve the

community with regard to spiritual treatment are completely abolished by the *Mahallu,* an authoritative body of Malabar Mappila Muslims. If the act is committed by the elder son of the community, his surname '*thangal*' which gives him all the spiritual luxuries within the community is removed. The head '*thangal*' of the family thus transfer the rights related to 'healing practices assisted with spirituality' to the second eldest son. If there is no more son in the children of the respective family, the same title and head rights are given to the elder son of any siblings of the head *thangal*. Unlike *thangals*, when the person belongs to *pusalan* group married to a man or women outside the religion, he or she can follow the healing practices they acquired through their life. This is mainly because the healing practices within the *pusalan* groups are much more related to their occupation. As far as marriage alliance from outside the religion doesn't make a shift in the nature of occupation they belong to, they can practice every healing mechanism that were routinised. The major example is the seasonal medicine therapy which belong to the popular model of dietary therapy within Malabar Mappilas. *Pusalan,* whose healing mechanism is mostly related with dietary therapy can continue its consumption in their daily life as because it is much more related to cultural factor rather than religious factor. Seasonal health care through including Halal animals is the main thing to be discussed here. Having mutton and chicken occupies a primary role in this. They are asked to have the soup prepared with the corresponding bone of the lamb. Accordingly, a person suffering from leg pain should consume soup made with gigot. Kozhimarunn (Seasonal homemade medicine) which is a dish made with chicken by adding Ayurveda medicines and having it in the ratio of one is to one is also a major dietary practice followed among the Malabar Mappila community in the rainy season. The process of choosing chicken is highly selective to maintain the quality of medicine prepared. Naadankozhi (Domesticated chicken), a specific breed of premature chicken that is locally domesticated is consumed for the medicine preparation. Along with this, Mappila's also consume Kashayam (decoctions) and Lehyams (herbal jam) which is a localized practice among Kerala. The intake of garlic, camel meat (if available), and dates in the diet are also promoted among the community. If a person is afflicted with fever, s/he is asked to enhance the consumption of young goat's mutton along with the diet including vinegar and olive oil. The use of olive oil within the traditional healing practices of Malabar started after cultural islamisation and accelerated gulf country migrations. Obese people are encouraged to have green leafy vegetables along with onion, mint, and Piper longum whereas epilepsy ill people are asked to have black mustard along with fried mutton and cabbage. Consuming goat's milk for the people who suffer from tuberculosis and Kanji (rice soup) and white bread for worm infestation are strictly followed by them.

Another dimension of Malabar Mappila's stratified division is based on the occupation. Accordingly, the major four subgroups of the Malabar Mappila's do hold their own specialised arena of occupation. The flexibility to move outward and inward in to this occupation is comparatively less in possibility. The first group, *thangal's* major occupation lay close to religious works and spiritual responsibilities, whereas the second group *kurikkals* are mainly employed in physical works including Martial arts. The third group *ossans* were vested with the duties associated with rituals among Malabar Mappila's such as circumcision, shaving etc whereas the fourth group p*usalans* are mainly engaged in the livelihood works such as fishing. While all these are the general or specialised occupation of the subgroups among Malabar Mappila's, the members of the community are also working in other streams of occupation. The major point to be noted is the specialised work is hereditary while they are vested with the freedom for moving out of the specialised occupation. It has been observed that several professional skills and crafts have only been available to the lowest class of Malabar Mappilas. This group includes the barbers, blacksmiths, and mosque servants. In addition to their regular jobs, *Ossans* are necessary for several ceremonial events like birth and circumcision, as it was already noted. The respondent from the *Ossan* subgroup of Malabar Mappila community responded as follows

"*Am supposed to do circumcision for the child of our community. whereas the times where I left jobless, I go for other works including the job of salesman. I did also work as a sweeper in mosque*."

From the similar responses obtained from the fieldwork, it has been noticed that adhering to specialized occupation which has been hereditary is becoming more a choice. Coming out of the occupation is not a taboo in the community. Most of the respondents adhering to their works showed the concern of service with regard to their continuation of the work. It is much more evident from the response of the respondents from fieldwork when asked about the rituals associated with health

"*Circumcision is both a religious and a social event. It is a matter of health, matter of life where a strong sense of concentration is needed. Hence, within the community only our group are vested with the duty to do so. Hence, for me, this profession is not only a way to earn money, but also a service*."

While profiling on the subgroup of *pusalans,* their occupation reflects more reference for cultural islamisation. As because the work of them is dealing with '*najs*', which is an Arabic

term used for ‘polluted’ or ‘impure’, the subgroups lay in the upper strata of Malabar Mappila community have a different attitude to these people. The healing practices and the treatment modalities of the *pusalans* are very much specialized and particular as per their occupational needs. Due to the severe contact with salt water, there are higher chance of skin diseases among them and also fishing does require a strong physical power, they are also advised to take care of health specific to different seasons. As like its already mentioned their mode of healing is much more related to their specialized occupation i.e.; fishing. Hence, the people from other subgroup are very rarely depends upon them for treatment purposes.

4.5 Ethnographic description of Subgroups among Malabar Mappilas

The six northern districts of modern-day Kerala are referred to as "Malabar," and they are where the bulk of Muslims in this south Indian state nearly 70% call home. In 2011 (Census of India, 2011) (14), Kerala's population was projected to be little over 33.3 million. In 2001, Christians made up 19% of Kerala's population, while Muslims made up roughly 25%. Although religion figures from the 2011 Census are not yet available, Hindus continue to make up the majority of Kerala's population. Muslim communities first appeared on the Malabar Coast as a result of relationships between Arab traders and indigenous women (Koya, 1983; Miller, 1991 [1976]; Randatthani, 2007; Thurston, 1909) (15,16,17). While the bulk of Muslims in Malabar were converted from Hindus, many more Muslims eventually moved there from other areas of South Asia and outside, mostly for trade, commerce, and religious propagation. The resulting Muslim communities appear to have undergone gradual hierarchical reorganisations in accordance with Islamic ideas of piety, purity/impurity, and birth. These groups still use distinct nomenclatures and discourses to this day to declare specific names and conceptions of status. Small Muslim communities, like the *Dawoodis, Dakhnis,* and *Navayatis* who migrated to Malabar from different parts of India, have maintained their distinctive socio-cultural life and they continue to be linguistic minorities, whereas Muslims from various parts of Arabia appear to have assimilated themselves into the overall social structure of Muslim communities in Malabar. They are seen by the government as distinct from Malabar's traditional Muslim populations, and neither the state nor the federal governments have ever contemplated include them in any special projects for the underprivileged.

For recognising the social division among Malabar Mappilas in order to unravel its specialised treatment modalities, the fieldwork was mainly conducted in Malappuram and Kozhikode of Malabar. In Malabar, Mappilas mostly belong to the *Thangal, Kurikkal, Ossan*, and *Pusalan*

groups as it mentioned in the previous part of this chapter. The researcher carried out 65 interviews, of which five involved groups of three *Pusalans* and two *kurikkals* each. Due to their scattered lifestyle, group interviews with *Thangals* and *Ossans* were not feasible. A purposive selection was made to interview mostly male septuagenarians in order to better comprehend previous social hierarchies. Only a few women from these social groupings were interviewed. The following sections highlight the social hierarchies among Malabar Mappilas in a broader South Asian context. They start with a brief ethnographic description of the four main social groups, emphasising origin stories, justifications for assigning notions of high or low status, spatial segregation in ritual spaces, and marriage arrangements and their respective healing modalities. This demonstrates how the Malabar Mappilas' social hierarchy is upheld by social practises similar to the Hindu caste system, but is primarily expressed and justified through Islamic concepts. The study then goes on to explore how Muslim social hierarchies are seen throughout South Asia, specifically in Malabar.

4.5.1 Thangals

In Kerala, those Muslims who are referred to be Sayyid everywhere in the world are also called *Thangal*. Their males are known to as *Thangal*, while their girls are referred to as *Bivis*, and they assert ancestry from the Prophet Muhammad. In the past, castes from the Hindu high castes, such as *Namboodiri* Brahmins and *Nayars*, were referred to as "*Thangals*." Dale (1980) points out that Muslims were taught not to treat their Hindu landowners with this honorary title by Sayyid Fadl, a well-known leader of Muslim uprisings in Malabar until his expulsion in 1852 (19). However, a casual reading of local literature, particularly *Arabimalayalam* works from the nineteenth century, suggests that *Thangal* was also employed among Muslims as an honorary term for other religious teachers besides Sayyids. The German lexicographer Gundert (1872: 455) noticed that the name was employed not only as an honorific title for Namboodiri Brahmins but also for 'Muslim high priests at *Ponnani (*20*)*, despite the fact that they were not typically Sayyids. This flexibility of usage in the nineteenth century is likely to be the cause of this. On the basis of Tellicherry records for the years 1796–1799, Gundert (1872: 455) noted that many people agreed to the term's usage for "descendants of high-priests in each mosque." When he claimed that not all *Thangals* in Malabar are Sayyids, Kareem (1957: 46) also brought up this change in use (21). It is plausible to infer that the phrase was first used as a derogatory word among Muslims in general before changing to refer only to Sayyids in Kerala. Many *Thangal* clans in Kerala may trace their ancestry to South Yemen, with the bulk of them also deriving from Russia, Indonesia, and Indonesia (*Thangal*, 2009; Wink, 1990:) (21,22). The

Ba'alavi, Shihab, Ba'hassan, Jamalullaili, Al-bafakhy, Al-saqaf, and Bukhari are a few well-known *Thangal* clans in Malabar. Based on their origins, these groupings are arranged in a delicate hierarchy. Given the disagreements that occasionally arise between various groups over relative quality and legitimate lineages, this hierarchy is apparent. For instance, a dispute about a deceased *Thangal's* genuine ancestry broke out among family members in the Malappuram area. One group asserted—and even produced a biography of the deceased in this regard—that the deceased was a Bukhari, not a Ba'alavi, as had previously been assumed (21). In a book that was released four years later, the detractors claimed that the dead was really a Ba'alavi and not a Bukhari (23).

The distinction derives from the origin location. Bukharis may trace their ancestry to Russia, whereas Ba'alavis can go back to South Yemen. Due to the prominence of larger networks (hadrami) in the spread of Islam in South Asia, Ba'alavis are thought to be superior to Bukharis. Questions concerning the ancestry of other communities, such the *Valiyapediyekkal Thangals,* were also raised during this issue (23). The top positions of authority among Muslims in Kerala's political and religious institutions are held by *Thangals*. *Thangals* have held the position of president in Kerala's major Muslim political party, the Indian Union Muslim League, for several decades. By focusing on Prophetic lineage, they were able to in still a sense of reverence for themselves among Muslims in Kerala. They work in both religious and secular fields to support themselves. The task of healing through religious sayings and practises (*asmaa*), religious medicine, and managing some educational institutions are all examples of religious roles. They have never worked in physical labour in Kerala, but they have started to work in secular occupations like education and business in growing numbers. When the issue of social separation within the Muslim community was brought up, the responders raised at the chance to argue that the concept of respect was not a result of any practise that divided the society but rather was a directive from the Prophet. *Zakath*, the annual tax imposed on one's wealth and production, was used as an example to underline the issue of socioeconomic differentiation among Muslims once more. *Zakath* is prohibited from being given to *Thangals* because they are thought to be trash, or something that yearly cleanses the giver's money. Only *hadiya*, a gift given without any sort of religious requirement, may be offered to them.

Muslim's mechanism of rationalization placed *Thangals* at the pinnacle of the social and political setup of Malabar. These gnostic personalities are the one who dominates the realm of spiritual healing. *Hadith* (Holy gospels) and *Ayath* (Qura'anic verses) of holy Qur'an act as the primary source of prayer for healing. Reciting these and blowing over the sick person, asking

to intake holy water *Zamzam* (holy water) are the usual methods followed by *Thangals* during prima facie meeting with the clientele. For instance, the person who suffers from physical pain is asked to recite *Alhamd* (3 times) and *Kulhuvallahu* (7 times) by blowing over the wounded part. The major benefit of medication Qura'anic (table 1) is primarily relaxing the negative aura which is psychologically experienced due to physical illness. Even though advanced technological practices are widely consumed as a part of globalization, faith healing is still in demand due to three reasons. Firstly, its risk-free methodology enthrals people to select faith healing. This is because of the reason that most of its modalities are designed in a way where mind involvement is more required than physique involvement. Second, the absence of scepticism regarding the general applicability of the treatment. For example, while evidence-based treatment needs to be much cautious while prescribing medicines due to the existence of different physiques and degree of austerity of ailments, the modalities of faith healing can be applied to every individual independent of his or her physique attributes. Thirdly, the promised part of faith healing treatment. As far as a person caught with physical illness, it causes obstructions in his/her body vibration system. The Psychologic confidence gained through faith healing aid in regaining the equilibrium of body's vibration system and thereby to put a relief over the physical suffering of the ill person This mode of healing is placed under the umbrella term of psychotherapy [24]. A combination of religiosity and spirituality has been applied for mental health care. Mental health care cannot be solely curable through drug assistance; indeed, it needs a bio-psychosocial model where the social fact, religion occupies a primary role. Hence, choosing faith healing is thus a priority in this context. Other customary practices like *'Noolukettal* (The holy thread tied during illness)', *'Pinjanam Ezhuthu* (Spiritual treatment using special ink) *'Urukkezhuth'* (inscription kept inside round sheet metal Amulet), etc., come under the realm of *Thangal*. *Pinjanam Ezhuthu* is a mode of spiritual treatment that is especially offered for pregnant women [25] Having the water-dipped with pieces of *Pinjanam* (porcelain) where Arabic alphabets were written with *Arabi Mashi* (black ink) will bring psychological strength to the women and aid them for a less complicated delivery. Women among the *Thangal* community also act in the role of practitioners. When the male head of the family passed away, that medical knowledges were transferred to his spouse either through oral mode transmission or written scripts in the Arabic language. They also provide treatment for ill infants as well as kids who suffer from vomiting and stool issues. A spoon of water diluted in sugar were dropped into the kid's tongue along with reciting Qura'anic verses. Epilepsy was also treated with spiritual healing where the '*Apasmaraneyyu'* (oil used for epilepsy) has been provided for the ill person for a better cure [26]. *Elas*, a cylindrical-shaped mini copper element

where Qura'anic verses have been rolled in were asked to wear by the sick person. The ingredients of the medicines suggested by *Thangals* vary according to the intensity of the disease (for severe disease flowers, egg, chicken, etc., are used). The practice of wearing *Tabeez* (holy chain) and black string over the ankle are also functioned by them. Succinctly the fear of being stigmatized and causing side effects enhanced people's selection for faith healing in such diseases

QURA'ANIC RECITES	DISEASES
Surah Al falaq	Pain
Surah Al Fatiha	Bitten by venomous animals
Surah Al Mu'minun	Skin Allergy
Surah Al Bakara ***Surah Yunus***	Hypertension and Diabetes
Surah Muhammed	Psychological Illness; Bipolar disorder

Table-2 Qura'anic Medication

4.5.2 Kurikkals

Kurikkals are the second ranked subgroup of Malabar Mappila community. Unlike *thangals* they are not much vested with the power of dealing with spiritual matters. Most of their activity belong to outside the religion. Once these group were known for martial arts and other adventurous activities within Malabar, but now their major work is associated with *Uzhichil* and *pizhichil* , which are the local terms used for treatment modalities. Their model of treatment does resemble ayurveda when it comes to medicinal preparations. But they own their own knowledge system and specialisation with regard to bone ailments. Currently, most of the descendants from *kurikkal* subgroup of Malabar Mappilas are turning to formal education system especially homeopathy or Ayurveda. In order to provide a blend of their hereditary knowledge with a recognized medical knowledge, this particular move gives them the right to perform service to their community in an environment which was once they couldn't legally perform due to the unrecognition of their hereditary knowledge. Regarding the historical origin of *kurikkal* subgroup of Malabar Mappila community, they were believed to be the converts from kshatriya of Hindu community. Kshatriya, sometimes spelt *Kshattriya* or *Ksatriya*, is the second-highest religious standing among Hindu India's four social classes and has historically been the governing or warrior class.

Elaborating over the second subgroup, *kurikkals* who head the category of healing practices with herbal medicines is known as bone specialists. Most of them basically engage in physically adventurous activities like *Kalari* , and the treatment practices evolved among them is invented for treating their injuries. They are an excellent service provider for bone ailments. They use bamboo for mobilizing the broken bone and egg white to maintain the stiffness of the tied area. This practice does have resemblance with the Puttur Kattu bandage system, the traditional bone setting practices popular in Andhra Pradesh. The process of tying will repeat weekly once or till the time of completely regaining bone alignment and position. As a part of cultural Islamisation, new methods were accommodated by Kurikkals for treatment especially oils like *Shifathailam* (Herbal sesame oil) and oils prepared with ethnic herbal materials. Women in this sub-group also practice these roles if the patient hail from her sex. Other than these, consuming black cumin seeds which is having anti-toxicant properties is advised to relax muscles and to reduce inflammation.

4.5.3 Ossans

This term refers to the Muslim barber community in Kerala. The younger generation considers the phrase humiliating and derogatory, whilst the older generation sees nothing wrong with its use and the elders are really proud of it. Researcher also use it here since they prefer the English phrase. Their males still perform circumcisions and even do barbering. Although some people remembered previous cases, the practise of circumcision is in the process of declining. In social rituals, their ladies performed as vocalists (29). Prior to Malabar hospitals being an integral part of daily life, they also served as midwives. They still take up the task of washing new moms and their new-borns nowadays. Barber women are viewed as being dirty, just like new moms, their belongings, and the environment in which they live. This society, which has various lineages (*tharavads*) and is dispersed over Kerala, claims to be descended from the first Muslims. All the Barbers researcher spoke with referred to their origin story in their conversations. The beginning of the tale is when Islam first arrived in Kerala. Some of these individuals were married to local women and made their homes here when Malik Dinar and his 12 companions travelled to Kerala to spread the Islam. There was discussion on how to perform the Islamic rituals of tonsure and circumcision when they had their first child. According to *ossans* and other subgroups of Mappilas, the plot then takes two different directions. According to *ossan's* accounts, one of the companions of Malik Dinar offered to carry out the ceremony on behalf of the baby's aunt provided she agreed to do so. This voluntarism and the insistence on the aunt's attendance were highlighted as indicators of the

loftiness of the position. The *ossans* assert that they are descended from this first Muslim. The *ossans* are said to be derived from a guy who was forced to perform this task since he was unfit to spread the faith and was also lethargic. The recognition of *ossans* as a social class that can trace their origins to an early Muslim is present in both of these accounts, even by other sub groups of Malabar Mappilas. Notably, there is little mention of the relative social degradation *ossans* have experienced since then in these accounts. However, the researcher through the fieldwork identified that *Ossan's* prior contact with blood, which is considered unclean by Islamic doctrine would have contributed to their low social standing. While most *ossans* disputed the existence of this problem in recent times, certain *ossans* and other subgroups of Malabar Mappilas remembered incidents of social distancing that were used against them by Muslims in general. Both sides moved quickly to persuade researcher that those procedures are no longer practical and do not exist in the present. When it came to ritual locations and practises, Muslims had two different sorts of practises. A spatial segregation was implemented against *ossans* in the older mosques, which had a central hall and narrow lengths on each side. *Ossans* were prohibited from praying in the centre hall and were required to do so in the narrow parts on either side.

Food-related social stigma is still another practise. The mosque's *imam*, who oversaw the prayers, refused to receive or consume meals from *Ossan's* homes. When researcher brought up this practise in conversations with certain modern *imams* and Mappilas, they countered that it was a common practise at the time. All Muslims engaged in this practise; it was not exclusive to the *Imams*. Up until recently, the Mappilas believed that dining at *ossan's* houses was not advised (*makrooh*), something that was rewarded if not practised but was not penalised if it was. One of the respondents from the *ossan* subgroup of Malabar Mappila's stated as follows;

"Muslims might be reluctant to eat at barbershops. This relates to the services provided by female barber houses. They typically attend rites and events associated with births. It can seem pointless [arthamillaima] for people to consume the meals prepared by such women"

Other Muslims have a propensity to steer clear of *ossan* homes due to ideas about impurity connected to the work that both *ossan* men and women do. This pertains to blood taboos and contamination, which have both Muslim and Hindu meanings.

Comprehending on their physician role, this subgroup of the *Ossans* who are basically assigned with the task of conducting ritual practices like doing *Sunnath* (circumcision) as well as hair removal for the community members. Through engaging in minor surgical activities, they are

actually playing the role of traditional surgeons within the community. As there are higher chances for wounds while shaving, they use *Sphadikam Kallu*, (Potassium aluminium sulphate, the stone preventing inflammation). It's a stone were rubbing with it aid in removing the infections and inflammations. The *Sunnath* ceremony is a well-celebrated ritual in the Muslim community. It is believed that there is less risk for wound while removing the layer of the skin if it is done by an *Ossan*. It can be both a religious belief as well as an attitude towards the person who is having much experience in doing so. For a swift cure, they suggest the use of charcoal parts from *Chirattakkayil* (Spoon made from coconut shell and bamboo sticks) which is much a sceptical one in the medical field due to its risk factors for infection. These practices have been widely used before the adequate establishment of clinical practices and even now followed by orthodox families of the Malabar community. Washing with hot water and tying tightly with a white cloth over the skin removed is also done by *Ossans* themselves. While evidence-based medical practitioners rely on stitching the area, *Ossan* follow a particular kind of cloth tying. Women among *Ossans* engage in the role of indigenous midwives which is known as *Vayattatti* (Indigenous midwives) in vernacular dialect. They took the role of the home nurse and even prepare medicines especially antiseptics made out of pepper, dried ginger, turmeric, and garlic to ensure a safe delivery. The anti-septic power of spices has been the topic of various scientific writings. The article, antibacterial and antifungal activities of spices (2017) published in National Library of medicine reiterate the antiseptic properties of spices which has been used by Mappila's as their ingredients in medicine. Quranic verses are also recited along with Mala songs (An ode of praise for the Muhyadheen Abdul Khadir Al Gilani composed by the poet Khazi Muhammad) which act as a psychological treatment for the woman and robust her mental health to efficiently equip the pain during pregnancy. Midwives also act in the role of caretaker for infants and mothers until the baby completes 40 days and also assist and lead the ceremony of *Nalpuli* (ritual bath after forty days of delivery)

4.5.4 Pusalanas.

The fourth subgroup *pusalans* view this name as insulting because they are former members of the Hindu *Mukkuvan* caste and no one dares to use it in their presence. They enjoy the name "fisherman,". There is disagreement over the term's etymology. The majority of historians believe that the name originated from *putiya Islam*, which is Arabic for "new convert." The majority of Muslims in Malabar identified as "Mappila" in the decennial Census of 1891, while a small number identified as "*putiya Islam*," but they were converts from the *Mukkuvan* caste among Hindus (Stuart, 1893) (30). While some interviewees were in favour of the change, the

majority stated that the phrase's original meaning was "Islam flourished in the sand" (*poozhiyile Islam*). Other Hindu untouchable communities in Kerala's inland areas who converted to Islam were able to integrate themselves into Mappilas, while "*pusalans*" assumed a new name of lower social status after conversion. This may be due to two factors: the continued practise of fishing as a caste-related activity and the separation of fishermen from other Muslims in terms of geography.

There is a clear distinction between people who reside in the neighbouring town (*angadikkar*) *and those who reside on the seaside (kadappuratthukar) with regard to the latter. Even today,* the extreme sociocultural gap between *pusalans* and other subgroups of Mappilas is a result of this geographical isolation. The majority of the *pusalans* remembered that they had to take off their turbans if they saw a townsperson or were walking through the town. In the town, they were not permitted to wear their sandals. *Pusalans* and town people were separated physically even within the mosques. When praying on Fridays and in the mornings (*subhi*), the town's elites used to sit in the front rows of the mosque. *Pusalans* and townspeople clashed in several mosques, and in the majority of these instances, like in *Parappanangadi* and *Chaliyam*, the *pusalans* were forced to leave the ancient mosques and construct their own. However, only a few respondents reluctantly admitted this after being pressed hard. Initially, the majority of them stated that the older mosques for *pusalans* had run out of room, therefore new ones had to be built. Numerous town residents justified these earlier customs by citing the *pusalan's* variously uncultured and un-Islamic actions. The beach was seen as a haven for stupidity and depravity. Their ladies would frequently shop at the markets in the evenings for food and vegetables, a behaviour that was frowned upon by 'decent' Muslims as being unhealthy and unheard of. Furthermore, these women did not behave in an Islamic manner in these public places. They failed to adequately cover their heads, engaged in loud conversation, and male-style haggling. Additionally, because of the nature of their work, pusalans frequently missed their prayers and acted in a way that was unsuitable for Muslims. The majority of the elder *pusalans* agreed with these accusations but added rather vehemently that it was against Islam to keep *pusalan* at bay and separated for these reasons, which has further divided the community. They stated that the community's religious leaders ought to have taken action to put an end to such discriminatory practises. Instead, the majority of them claimed that whenever a programme was being held, they were more interested in gathering donations. While internalising the discourses of mainstream Muslims about their behaviour, they also rebutted these claims by emphasising the purportedly egalitarian aspects of Islam, claiming

that such discriminatory practises of Muslims were the result of ignorance of true Islam. One of them made the observation that

"*Allah has declared there is no distinction between an arabi [Arab] and an ajami [non-Arab*]"

During the time of their conversion, they have come along with the traditional medical practices that they followed previously. They resumed the use of natural antioxidants like pepper, ginger, garlic, honey, and fenugreek and prepare Lehyams (Herbal medicine) for themselves. Belonging to the fishing community, they showed high interest in consuming fish in their diet especially sardine popularly known as Chala/Mathi (sardine fish) in Malabar. They are basically calcium rich food that enhances the strengthening of bones. Engaging in an occupation where physical strength is necessary, these people are conscious of taking such geographically available food in their diet. Both social and economic factors of Pusalans made them close to their environment and nature, and even their treatment practices are developed on the influence of these factors. Thus, they become the mastery in single medicine therapies which are locally known as *Ottamooli* (Single medicine therapy) in Malabar. It is comparatively easily available and less expensive and less expertise is needed when compared to other models of treatments. *Ottamooli* is widely used for diseases like fever (having drops of ginger juice diluted with pepper and dried ginger powder, having *Tulsi* (Ocimum tenuiflorum) nectar with honey, throat pain (applying the papaya stain on the throat, having water diluted with white sugar candy, and dried ginger), blood pressure (having the powder of dry watermelon seeds, consuming drumstick leaves daily), skin infections (applying oil made out of crown flower or *Erikku* (Calotropis acaia) juice and turmeric)s, breath ailments(having an egg dipped in lime water for twenty-four hours, having honey and Malabar nut's leaf juice or *Aadalodagam* (Adhatoda vasica) together, etc.

Finally, the Malabar Mappila healing practices manifest a subtle interplay between medical knowledge and social hierarchy. Each subunit—Thangals, Kurikkals, Ossans, and Pusalans—has specialized expertise in specific modes of treatment, whether spiritual, herbal, or dietary, reflecting the internal stratification of the community. These traditional practices, though culturally embedded and socially sanctioned within the community, are situated mostly outside the formal, codified domains of mainstream medicine. The tension between the experiential, oral knowledge of the community and the standardized, regulated "coded" medicine highlights both the subaltern healing's marginalization and the selective integration's possibility. Understand that the hierarchical structure of Mappila healers in conjunction with the

appropriateness and boundaries of mainstream health systems presents a critical understanding of public health: it shows that effective health strategies in Kerala would be enhanced by integrating these knowledge systems, acknowledging the validity of traditional practices while making them safe, accessible, and more widely accepted within society.

5. CHAPTER-III

Documenting Traditional Medicine Of Malabar Mappilas For Recognized Body Systems Based On Mainstream Phytochemicals Used In Popular Medicine.

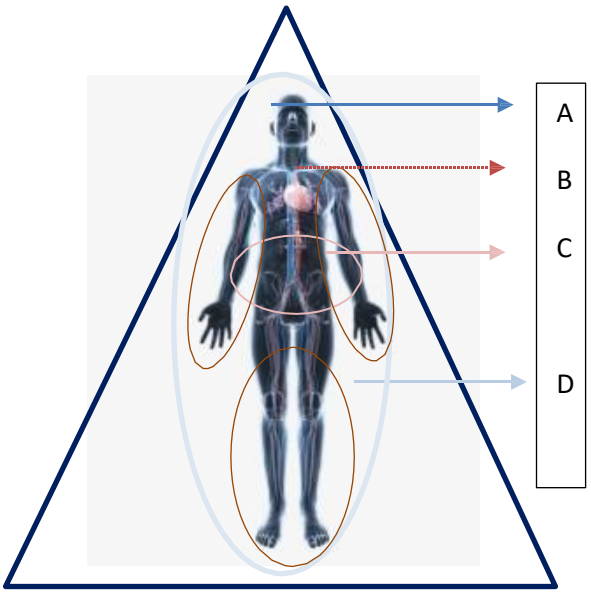
5.1 The concept of 'Body Triangle'

Previous chapters focused on exploring the types of healing practices among Malabar Mappila's along with discussing the hierarchical social organisation of them. It has been also discussed that the hierarchical ordering is also evident in the expertise of therapeutic practices. one of the interesting factors founded from the fieldwork is the justifications provided by the community in rationalising the hierarchical ordering of therapeutic practices in their society. Different from medical ordering of the human body, Malabar Mappila's have their own analysis and understanding of human body parts. For them, brain comes at the pinnacle of their body triangle, hence ***thangals*** (Fig 1; A) the pinnacle of their social triangle is vested with the power of treating brain and psyche issues. According to them, the most intricate organ in the human body is the brain. This three-pound organ serves as the brain's seat of intellect, a sensory translator, a movement-initiating organ, and a behaviour-controlling organ. Hence treating brain associated ailments is a sacred procedure for them and those duty vested with the gnostic personalities of the community.

The second part of the body triangle consist of limbs where the kurikkals (Fig 1;2), the second strata of their social triangle are employed to treat limbs associated ailments. It has been already discussed that *kurikkals* developed their medical knowledge and healing practices as a part of their mundane life, where adventurous physical activities are mandatory. Being titled as the 'robust people', '*karuthuttavar*' in local language *kurikkals* are treated as the physically strongest members in the social organisation of Malabar Mappilas. Among human body parts limps are very important as because they make physical activities feasible. The forelimbs (upper limbs) of humans are used for grasping, holding, writing, and eating, whereas the lower limbs are used for running, walking, and other activities. Hence limbs being the facilitator of physical activities, the right to treat associated ailments are vested with *kurikkals*.

The reproductive system and stomach make up the third segment of the body triangle. Due to their role as the community's reproductive ritual facilitators, *Ossan*(Fig 1; C) members are qualified to diagnose and cure reproductive disorders. They advise methods for maintaining healthy reproductive organs as well, although their major focus is on anti-infection treatments. They are also in charge of treating gastrointestinal issues and stomach illnesses especially in neo mothers.

The outer skin is the third and final component of the Malabar Mappila community's human body triangle. The *pusalans* (Fig. 1;D) are in charge of treating ailments relating to the skin with the aid of herbal remedies and nutritional regimens. Members of the Malabar Mappila community, known as *pusalans*, are considered to some extent to be the 'other' in the community, much like the skin is considered to be the exterior portion of the body.



Fig;11 body triangle of Malabar Mappilas

The local general hierarchy of understanding of human body parts among Malabar Mappila community. The order of body parts based on this understanding has gradually developed as supportive to the hierarchy of Malabar Mappila's social organisation.

Other than these, there are common treatment methods, ingredients selection, medicine preparation and healing mechanism in whole community of Malabar Mappilas. Based on the fieldwork analysis this chapter documents traditional medical practices of Malabar Mappila's through classifying each practices as per the recognized classification of human organ system and associated ailments. Succinctly, the chapter profile on the larger healing practices of ailments associated with Musculoskeletal system, cardiovascular system, integumentary system, respiratory system, Digestive system, excretory system and finally nervous system.

5.2 Musculoskeletal conditions (MSDs)

The locomotor system, also known as the musculoskeletal system, is a component of the human body that gives us movement, stability, form, and support. It is split into two major systems; 1) The muscular system, which comprises all bodily muscle types. The muscles that move the bodily joints, in particular the skeletal muscles, do so. Tendons, which connect muscles to bones, are also part of the muscular system.2) Skeletal system, which mostly consists of bones. Our bodies' rigid but movable skeleton is made up of bones that articulate with one another to form the joints. Articular cartilage, ligaments, and bursae are skeletal system accessory structures that maintain the integrity and functionality of the bones and joints. According to the WHO Scientific Group on the Burden of Musculoskeletal Conditions at the Start of the New Millennium (2003), musculoskeletal conditions are one of the main causes of morbidity and disability worldwide, leading to significant healthcare costs, job loss, and a decrease in the quality of life for affected workers and their families. In all recent general household surveys, which include roughly 16.3% of women and 12.2% of men, it is the most often reported self-reported symptom [1]. According to 2012 figures from the National Centre for Health in the United States, 52% of people who were 18 years of age and older reported having musculoskeletal discomfort. The most frequent types of discomfort were neck (15.2%), knees (18.1%), and low back (28.6%). According to health statistics from the United States from 2012, women (54.6%) and men (49.5%) were the primary patients of low back pain. According to Murray et al. (2013) [2], musculoskeletal illnesses account for roughly 27% of Years of Living with Disability (YLDs) and are the main cause of disability in Australia and the UK. About 41.2% of adult Japanese people had musculoskeletal discomfort. Musculoskeletal conditions, particularly back issues, which were 33% prevalent, were a serious hazard to the population in Sierra Leone. Results of a research on the incidence of Musculoskeletal Conditions in Norway revealed that women had persistent pain more frequently than men did, particularly in the neck and low back. Around 20–33% of people worldwide have endured severe and incapacitating muscular-skeletal disorders. One in two individuals in the USA has experienced similar conditions [2]. One of the most frequent causes of severe long-term aches and impairments in Europe is Musculoskeletal Conditions, which results in high healthcare and social assistance expenditures [2]. Additionally, the loss of employment and diminished capacity in social duties may result from the limited mobility and adroitness brought on by Musculoskeletal Conditions [3]. All nations in Asia, but notably India and China, have a high frequency of arthritis [3]. Thus, it is the non-communicable illnesses that are rapidly spreading

in many developed and developing nations [4]. These illnesses affect more than 1.7 billion individuals worldwide and are a leading cause of disability and mortality [4]. According to a recent WHO research, Musculoskeletal disorders, which include conditions including osteoarthritis, arthritis, back and neck discomfort, and bone fractures, are the second most frequent cause of disability worldwide [2]. Due to their hard effort throughout life, adolescents are also affected by these ailments, making them a problem not just for the elderly.].

In India, pain in the muscles is a major cause of illness. It is one of the most prevalent symptoms, affecting a large portion of the population, including students and those employed in both the formal and unofficial sectors of society (5). Musculoskeletal discomfort was found to be prevalent in India at 25.9%, with women reporting it more frequently [5]. The prevalence of musculoskeletal pain was assessed by a COPCORD research to be 30.13 percent in a rural area of south India, and it was discovered that this condition had a negative effect on quality of life [5]. Another research conducted in 2014 discovered that 83.1% of people have musculoskeletal discomfort in at least one area. The most frequent place was the neck (31.7%), followed by the low back (57.75%) [5]. The disease burden profile of Kerala, especially Malabar also hold a similar prevalence of musculoskeletal conditions. Hence, before approaching mainstream medical care, they at prime facie depends on their community medicine.

5.2.1 MSDs treatment among Malabar Mappila community

Numerous medicinal plants have been utilised by people from various cultures to treat conditions connected to Musculoskeletal Conditions, such as muscle discomfort, rheumatism, broken bones, etc. 142 plant species were reported in studies from Pakistan and Turkey as being historically used to treat MSDs, primarily rheumatism. Moreover, MSDs have a significant impact on professional farmers. For instance, injuries from MSDs were documented in farmers in southeast Kansas (USA) , the Netherlands , Britain, and Ireland [5] Osteoarthritis, lower back discomfort, upper limb diseases, sprains, fractures, and dislocations were significant conditions associated with MSDs. The effects of MSDs are severe in Malabar. Over half of the agricultural land in Malabar is used for the production of rice and vegetables. Overly bending, twisting, kneeling, and carrying weights are common physical activities among farmers, which have been linked to a variety of musculoskeletal disorders. These conditions frequently impact the knees, shoulders, hands, and wrists. The other working population in Malabar primarily does unskilled labour, where physical labour is more important than cognitive labour.

Musculoskeletal disorders are becoming more prevalent in Malabar as a result of migration to middle eastern nations and the strenuous physical labour there. Even though Kerala has been the focus of several ethnomedical research, none of them have specifically examined the usage of medicinal plants in Malabar to treat Musculoskeletal disorders. Therefore, it is crucial to record ethnobotanical data among the Mappila Malabar to discover: i) How many plant species are employed in the treatment of Musculoskeletal disorders (ii) Which plant species and groups are most crucial for treating Musculoskeletal disorders (iii) Which plant components and preparation techniques are favoured for treating Musculoskeletal disorders (iv) Which Musculoskeletal disorders category among Malabar Mappila has the highest occurrence, and which plants are utilised to cure it.

The Malabar Mappila people employed a wide variety of medicinal herbs to cure MSDs. When compared to the evaluation of ethnobotanical knowledge regarding medicinal plants to treat MSDs in Kerala [6], these plants account for 30% of all medicinal plant species in Northern Kerala. It should be noted that various parts of Malabar have varying numbers of medicinal MSD plants. There were many locations with many of MSD plants. *Leguminosae* was the most popular family among the Malabar Mappilas for treating MSD, which is consistent with previous ethnomedicinal study conducted elsewhere. According to reports, the family *Leguminosae* contains the greatest variety of medicinal plant species used to treat MSDs in northern Pakistan [7]. Locals in many regions of the world utilise many species of the family to treat illnesses. Additionally, it was one of the families that dominated ethnobotanical plant surveys, with the most usage reports and species utilised among a variety of global ethnic groups [7]. The Mappila people still has a wealth of traditional plant knowledge and uses numerous medicinal *Leguminosae*. One of the biggest plant families in the world [7], Leguminosae may be found in a variety of locations and is home to a wide range of organisms. As a result, it was chosen for usage in Southeast Asian locales [7]. *Zingiberaceae*, *Asteraceae*, and *Rubiaceous* were other plant groups with several medicinal plant species; these families also contain numerous species in Malabar. In terms of the total number of species worldwide, the Asteraceae family is comparable in size to the Leguminosae [7]. Many species from both groups are utilised to treat MSD-related illnesses in Malabar. Additionally, all of these families dominate in Kerala's other ethnobotanical studies, particularly the Malabar studies. The Malabar Mappila mostly used shrubs and trees among the plant species they picked for traditional MSD treatment. In various regions of the world, like Thailand, Ghana, Peru, and South America, trees were very often employed as MSD remedies. [8]

5.2.2 Utilization of Plants: Components, Preparation, and Administration Routes

Similar to what has been discovered in previous research in India, including the ethnobotany of the northern India and the evaluation of all ethnomedicinal applications of plants in India [7], leaves and roots were the most commonly employed portions in the treatment of MSDs. Similar to earlier ethnomedical studies on MSD therapies conducted in Algeria, Central Africa, India, Italy, Kenya, Papua New Guinea, and South Africa, leaves were reported as the most utilised part in Malabar as well. Additionally, Malabar employed the plant's leaves with roots extensively for the treatment of MSDs. Because they are easier to harvest than other plant components, leaves are frequently chosen. In addition, as leaves are where photosynthesis occurs, they are abundant in secondary metabolites. The root alone was another often-utilised component because some bioactive chemicals are maintained in roots at higher levels than in other components. Decoction was the most popular preparation technique. In Malabar and across Kerala, such as in Kottayam, Kolam, and Trivandrum, as well as other parts of the world such Central Africa, China, eastern Nicaragua, northern Pakistan, and the Philippines, this process is frequently used to prepare medicinal herbs. The simplest method for removing bioactive compounds from plant materials is through decoction. Additionally, sweeteners can be added to the decoction during or after preparation to change the flavour and lessen the harshness of the medications. In addition to being consumed, the decoction might also be used topically (such as when bathing). Oral ingestion was the most popular method of delivery. from the fieldwork it has been reported that, Malabar and several regions of Kerala [9] use it as their primary way of administration. Oral intake is also common all across the world. Poultices and eating as food were two additional preferred methods of administration. Herbal remedies were ground up and put directly to the affected areas. Additionally, the plants' secondary substances were released when they were crushed or pulverized. Furthermore, experts in the area concurred that eating veggies helped patients feel as though they weren't taking any medication. A simple technique to prepare medicinal plants so that they may be consumed as part of a daily diet is to prepare them as fresh vegetables. *Ageratum conyzoides* is the most crucial herb for treating MSDs among Malabar Mappila. It is utilised for a variety of MSDs, including wrist symptom/complaint, joint symptom/complaint, sprain/strain of joint, fracture, joint symptom/complaint, leg/thigh symptom/complaint, and flank/axilla symptom/complaint. In many other parts of Malabar, this plant is widely renowned for its medical qualities. The various subgroups of the Malabar Mappila community utilize it to cure muscular discomfort and bone fractures. As part of the information exchange of knowledge regarding medicinal plants, the

other residents of Malabar also use this plant. The other significant plant is called Alpinia galanga. It has been noted that other members of this genus include phytochemicals with anti-inflammatory and anti-analgesic effects, which may be directly connected to their usage in the treatment of MSDs. It contains substances with anti-inflammatory properties, including as phenolics and terpenoids. *Alpinia galanga* root extract also demonstrated anti-inflammatory and anti-analgesic properties. *plantago major, , Gmelina arborea, Miliusa thorelii, Elephantopus scaber,* and *Blumea balsamifera* species were employed to cure illnesses in many MSD categories and were recorded in various locations throughout Malabar. Some of them are extensive like *Plantago major*, and are simple to gather for usage. This plant has reportedly been used to treat eight different types of MSDs, including back pain, flank/axilla discomfort, and muscular aches. It has iridoids that have persistent anti-inflammatory properties that might ease MSD. It was also utilised in other Malabar cultures to alleviate muscular discomfort, bone fractures, and rheumatic conditions. Islam has utilised *Blumea balsamifera* for traditional medicine for thousands of years. It does enjoy widespread religious support. Additionally, this plant contains chemical components that have antioxidant and anti-inflammatory properties. The other important species used by Malabar Mappilas is listed below.

FAMILY	**SCIENTIFIC NAME**	**PART USED**	**MODE OF USAGE**	**ADMINISTRATION**
ASTERACEAE	*Acmella oleracea*	roots	Alcohol infusion	Oral consumption
ASTERACEAE	*Ageratum conyzoides*	Full plant	Decoction	Oral consumption
ASTERACEAE	*Blumea balsamifera*	Full plant, roots, stem	Grind, decoction	Steaming, oral consumption, poultices
ASTERACEAE	*Chromolaena odorata*	Stem, roots	Decoction	Oral consumption
ASTERACEAE	*Elephantopus scabe*	Full plant, roots	Decoction	Oral consumption

ZINGIBERACEAE	*Alpinia roxburghii* Sweet	root	Decoction	Oral consumption, Bath
ZINGIBERACEAE	*Alpinia galanga*	root	Decoction	Oral consumption
ZINGIBERACEAE	*Curcuma longe*	root	Grind, burning	poultices
ZINGIBERACEAE	*Curcuma zedoaria*	root	-	chewing
LEGUMINOSAE	*Biancaea sappan*	stem	Decoction	Oral consumption
LEGUMINOSAE	*Brachypterum scandens*	stem	Decoction	Oral consumption
LEGUMINOSAE	*Codariocalyx motorius*	root	Decoction	Oral consumption
LEGUMINOSAE	*Erythrina subumbrans*	Leaves, Bark	Decoction, Burning	Oral consumption, poultices
LEGUMINOSAE	*Flemingia strobilifera*	root	Decoction	Oral consumption
LEGUMINOSAE	*Huangtcia renifolia*	Full plant	Decoction	Oral consumption
LEGUMINOSAE	*Mimosa pudica*	Full plant, roots	Decoction	Soak, Oral consumption
PIPERACEAE	*Piper boehmeriifolium*	root	Decoction	Oral consumption
PIPERACEAE	*Piper nigrum*	Infructescences	Decoction	Oral consumption
PIPERACEAE	*Piper ribesioides*	stems	grind	Oral consumption

PIPERACEAE	*Piper interruptum* Opiz	stem	Decoction	Oral consumption
RUBIACEAE	*Psychotria yunnanensis*	stem	Decoction	Oral consumption
RUBIACEAE	*Rubia cordifolia*	Full plant	Decoction	Oral consumption
PLANTAGINACEAE	*Plantago major*	Full plants, leaves, roots	Burning, decoction, grinding, pounded	Compressed and eaten as food, poultices, oral consumption
ANNONACEAE	*Miliusa thorelii*	Leaves, stem, roots, bark	Decoction, alcoholic infuse	Oral ingestion
LAMIACEAE	*Gmelina arborea*	inflorescences, bark	Decoction, burning	Oral ingestion, soak, poultices

Table 3; plants used by Malabar Mappilas for Musculoskeletal diseases

5.3 Integumentary system

The major organ of the body that physically separates the internal environment it protects and maintains from the exterior environment is the integumentary system. The primary components of the integumentary system are the hair, skin, and nails. This system not only serves as a barrier but also carries out a number of complex tasks like controlling body temperature, maintaining cell fluid, synthesising vitamin D, and sensing inputs. The many parts of this system cooperate to do these tasks; for instance, thermoreceptors control body temperature by adjusting the amount of sweat produced, the growth of body hair, and peripheral blood flow.

5.3.1 Integumentary system; Care, disorders and remedies

The Malabar Mappila community practises Islam, as has already been mentioned. The Malabar Mappila's sacred books make specific mention of cleanliness and hygiene, putting emphasis to the outer cleanliness of the body, particularly the skin, hair, and nails. These bodily parts are

cleaned on Fridays in the community. Respondent A from the community made the following claim:

"*Cutting nails is advised on every Friday. A sunnath it is. Of course, Fridays are significant in Islam since Jumah (Friday Namaz) is performed on these days. Therefore, including these hygienic actions will double God's blessing.”*

The community engages in physical labour, particularly the "work of mud, dirt, and soil," as was previously described in the section on the musculoskeletal system. *Pusalans*, a Malabar fishing community, are more likely to practice it. In the fieldwork, a respondent from the *pusalan* subgroup stated that:

"*There is a type of 'nura and padha' (a material formed by the chemical reaction in the water) when we go for fishing in certain seasons. There are greater odds of coming into touch with these materials and resulting in a severe skin illness. The affected body part will eventually be exposed to serious illnesses if it is not treated appropriately’’*

Thus, Malabar Mappilas' daily activities include treating skin conditions and developing preventative measures. They frequently have curable skin disorders. Living near the shore and Malabar's other geographical features can contribute to skin disorders. However, research shows that Malabar landscape also preserves the balance by offering treatments for those illnesses in its soil.

5.3.2 Skin disorders; care and remedies.

Skin illness is a widespread public health issue that frequently affects social, psychological, and physiological aspects of health. Skin conditions frequently have a negative impact on people's health, including infants and the elderly. Global distribution is impacted by common skin disorders in both resource-poor and high-income environments. Examples of skin conditions seen in places with limited resources include pyoderma and scabies. Both resource-poor places and sophisticated economic settings are prone to skin conditions such atopic eczema, psoriasis, skin ulcers, and itch. Various illnesses with varying degrees of severity are classified as infectious skin diseases. For the treatment and prevention of different diseases, herbal remedies and traditional medicines are beneficial. They are becoming increasingly popular as alternatives to conventional treatments for common skin issues. Natural medications made from plants have gained popularity throughout time owing to a number of benefits, including as less side effects, affordability, and long-term acceptability. Additionally, medicinal

plants can be used as raw materials in the creation of new therapeutic medicines. Numerous plants, including *Aloe vera, Azadirachta indica, Calendula officinalis ., Cannabis sativa ., Portulaca amilis*, and others, have been studied for the treatment of skin conditions ranging from itching to skin cancer and have been reported to be effective in treating a number of skin conditions. In the native communities of Northern Malabar, about 106 plant species (oral count) are used to cure skin issues such wound healing, skin burns, boils, pimples, inflammatory abscesses, etc. Plants include phytochemical compounds that are used to treat skin conditions. Depending on how they function in a fundamental metabolic process, plant components, or phytoconstituents, are classified as primary and secondary metabolites. The biological effects of secondary metabolites have been shown to vary, giving many ancient civilizations' usage of herbs in traditional medicine a scientific basis. According to their chemical structures, secondary metabolite classes include phenolics, lipids, saponins, carbohydrates, alkaloids, and terpenes. Mangiferin, lutein, curcumin, resveratrol, embelin, naringenin, quercetin, lycopene, gingerol, and apigenin are among the phytochemicals used to treat skin diseases. Their mechanisms of action against skin disorders, such as reducing inflammation, reducing skin infection, healing wounds, treating skin cancer, and slowing down skin ageing, have also been reviewed [10].

Traditional healers are important for maintaining public health in Malabar Mappila communities, and many people believe that herbal medicine has therapeutic properties. The local healer is one of the key sources for learning how herbal medicine is used to treat patients in the region, and they will also serve as the starting point for your quest for notable plants. However, there hasn't been a thorough ethnomedical investigation into the polyherbal remedies utilised in this region by conventional healers to treat skin diseases. The purpose of this study was to identify local knowledge and investigate how local healers in the Malabar Mappila community used medicinal plants to treat different conditions of human body.The most prominent families of plant species employed for treating skin diseases in Malabar were *Acanthaceae, Fabaceae, Rubiaceae,* and *Zingiberaceae*. *Acacia catechu, Entada rheedii, Pterocarpus indicus, Senna alata, and Senna siamea* were among the plants in the Fabaceae family. *Rubiaceae* family included *Mitragyna speciosa*, *Uncaria gambir, Prismatomeris tetrandra, Hydnophytum formicarium, and Ceriscoides turgida*, whereas *Zingiber montanum, Curcuma zedoaria, Curcuma longa, Zingiber zerumbet, and Curcuma aromatica* were found in the *Zingiberaceae* family. Among the plants utilised in Malabar Mappila's traditional medicine, *Fabaceae* and *Zingiberaceae* are widely recognised.

SCIENTIFIC NAME	FAMILY	PART USED	PROPERTIES
Tinospora crispa	MENISPERMACEAE	stem	antioxidant, antifungal, and antibacterial properties inflammatory-reduction capacity wound healing process
Barringtonia acutangular	Lecythidaceae	Bark, stem	antifungal, antibacterial, and antioxidant properties inflammatory-reduction capacity
Anacardium occidentale	Anacardiaceae	pericarp	anti-oxidant and anti-bacterial properties, anti-fungal properties, inflammatory-reduction capacity
Aloe vera	Liliaceae	Latex, leaf	Effects on skin moisture and erythema Effect that increases skin permeability wound healing process Melasma activity is declining psoriasis prevention
Tiliacora triandra	Menispermaceae	stem	antioxidant, antifungal, and antibacterial properties anti-viral activity
Quercus infectoria	Fagaceae	Gall	anti-oxidant function inflammatory-reduction capacity wound healing process
Punica granatum.	Lythraceae	Pericarp	anti-oxidant function inflammatory-reduction capacity anti-melanoma properties wound healing process
Garcinia mangostana	Guttiferae	pericarp	Effect of treatment on skin conditions Proliferation of cells and activity related to wound healing

			increasing thickness and density of skin collagen
Datura metel	SOLANACEAE	seed	anti-fungal properties anti-viral behaviour anti-oxidant function
Curcuma zedoaria	zingiberaceae	Rhizome	anti-inflammatory and Antibacterial activity, antioxidant function, wound-healing processes, anti-tumour action
Senna siamea	Fabaceae	leaf	anti-inflammatory and painkilling effects anti-oxidant function
Knema globularia	Myristicaceae	seed	cytotoxic effects
Eurycoma longifolia	Simaroubaceae	root	antifungal and antibacterial properties, anti-cancer properties, Activity to inhibit tyrosinase
Oryza sativa	POACEAE	seed	anti-inflammatory and antioxidant properties bacterial resistance anti-fungal properties anti-viral effect Anti-aging exercise psoriasis severity reduction Arthritis-Preventive Action
Zingiber montanum	zingiberaceae	Rhizome	anti-inflammatory properties, anti-bacterial properties, anti-fungal properties anti-ulcer ability anti-cancer properties

Nicotiana tabacum	Solanaceae	Leaf	anti-bacterial and anti-fungal activities anti-viral action antioxidant function Anti-dandruff action against aphthous
Curcuma longa	zingiberaceae	Rhizome	anti-oxidant function inflammatory-reduction capacity wound healing process Activity as a hyaluronidase inhibitor

Table; 4 Preferred plants and their medicinal properties in multi-herbal treatments for skin conditions

Table 4 lists the chosen medicinal plants utilised in polyherbal treatments for skin conditions along with their pharmacological properties among Malabar Mappilas. The Malabar Mappila community has the highest preference for *Oryza sativa* and *Zingiber montanum*, followed by *Nicotiana tabacum*, according to the qualitative data. Herpes simplex and abscesses were treated with Oryza sativa, while *Zingiber montanum*, a plant related to *Nicotiana tabacum*, was used to cure tinea, acne, and ulcer leprosy. *Curcuma longa, Eurycoma longifolia, Knema globularia, and Senna siamea* were further significant plants. Malabar Mappilas regularly treated their skin with *Oryza sativa* seeds. Due to their antioxidant characteristics, the anthocyanin polyphenols found in *Oryza sativa* have a positive impact on health. By controlling the expression of type I collagen genes and repressing H2O2-induced NF-B activation in skin fibroblasts, anthocyanin from *Oryza sativa* displayed anti-inflammatory and anti-aging effects [11]. Against multidrug resistant Staphylococcus aureus, the crude extract, alkaloids, flavonoids, and saponins from *Oryza sativa* shown antibacterial activity [11]. In addition, *Oryza sativa* L. has been shown to have antibacterial action against viruses and fungi [11]. The severity of psoriasis was reduced by *Oryza sativa* crude extract's antioxidative and immunomodulatory qualities. Another plant that is widely utilised in the community is *zingiber montanum*, which has been studied for its phytochemicals and pharmacological properties all over the world. The rhizomes of *Zingiber montanum* contain a wide range of bioactive phytochemicals, such as alkaloids, saponins, tannins, flavonoids, terpenoids, phenolic compounds, phlobatannins, steroids, and glycosides [13]. The rhizome of *Zingiber montanum's* essential oil had antifungal properties against *Candida albicans*.

The *Nicotiana tabacum* leaf, which has a variety of biological functions, was the chosen ingredient in the formulations. Alkaloids, phenolic compounds, tannins, flavonoids, steroids, terpenoids, cardiac glycosides, essential oils, resins, saponins, quinones, and polypeptides are among the phytochemical components found in the various extracts of *Nicotiana tabacum* leaves [13]. The ethyl acetate extract of Nicotiana tabacum showed antimicrobial action against *biofilm-forming Escherichia coli* and *Klebsiella species,* as well as *Staphylococcus aureus, Pseudomonas aeruginosa, and Klebsiella pneumoniae*. 3, 4, 5, and 6 tetrahydro-1, 3-dimethyl-2(1h)-pyrimidinone, pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, isododecane, n-pentadecane, and tetradecyl aldehyde were the most prevalent phytochemical elements identified in the ethyl acetate extract [13]. Biological activity was shown for curcumin and its derivatives derived from *Curcuma longa* L. The antioxidant, anti-HIV, anti-inflammatory, and anti-tumour properties of curcumin were demonstrated. While sodium curcuminate shown anti-inflammation properties, dimethoxy and bisdemethoxycurcumin displayed antioxidant activity [14]. The strength of the antioxidant action was indicated by the high concentrations of curcuminoids and other chemicals found in MeOH extracts from *Curcuma longa* . [14]. Herpes simplex virus type 1 (HSV-1) in cell culture shown impressive antiviral effects when treated with curcumin and its derivatives, gallium-curcumin and copper-curcumin [14]. On the excision wound model, an ethanolic extract of *Curcuma longa* rhizomes was discovered to have superior and quicker wound healing activity than the widely used medication povidone iodine ointment. The hydroalcoholic extract of *Eurycoma longifolia* shown notable anti-inflammatory and antioxidant activities. The extracts from the stem and root of *Eurycoma longifolia* contained proteins, flavonoids, terpenoids, alkaloids, phenolic compounds, flavonoids, terpenoids, terpenoids, alkaloids, and cardiac glycosides. *Bacillus cereus, Staphylococcus aureus, and Aspergillus niger* were all susceptible to the extracts antibacterial effects [15]. *Senna siamea* leaf extracts effectively combatted *Candida albicans* and *Aspergillus niger* fungi. Leaf extracts in petroleum ether were discovered to be quite effective against S. aureus [16]. According to phytochemical screening, *senna siamea* extract included alkaloids, anthraquinones, saponins, tannins, phenols, steroids, flavonoids, terpenoids, and glycosides [16]. Klebsiella pneumoneae, *Salmonella typhi, Shigella spp., Escherichia coli*, and *Pseudomonas aeruginosa* are all susceptible to the effects of *senna siamea* leaf extracts. For the purpose of wound healing several other noteworthy plants, including *Curcuma longa*, *Curcuma zedoaria*, *Aloe vera, Garcinia mangostana, Punica granatum*, and *Tinospora crispa*, were also mentioned by Malabar Mappilas.

5.3.3 Nail disorders; care and remedies

The herbal antifungal treatment is an alternative therapy for onychomycosis that is less expensive, safer, and often accessible. Worldwide reports have been made about the antifungal activity of plant extracts from native species, including their activities against yeast and dermatophytes. Due to its ability to treat diseases and lack of negative side effects, medicinal plants have attracted more attention in recent years. Researchers found that using plant-based solutions to combat fungus infections has also been proven to be a successful strategy. Some plants, including ginger, neem, cilantro, garlic, *tulsi*, henna, and aloe vera, have been shown to have antifungal properties that can treat fungus-related diseases. Some of the bioactive substances included in these plants include flavonoids, alkaloids, tannins, citronellol, geraniol, thymoquinone, and phenolic compounds. The Northern part of Malabar was where *Euphorbia cotinifolia's* antifungal leaf and stem bark extracts were mostly employed. It is possible to cure onychomycosis using this attractive plant. *Trichophyton rubrum, mentagrophytes*, and *Aspergillus niger* were all suppressed by the methanolic extracts of *Euphorbia cotinifolia's* leaves and stem bark, but not by the common medication fluconazole [17]. Locals utilise the stem sap of *Euphorbia sanguinea* as a traditional treatment for onychomycosis. When compared to antifungal medications, the sap had excellent antifungal activity. Onychomycosis is brought on by the *euphorbia sanguinea*, which possesses antimycotic action against *Candida albicans* [17].

FAMILY	**SCIENTIFIC NAME**	**PART USED**	**DROPS (D)/ NUMBERS (N)**	**MODE OF APPLICATION**
EUPHORBIACEAE	*Excoecaria oppositifolia*	Latex	2 or 1 (D)	It is used in the preparation to control the excruciating nail condition. One or two drops of the latex from this plant are placed to the corners of the sore nails. This method should be used for three to seven consecutive days. The patient should keep their body as clean as possible.

APOCYNACEAE	*Tabernaemontana divaricata*	flowers	5 (N)	They are turned into a paste, which is then put over the sore toes. wrapping the diseased portion with fabric is absolutely forbidden. This procedure is repeated twice daily for 5–6 days.
BROMELIACEAE	*Ananas comosus*	leaves	6 (N)	
ARECACEAE	*Calamus tenuis*	Tender stem	1 (N)	To get it hot over fire, it was first roasted. It is then turned into a paste and administered topically to the toenail or nail that is infected. When done in the morning, it works excellently and lasts for several hours. For three to four days, this process is continued continually.
COMMELINACEAE	*Commelina benghalensis*	Branch	1(N)	These six (6) herbs are combined with two (2) catfish heads to form a paste. On the sore nail, this paste combination is put locally, and it is left on for a while. However, the paste is repeatedly wetted with cold water for a number of times before it

				completely dries. Once in the morning and once in the evening should be done each day. The procedure must continue for 4-5 days without interruption. The patient is advised by the healer not to wrap their toes in fabric.
EUPHORBIACEAE	*Ricinus communis*	Leaves	1 (n)	
MIMOSACEAE	*Mimosa pudica*	leaves	3 or 4 (No)	
MALVACEAE	*Sida cordifolia*	leaves	1	
BASELLACEAE	*Basella alba*	Shoot (tender)	1	
MALVACEAE	*Sida acuta*	leaves	2	

Table 5; Preferred plants and their medicinal properties for nail and toe infections.

5.3.4 Hair problems; care and remedies

The migration of Malabar Mappilas to middle eastern nations for employment reasons was already covered in earlier parts. Climate change weakens the health of the hair and causes hair loss. Because males make up the majority of the working population in the middle eastern countries, this is a widespread problem among men. Women practise proper hair care practises mostly during adolescence and as part of postpartum care. In summary, the treatment is used to promote hair development while also preventing hair health loss. Alopecia (hair loss) does not often have many physically detrimental symptoms, but it can have psychological repercussions, such as elevated levels of worry and sadness. One of the main proteins that makes up the fibrous structure of hair is keratin. These hairs originate in tubular, funnel-shaped

organs called hair follicles. The matrix of the hair bulb, a single stem cell group, and several keratinocyte types are the first cells to create the hair shaft [18]. Proliferative cells in the hair follicle divide relatively quickly to generate the hair. In a hair follicle, the freshly generated cells are differentiated, keratinized, and pigmented to create a dead hair shaft. Each follicle has an independently operating, naturally defined cycle; hair does not grow constantly throughout life. The growth cycle consists of three phases [19]: the first phase is the anagen phase, which lasts from three to six years on average before slowing down and stopping, followed by the transitional or catagen phase, which lasts for around two weeks. The morphology of the hair changes throughout this time. The telogen phase, often known as the sleeping stage, is the last stage before the anagen phase, which lasts for roughly three months. When hair is in the telogen phase, it progressively grows out and falls off. The medicinal plants used by Malabar Mappilas has been listed in Table 6. *Allium sativum* and *Allium cepa* ;Malabar Mappilas patch baldness has been treated traditionally with garlic applied topically. The major substance in a garlic clove is alliin, a derivative of an amino acid that contains sulphur and has no odour. An enzyme transforms it by chopping, grinding, or crushing it into allicin (a yellow liquid), which is thought to be the source of the medicinal effects [23]. Sadly, very few research have been conducted to yet on the effectiveness of garlic in treating spot baldness, and as a result, it is still unclear how garlic stimulates the development of hair [24]. Garlic's modulatory effect on the immune response may have an impact on this problem because spot baldness is immune-dependent. Topical usage of onion was also investigated since it is related to garlic and has many chemical properties with it. Patients with spot baldness received topical applications of raw onion juice. For a period of two months, patients received treatment twice daily. Beneficiaries of the Malabar Mappila Community's therapy demonstrate hair growth following a two-week onion juice regimen. *Camellia sinensis* ; The leaves of the evergreen plant Camellia sinensis are used to make green tea. Although this plant is Chinese in origin, it has ties to many other Asian nations, including Japan and the Middle East. It is a significant commodity that middle eastern nations export to Malabar. Different catechins, such as catechin, Gallo catechin, epicatechin, epigallocatechin, epicatechin gallate, and epigallocatechin gallate, are present in the tea leaf. Beneficiaries of this therapy claim that drinking water infused with green tea polyphenol extract for six months caused noticeable hair growth. Pumpkin, Cucurbita pepo; The Cucurbitaceae plant family includes the pumpkin. Some of its cultivars' fruits and seeds are frequently eaten as food. Pumpkin seed oil is a normal byproduct and is a good source of fatty acids, beta-carotene, lutein, gamma and beta-tocopherols, squalene, and phytosterols [19]. There have been some published findings on the effectiveness of pumpkin oil in the treatment

of symptomatic benign prostatic hyperplasia [19]. *Curcuma aeruginosa;* Instead of ginger, curcuma aeruginosa is a plant native to South Asia and India [20] that is related to turmeric. It gets its nickname "pink and blue ginger" from the pink corolla lobes and blueish rhizomes. Eastern medicine has long employed the rhizome of C. aeruginosa to treat a variety of ailments, including dysmenorrhea and fungus infections. 1,8-Cyneol, Curcumenone, Curcumenol, Iso-Curcumenol, Camphor, and other active substances are present in this plant's essential oil [20]. Its primary sesquiterpenoid component has anti-inflammatory and anti-androgenic properties, functioning as a germacrene [19]. Malabar Mappilas, however, does not apply this to female bodies since, in the past, it caused ladies to develop axillary hair. *Serenoa repens;* Although its effects on alopecia are less obvious, palmetto, a member of the palm tree family, is frequently used and studied for its effectiveness in the treatment of benign prostatic hyperplasia. Its fruit's dry extract contains phytosterols and flavonoids that have an anti-androgenic effect. Despite the plant's popularity among patients, no definitive scientific trials have been done to support its efficacy in treating alopecia. S. repens extract is a good option for the treatment of mild to moderate forms of androgenic alopecia because it caused an improvement and stabilisation in the state of the condition, but only in the area of the vertices, whereas finasteride also worked well in the frontal area of the scalp. *Sophora flavescens ;* An evergreen bush from the Fabaceae family called *Sophora flavescens* may be found in Asia, Oceania, and the Pacific. 1.5% flavonoids and 3.3% alkaloids are present in the plant [22]. Due to its anti-cancer and antibacterial action, as well as its vasodilatory and apoptogenic properties, Malabar Mappila traditional medicine has long utilised it to treat a variety of ailments [22]. Due to its anti-inflammatory properties, it is also traditionally used to treat skin conditions and to encourage hair growth. *Trifolium pratense;* An animal feed crop from the Fabaceae family is red clover. In Malabar Mappila medicine, it is used to treat chronic skin conditions like psoriasis or dermatitis as well as stomach irritation, depression, fungal infections, cough, and other respiratory tract problems. Dried flowers and their preparations, especially alcohol-water liquid extracts containing pharmacologically active ingredients including isoflavonoids (phytoestrogens), cyanogenic glycosides, cumarin derivatives, and essential oils with aromatic alcohols, are used in medicine. The quantity of hairs and anagen density were both raised by the red extract therapy. Additionally, according to its practitioners, red clover influences both hormonal effects, inhibits hair loss owing to micro inflammation, and promotes hair growth by promoting the production of extracellular matrix peptides. Other than these Malabar Mappilas also use **procyanidins** for haircare. It is a class of polyphenols known as procyanidins has a wide range of pharmacological actions. Procyanidins are also employed as active components

in pharmaceuticals to preserve capillary vessels and as skin protectants in cosmetic products. Numerous scientific studies of this plant have been done. There is evidence that they can encourage hair growth [21]. Procyanidins are thought to induce the catagen phase and inhibit the function of the negative hair growth regulator (TGF-). Additional aggravating variables for hair development include lipid peroxidation and inflammation, with research showing a connection between the two and male pattern baldness. Patients' follicle biopsies revealed a higher infiltration of lymphocytes [21]. Procyanidins can help stop this from happening. Another significant hair care essential of Malabar Mappilas are the use of **essential oils.** Thyme *(Thymus vulgaris)* lavender (*Lavandula agustifolia*.), rosemary (*Rosmarinus officinalis*.), and *Cedrus atlantica* have all been traditionally utilised by Malabar Mappilas to cure baldness for more than a century. For seven months, patients rubbed the blend of essential oils into their scalps for two minutes each night. To improve the absorption, they covered their hair and scalp with a warm cloth. The essential oils from the following plants were used in the lotion given to the beneficiaries of Malabar Mappila's curative therapy: *Pimenta racemosa, Myrtus communis, Cedrus atlantica, Laurus nobilis, Pogostemon cablin, Rosmarinus officinalis, Salvia officinalis, Salvia sclarea, Thymus satureioides, and Cananga odorata*.

FAMILY	**SCIENTIFIC NAME**	**USED FOR**	**PART USED**	**MODE OF USAGE**
LILIACEAE	*Allium sativum*	Patches, baldness	Leaf	Rubbing in effected area
LILIACEAE	*Allium cepa*	Spot baldness	Leaf	Dropping extract
THEACEAE	*Camellia sinensis*	Hair growth	Leaf	drinking
CUCURBITACEAE	*Cucurbita pepo*	Early baldness	Fruit	Dropping extract/ intake
ZINGIBERACEAE	*Curcuma aeruginosa*	Itching scalp (only for men)	Fruit	Dropping extract
ARECACEAE	*Serenoa repens*	androgenic alopecia	Whole plant	Dropping extract

FABACEAE	*Sophora flavescens*	Hair growth	Leaf	Dropping extract
FABACEAE	*Trifolium pratense.*	Hair growth	Whole plant	Dropping extract

Table 6; Preferred plants for hair care/ hair growth/ hair disorders.

5.4 Respiratory system

The bodily system in charge of breathing is the respiratory system. The nose, mouth, pharynx, larynx, trachea, bronchi, and lungs are all part of it. The respiratory system's primary job is to exchange gases, notably oxygen and carbon dioxide, between the body's cells and the outside environment. The circulatory system, which transports oxygenated blood to the body's cells and returns deoxygenated blood to the lungs, cooperates with the respiratory system to carry out these functions. This ongoing exchange of gases keeps the body's oxygen levels balanced and eliminates waste products like carbon dioxide.

5.4.1 Respiratory Diseases ; Care/Remedies

The term "respiratory diseases" refers to a group of pathological illnesses that affect the lungs, bronchi, and nasal passages, together known as the respiratory tract. These health issues include generalised symptoms like dyspnoea and vary from acute infections like pneumonia and bronchitis to chronic diseases like asthma and chronic obstructive pulmonary disease (COPD). The majority of respiratory illnesses are minor and self-limiting, like the common cold, but some can be fatal, such lung cancer, pulmonary embolism, and bacterial pneumonia. In terms of mortality, incidence, prevalence, and expense, cardiovascular illnesses come in second to respiratory diseases [22]. Every day, hundreds of millions of individuals throughout the world have chronic respiratory illness. According to WHO estimates, 210 million people worldwide have COPD, 300 million people worldwide have asthma, and millions more have allergic rhinitis and other chronic respiratory diseases that are frequently undiagnosed (22).

In order to gather information about Malabar Mappilas' traditional medical practises for treating respiratory disorders, attention has been given to infectious infections, although data on all respiratory ailments has also been gathered. Asthma, bronchitis, and generalised symptoms like breathlessness (dyspnoea) are some of the diseases that are frequently treated with traditional treatments. For pneumonia, which is an inflammation of the lungs brought on

by an infection by bacteria, viruses, or fungi. In the recent past, non-serious respiratory issues like common colds, influenza, or sore throats were typically treated with remedies primarily based on plants while, when the symptoms of pneumonia or pleuritis were recognized, a specialist was needed and more complex spiritual and dietary therapies were used in their culture. Traditional medicine is now also exclusively utilised to treat common respiratory infectious infections; hospitalisation is reserved for treating more serious conditions. Tables 5 and 6 provide a summary of the findings from the field on the treatment of respiratory illnesses in Malabar Mappilas. The Table 7 relates to plants and plant-derived products. Table 8 has a considerably smaller data set on animals and their products, but it is still pertinent. Despite the fact that just one informant has mentioned the medicinal plants they utilised, this suggests a loss of knowledge, which is a regular occurrence in many industrialised regions and even in non-industrialized areas. Additionally, the informants typically forget the herbs that are utilised to treat various illnesses. This would imply that their usage was fairly constrained. Because of the synergy between the various plants, the effects are amplified when they are combined. The *Lamiaceae, Pinaceae, and Asteraceae* families are the most often mentioned. These findings imply that, in addition to the informant's positive experiences with each plant they ultimately choose, the ease of gathering may also play a role in determining which plants are utilised by locals in the study region. In the Malabar landscape, species from the *Lamiaceae* and Asteraceae families are particularly prevalent.

As Because it can be challenging to tell pneumonia from other related respiratory diseases and because the informant's descriptions frequently referred unidentified lung issues, the current findings may be somewhat skewed if they strictly focus on pneumonia. This is the reason why all therapies pertaining to the respiratory system are included in this chapter. The acquired outcomes for the respiratory tract disorders treated with plants have also been many, it is evident from the field. The most often mentioned usage is for anticatarrhal purposes, followed by uses for sore throat and antitussive. Due to the area's chilly environment, these issues are extremely prevalent, yet they do not represent highly significant diseases. It is simple to cure these issues or symptoms with plant medicines due to both qualities (the prevalence and the mildness of these illnesses), and various plants are employed as coadjuvants in the treatment of these ailments. The so-called doctrine or theory of signatures, which holds that morphological characteristics of plants would indicate their therapeutic properties, is frequently used to select the plants that are to be tested for use in folk medicine in addition to the previously mentioned plant availability (23). The citation of Pulmonaria longifolia, a plant

utilised for lung spots, provided evidence of its production in the current prospectus. Due to the relationship between the spots in the lung and the leaves' obvious spots in the plant, it is possible to interpret this stated property to improve pulmonary diseases, which is presented that way by the informants, based on this idea. This is not only a question of belief or magical application. The most often utilised parts of plants are their flowers and inflorescences, which are followed by their flowered aerial parts, fruits, including fruit components and juice, leaves, roots, cones, and buds. There are extremely few stories of people using complete plants or a plant's surviving components, such bulbs, tubers, or seeds, for example. In the course of the research, many preparation techniques were discovered. The majority of them are tisane, syrup, poultice, tincture, and aerosol, in that order. Internal usage is far more prevalent than external use when it comes to the means of administration. Different plant components are decocted (boiled in water) to create the tisane, and internal consumption is the typical method of administration. On the other hand, the poultice is often applied externally. People think that using a cure that may draw blood or fluids from the lung is important in order to "pull the pain out." Sometimes they say that when the poultice was applied, it became stained with blood. The dominance of odd numbers (mostly 7 and 9) in folk phytotherapy, here exemplified by nine folds, but frequently expressed in terms of number of days of a treatment or number of plant parts - flowers, leaves, or other - used to prepare a remedy, is another aspect of this use pattern that points to another common trait in ethnobotany, almost as quoted in medical anthropology as the theory of signatures [23]. Another important remedy of respiratory disorders is the use of animals and its product [table 6]

SCIENTIFIC NAME	**FAMILY**	**PART USED**	**USED FOR**
Costus speciosus	ZINGIBERACEACE	Rhizome	Cough, cold
Achyranthus bidentata	AMARANTHACAEAE	Root	Cough, cold
Phyllunthus embilica	EUPHORBIACEAE	fruit	Cough, cold
Curcuma aromatica	ZINGIBERACEACE	Rhizome	Cough, cold
Terminalia chebula	COMBREATCEAE	fruit	Asthma

Ranunculus laetus	RANUNCULACEAE	Rhizome	cough
Terminalia bellirica	COMBREATCEAE	Fruit	Asthma
Zanthoxylum armantum	RUTACEAE	Fruit	Cold and cough
Azadirachta indica	MELIACEAE	Leaf, fruit	pneumonia
Swertia chirayita	GENTIANACEAE	Whole plant	Cough
Cinnamomum zeylanicum	LAURACEAE	Leaves, bark	Pulmonary Tuberculosis, Pneumonia,
Antennaria dioica	ASTERACEAE	The aerial part (flowered)	Tuberculosis
Rosmarinus officinali	LAMIACEAE	Tender buds, aerial flowered part	breathlessness
Rubus ulmifolius	ROSACEAE	Tender buds	Sore throat
Rosa tomentosa	ROSACEAE	Flower, fruits	Sore throat
Origanum vulgare	LAMIACEAE	Flower	pneumonia
Origanum majorana	LAMIACEAE	leaf	Sore throat
Mentha pulegium	LAMIACEAE	Aerial portion	Sore throat
Piper nigrum	PIPERACEAE	Fruit	Throat infection
Pulmonaria longifolia	BORAGINACEAE	Leaves	pneumonia

Table 7; preferred plants for respiratory disorders

ZOOLOGICAL NAME	USED FOR	PART USED / PRODUCT USED
Apis mellifera	Antidiphteric	Honey
Bos taurus	Anticatarrhal	Milk
Gallusgallus domesticus	Antipneumonic	Meat

Table 8; animals used for respiratory disorders

5.5 Cardiovascular system

The cardiovascular system's primary job is to circulate blood throughout the body. In addition to extracting carbon dioxide and waste products from the cells and transporting them to the lungs and excretory organs, the system is principally in charge of delivering oxygen, hormones, nutrients, and disease-fighting cells to their respective destinations inside the body. Additionally, the circulatory system controls body temperature by expanding and contracting blood vessels near the skin.

5.5.1 Cardiovascular diseases.

Conditions that affect the heart and coronary blood arteries are often referred to as cardiovascular diseases (CVDs). High blood pressure is one of the risk factors for CVD that is associated with the highest evidence for causation and has a high exposure rate. Hyperlipidaemia, which is caused by abnormal lipid metabolism, is a major contributor to a number of chronic illnesses, including cardiovascular disease (CVD) [24]. Cardiovascular disease (CVD) is a term that covers a variety of illnesses, including hypertension, dyslipidaemias, cardiomyopathies, stroke, coronary heart disease, heart failure, heart attacks, and peripheral vascular disorders [24]. In recent decades, CVDs have emerged as one of the most important and rapidly growing public health concerns since they are a major cause of death and morbidity globally [24]. The major cause of mortality and morbidity worldwide is CVD. Today, more women die from cardiovascular disease than from breast cancer [25]. Globally, CVD-related causes account for 30% of fatalities [25]. According to the World Health Organisation [30], 17.9 million people worldwide die from CVD each year, making about one-third of all deaths. According to the 2017 European Cardiovascular Disease Statistics [26], 45 percent of all fatalities in Europe are attributable to CVDs. With almost 17 million fatalities per year, it is the leading cause of mortality globally. More women than males (51 percent vs.

42 percent) are afflicted, and death rates increase with age. The most often reported non-modifiable cardiovascular risk factors are age and gender. As people age, cardiovascular problems become more prevalent [26]. Other factors that increase the risk of cardiovascular disease include high blood pressure, high levels of LDL cholesterol, excessive alcohol use, high levels of psychosocial factors, cholesterol, insufficient regular physical activity, diabetes mellitus, abdominal obesity, and smoking [26]. Atherosclerosis is the primary cause of cardiovascular disease and mortality globally, along with excessive blood pressure.

Belong to the tradition of Islam, Malabar Mappilas also pursue high calorie diets which exacerbates the prevalence of cardiovascular conditions. Malabar Mappilas retorted that conventional medications are exceedingly pricey and have adverse effects when used to treat CVDs. They had to come up with a safer, more affordable, and more effective substitute as a consequence. In this regard, the most important kind of treatment for cardiovascular disease is herbal medicine. Malabar Mappilas are more prone to treat CVDs with medicinal herbs. a deeper understanding of how herbs promote health and quality of life has led to a general acceptance of their field of herbal medicine by the outsiders of Malabar community. Utilising phytochemicals and plant-based whole meals is an alternative and promising method to prevent CVD, as evidenced by the growing improvements in its beneficiaries. Arrhythmia, congestive heart failure, cerebral and venous insufficiency, atherosclerosis, angina pectoris, and systolic hypertension have all been treated with herbal remedies. Physical exercise is believed to be cardioprotective in addition to medicinal herbs. Malabar Mappilas reported 5 times mind body therapy (*Namaz*) as a type of physical exercise. Recent research has demonstrated that key cardiovascular disease risk factors including oxidative stress and inflammatory mediators may be successfully prevented, controlled, or blocked by natural substances [25]. The features of the bioactive chemicals that medicinal plants possess are what give them their therapeutic qualities [25]. There is evidence that a number of plant bioactive substances, such as carotenoids, tocotrienols, polyphenols, sulforaphane, catechin, quercetin, resveratrol, diosgenin, and flavonoids, can protect cardiovascular disease (CVD). According to epidemiological research and a few clinical trials, a healthy diet lowers the frequency of cardiovascular problems [24]. In comparison to diets rich in saturated fat, research found that diets high in polyunsaturated and monounsaturated fat protect CVD [24]. According to a different study, eating more foods high in phytochemicals is substantially related with a decreased likelihood of having a high LDL-C/HDL-C ratio, which is a predictor of CVD risk. Insoluble polyphenol consumption can lower the LDL-C/HDL-C ratio, according to a

randomised clinical investigation on hypercholesterolemic participants. A reduction in damage to macrophages and monocytes, cardiomyocytes, vascular smooth muscle cells, and endothelial cells has been shown to result from the cardioprotective actions of medicinal herbs [24]. Certain actions, such as anti-inflammatory, anti-coagulant, hypolipidemic, hypotensive, and diuretic ones, can have an impact on the cardiovascular system [24]. By lowering the body's level of free radicals, antioxidant mechanisms of action, for example, are the main method utilised to lessen the impact of cardiovascular disease.

5.5.2 CVDs: Care/ remedies

Malabar Mappilas have focused a lot of effort on using natural products and herbal treatments to prevent or treat cardiovascular disease. This motivation stems from several causes. Particularly, the possibility for a financially viable course of therapy has been contrasted with the existing accepted standard of care and the widespread acceptance of its safety and efficacy within the community as well as beneficiaries from outside. These motivations have led to the use of several medicinal plants for the treatment of cardiovascular disease. For example, *Achillea arabica* aerial parts, *Ageratum conyzoides* root, leaf, and stem portion, *Artemisia absinthium* leaves, stalks, and stems, and *Clerodendrum volubile* leaves have all been used to treat cardiovascular problems.

According to respondents, substances for treatments are not just restricted to Malabar-region flora. However, there have also been incidences involving the import and export of these medical plants. Malabar Mappilas have used both intrastate imports and intercountry imports. The history of the practise of importing and exporting medicinal plants is based in the Malabar region's interactions with Persians. for instance, species of the Lamiaceae plant family such as *Ballota glandulosissinia* were imported from Turkey, *Clerodendrum volubile* from Nigeria , Ajuga integrifolia from Ethiopia , and *Pogostemon elsholtzioides* from Eastern Himalaya. these plants are also used as a medicinal plant for cardiovascular treatment only in the hospital rejected cases of cardio vascular conditions.

There is a widespread view among Malabar Mappilas that eating habits contribute to the emergence of metabolic and cardiovascular problems. Health is improved by reducing consumption and substituting fruits, vegetables, seeds, and legumes for highly processed meals. The dietary components are abundant in unsaturated fats, minerals, fibre, carotenoids, and phenolics; they also include little salt and no added food ingredients. In this sense, dietary plants like coffee and tea are frequently utilised to treat CVD. Experimental, epidemiological,

and clinical studies have connected consuming green tea to improved cardiovascular health [26]. The difference in CVD risk between black and green tea, however, is not well supported. In research by Miura et al. [27], mice with hypercholesterolemia and apolipoprotein-deficient mice developed atherosclerosis after consuming green tea for 14 weeks (1.7 mg catechin/day/mouse). According to experimental data, consuming green tea in drinking water (3.5 g/litre) for two weeks caused hypertensive rats that were at risk for stroke to have lower blood pressure [27]. The other demonstrated that diabetic rats with cardiac malfunction were treated for four weeks with green tea (300 mg/kg body weight) to increase antioxidant protection and lipid profile [27]. Three cups of tea per day appeared to reduce the risk of CVD, according one research [27]. The phenolic compounds in tea (*Camellia sinensis* L.) are plentiful. It has a significant caffeine content. In the dietary therapy of Malabar Mappilas, they have included 10 types of tea as follows.

NAME	**FEATURES**
Black tea dust	Black tea, also translated to red tea in various Asian languages, is a type of tea that is more oxidized than other teas. Black tea contains a group of antioxidants called flavonoids, which benefit heart health. … Consuming them on a regular basis may help reduce many risk factors for heart disease, including high blood pressure, high cholesterol, elevated triglyceride levels and obesity
Broken leaf tea	smashed leaf, The third leaf of the tea plant branch is what is used to make tea. It has a delicate, light copper colour and a delicious aroma. The Broken Leaf has less theine (caffeine) than the other teas. The best users of this tea are it can blend with other teas. Due to its reduced theine concentration, it is also the best tea to drink during or after meals.
Cardamom tea	Cardamom pods are steeped in hot water to create cardamom tea, a herbal beverage. It is one of the teas that people in Middle Eastern countries drink the most frequently, and Malabar cuisine relies heavily on it. Cardamom tea has been used for a long time as a digestive aid to treat stomach problems including gas and bloating, and it contains anti-inflammatory effects that calm tense stomach muscles.

Cinnamon tea	Cinnamon tea is a potent beverage with several health advantages, including reduced inflammation and blood sugar levels, enhanced heart health, and even weight loss. It also contains antioxidants. It's simple to prepare and add cinnamon tea into diet.
Coco tea	Cocoa tea may be brewed like black tea to create a smooth, subtly chocolate-flavored beverage. It is prepared from organic cacao (cocoa bean). Cacao tea tastes great either black or sweetened with milk and sugar. It works well as an alternative to black tea or coffee. A tasty treat is chocolate tea. Due to its high antioxidant content, chocolate tea is excellent for the heart.
Ginger tea	Everyone is drawn to ginger because of its distinct flavour and aroma. Taking ginger tea as a supplemental treatment for nausea, digestive problems, and cold-related symptoms. It may also assist in controlling blood sugar, according to research. Due to its anti-inflammatory effects, ginger tea may also benefit those who suffer from arthritis. The primary bioactive ingredient in ginger is gingerol. It is largely responsible for ginger's therapeutic qualities.
Green tea	Camellia sinensis leaves and buds that have not gone through the same withering and oxidation process are used to make green tea. Green tea has the ability to increase blood flow, decrease cholesterol, and protect against a number of heart-related conditions, such as high blood pressure and congestive heart failure.
Herbal tea	Different plants are combined to make herbal tea. Almost any edible, non-tea plant's leaves, fruits, bark, roots, or flowers are combined in it. Antioxidants, which remove free radicals and guard against oxidative stress, are abundant in herbal products. Additionally, tea includes polyphenols, which reduce the risk of cancer.
Masala tea	

	Black tea is boiled with milk, water, and a blend of fragrant herbs and spices to create masala chai. Due to its rising popularity, many coffee and tea shops now carry this tea. Masala tea, which contains a variety of spices and has significant antioxidant capabilities, aids adults in preventing ailments including the common cold, cough, cancer, high cholesterol, and hypertension.
Lemon tea	Lemon tea is made by blending black or green tea with the proper quantity of lemon juice. A low-calorie, low-sugar strategy to increase the number of vitamins and minerals in tea is to add lemon. Your chance of developing cancer, diabetes, osteoarthritis, and other chronic illnesses is reduced by this antioxidant.

Table 9 : types of tea included in the dietary therapy for CVDs

Consuming coffee substantially decreased the risk of suicide, neurological illness, and CVD [28]. No negative effects on cardiovascular health have been linked to moderate coffee/caffeine use, according to studies [28]. Traditional wisdom held that one of the risk factors for cardiovascular disease was coffee intake. However, Malabar Mappilas doesn't believe in this. considerable epidemiological data also does not seem to support this notion, and coffee use may even be protective against a number of cardiovascular diseases. Studies show that a year of daily coffee consumption of 35 cups lowers the risk of cardiovascular disease by 15%. A higher risk of CVD is not associated with increasing consumption [28].

COFFEE	**FEATURES**
Robusta coffee	Robusta, which is comparable to the caffeinated beverage in the coffee industry. The most common type of coffee farmed in Malabar is robusta. They are renowned for their robust flavour, substantial amount of caffeine, and rich crema. Robusta beans are popular because they are inexpensive, resistant to pests and illnesses, and frequently used in espresso mixes.
Arabica Coffee	Malabar also produces Arabica coffee beans, however these are less prevalent than Robusta. Arabica coffee is renowned for its

	delicate and subtle flavours, which include overtones of florality, sweetness, and acidity. These coffee beans are thought to be of greater quality than Robusta and are frequently used in speciality coffee. Consequently, arabica has a great ability to resist sickness.
Pea berry coffee	These have a single, spherical bean as opposed to the typical boring flat ones, making them the coffee version of a unicorn. With their powerful flavour and attitude, they are akin to the rockstars of the coffee industry. Pea berry coffee is a distinctive variety of coffee in which the coffee cherry yields a single, oblong bean as opposed to the typical two flat-sided beans. Peaberry coffee beans are distinguished by their strong flavour and medicinal qualities. They are frequently said to be more fragrant and potent than conventional coffee beans.
Monsooned Malabar coffee	The Malabar coast of India, which includes Kerala, is home to the speciality coffee known as "monsooned Malabar." During the monsoon season, this coffee is exposed to monsoon winds and rains, which causes the beans to swell and alter the flavour profile. With overtones of spices and earthy tones, monsooned Malabar coffee is renowned for its mellow and low-acidic flavour.
Chicory coffee	Popular in Kerala's Malabar region and other regions, chicory coffee combines roasted chicory root with coffee beans to produce a distinctive flavour. Chicory coffee is renowned for having a rich, deep flavour with both bitter and sweet undertones. In addition to being used to produce traditional South Indian filter coffee, it is frequently used to make a strong, black cup of coffee. It has antioxidants and other potent ingredients that might lessen internal inflammation.
Ginger coffee	A hot beverage called Chukku Kappi is prepared by adding a variety of herbs and spices to boiling water, including ginger,

	cardamom, cinnamon, cloves, and black pepper. Then, coffee and milk are added to this mixture to make a rich, flavoured beverage that is both tasty and nutritious. Ginger, which is well-known for its anti-inflammatory and antioxidant qualities, is the major component in Chukku Kappi. Ginger is a well-liked natural cure for a number of illnesses because it aids in digestion improvement and nausea relief. The therapeutic qualities of cardamom, cinnamon, and cloves are also well documented. Cinnamon can aid with blood sugar regulation and heart health, while cardamom has been demonstrated to enhance digestion and lower blood pressure. Due to their antibacterial and antiviral characteristics, cloves are powerful in preventing infections.

Table 10: types of coffee included in the dietary therapy for CVDs

FAMILY	**SCIENTIFIC NAME**	**PART USED**	**USED FOR**
AMARANTHACEAE	*Amaranthus viridis*	Full plant	To treat hypercholesterolemia
ASTERACEAE	*Baccharis trimera*	Ariel part	for lipid-lowering action
THEACEAE	c*amellia oleifera*	leaf	For cardioprotection
THEACEAE	*Camellia sinensis*	leaf	To reduce cholesterol
ASTERACEAE	c*arthamus tinctorius*	flower	To reduce blood pressure
ARECACEAE	*Cocos nucifera*	Leaf, seed, flower, stem	To reduce stress

ZINGIBERACEAE	*Curcuma longa*	rhizome	Cardioprotective activity, to reduce stress
CYPERACEAE	*Eleocharis dulcis*	Fruit	For cardiovascular homeostasis
CLUSIACEAE	*Garcinia indica*	Fruit	To treat myocardial injury
LAMIACEAE	*Ocimum sanctum*	leaf	To reduce blood pressure
MORINGACEAE	*Moringa stenopetala*	leaf	To control high Blood pressure
MORINGACEAE	*Moringa olifera*	leaf	Reduce cholesterol
RANUNCULACEAE	*Nigella sativa*	seeds	To treat hypertension
ZINGIBERACEAE	*Zingiber officinale*	Rhizome	To Control blood glucose level and BP, to reduce pain
SOLANACEAE	*Solanum Lycopersicum*	Fruit	For diabetes, to reduce BP
ARECACEAE	*Phoenix dactylifera*	Fruit	Against cardio toxicity
LAMIACEAE	c***linopodium umbrosum***	Full plant	Act as a heart tonic
SCROPHULARIACEAE	Digitalis purpurea	Flower	Cardiovascular protection
APOCYNACEAE	Rauvolfia serpentina	Full plant	Hyper tension

Table 11: Important plants reported for the treatment of cardiovascular diseases among Malabar Mappilas.

According to reports, phytochemicals have the potential to be antioxidants' cardioprotective clinical trial subjects [29]. Through processes that are yet not fully understood, phytochemicals from fruits and vegetables showed the protective benefits against CVD [29]. Different phytochemical substances from plant extracts have been suggested in various papers to have cardioprotective effects by lowering inflammation and serum lipids, as well as via vasodilation by interacting with calcium channels and preventing platelet formation [29]. Some research

also revealed that the mechanism of phytochemicals may have the ability to block calcium channels, regulate irregular heartbeats, and elevate blood pressure [27,28,29]. According to studies, phytochemicals can cure atherosclerosis by preventing critical stages of pathogenic growth such vascular smooth muscle cell proliferation, endothelial dysfunction, lipid buildup, and oxidative stress. Although many medicinal plant items have not yet had their safety and toxicity studied for CVD therapies, most beneficiaries think that they are safe due to the product's natural origins. However, plants contain a variety of active substances that have the potential to have negative side effects. Therefore, such plants are only treated with the help of experts in healing CVDs among Malabar Mappilas.

5.6 Digestive system

The digestive system is a network of organs that aids in food digestion and nutrient absorption. It encompasses the biliary system and gastrointestinal (GI) tract. The GI tract is made up of a number of interconnected hollow organs that extend from the mouth to the anus. A network of three organs called the biliary system transports bile and digestive enzymes to the bile ducts.

According to the WHO, traditional medicine is the primary source of care for 80% of the populace in poor nations [29]. Approximately 65% of Indians now rely on the conventional medical system. According to reports, 2,500 plant species are used by traditional healers in India, and 100 plant species are regularly used as sources of medicine [29]. There are many different digestive system illnesses that have a significant global impact on morbidity and death rates. According to the World Health Organisation (WHO) [29], digestive system problems, notably diarrhoea, were the fifth largest cause of death globally in 2012, killing around 100 million people. In addition, 10% of fatalities among children under the age of five in South-East Asia have been attributed to diarrhoea. A wide range of symptoms, including weight loss, abdominal discomfort, nausea, vomiting, bloating, the passage of extra wind, and heartburn, may be experienced by those with gastrointestinal illnesses. Constipation or diarrhoea (frequent or loose bowel movements, occasionally containing blood and mucus) are two bowel habits that may change. Exhaustion and fatigue are also frequent. Depending on the type of gastrointestinal disease, a person's symptoms and their intensity might change over time, get worse, or get better. Children need to be closely watched since some gastrointestinal conditions can impair normal development and postpone puberty. Some gastrointestinal problems prevent vital nutrients like vitamins and minerals from being absorbed normally. Iron, folate, and vitamin B12 deficiencies can cause anaemia (low red blood cell count), vitamin D deficiency

can cause bone weakening, and vitamin K deficiency can cause bleeding. Low blood protein levels can cause tissue swelling, especially in the legs. From the medical researches, it is founded that the major cause of gastrointestinal diseases has much to do with the lifestyle. It is also influenced by the hygiene factors of the geography one belongs to. Regular diarrhoea may lead to dehydration and loss of vital minerals including salt, potassium, magnesium, and zinc, which can have detrimental effects on one's health.

5.6.1 Digestive system disorders; Care and remedies

The most typical gastrointestinal conditions reported from the field were piles, constipation, dyspepsia, stomach discomfort, lack of appetite, ulcers, dysentery, and diarrhoea. The causes of gastrointestinal problems vary depending on the person's age, location, and way of life. Nutritional factors, tainted food and water sources, infections such bacteria, viruses, protozoan parasites, and Helminthes, as well as nutritional factors, are among the typical causes. A range of plant species are being effectively used by regional herbalists in the research area to treat gastrointestinal ailments. In Table 12, the survey's results are compiled. For the therapy of digestive diseases, 30 species from 30 genera and 25 families have been identified. The scientific name, voucher number, family, local name, components utilised, preparation technique, and dose are given for each species. Families containing two species each included Fabaceae, Mimosaceae, Rutaceae, Asteraceae, and Zingiberaceae. In order to treat dysentery, 10 gm of the fruit pulp from *Aegle marmelos* is combined with 10 gm of jaggery and administered three times a day for three days. For the treatment of all forms of piles, 100 ml *of Cynodon dactylon* whole plant extract was combined with 5 gm of honey and 5 gm of sugar and administered orally once day for 4 to 5 days. A few of the plant species described in this study have been documented before. For instance, in Gujarat, Abrus precatori Revathi & Parimelazagan, Elettaria cardamom, and Aloe vera were used for indigestion; in Chhatisgarh, *Capparis zeylanica* was used to treat dysentery; in Assam, Psydium guajava and Mangifera indica were used to treat gastrointestinal disorders; and in Arunachal Pradesh, Zingiber officinale, *Cyperus rotundus* [30]. The treatment of gastro intestinal problems by many of the plant species mentioned in Table 12 has not been documented in the literature that is currently available. However, in other investigations, some of them were applied to the therapy of various human illnesses. For example, in Tamil Nadu, *Mangifera indica* is used for diabetes, *Cynodon dactylon* is used as a diuretic, Ficus religiosa is used as a cardiotonic, and *Terminalia chebula* is used for respiratory illnesses [31].

SCIENTIFIC NAME	FAMILY	PART USED	MODE OF USAGE	USED FOR
Urena sinuata	MALVACEAE	leaf	Leaves crushed with jaggary and taken 3 tablets a day	piles
Adenostemma lavenia	ARACEAE	Full plant	Oral consumption of plant juice	abdominal pain and diarrhoea
Ageratum conyzoides	ASTERACEAE	Leaf	Oral consumption of leaf juice	acidity
Allophylus cobbe	SAPINDACEAE	Leaf, root	Oral consumption of leaf and root juice	ulcer
Alpinia malaccensi	ZINGIBERACEAE	root	Use rhizome paste	Abdominal pain
Amorphophallus paeoniifolius	ARACEAE	Stem, leaf, corm	Oral consumption with curd	Piles, ulcer
Amaranthus spinosus	AMARANTHACEAE	leaf	Oral consumption with lemon juice	ulcer
Abutilon indicum	MALVACEAE	Leaf	Oral consumption of fresh juice	ulcer
Acorus calamus	ARACEAE	Full plant	Oral consumption of plant juice	Abdominal pain

Aegle marmelos	RUTACEAE	root	Oral consumption	dysentery
		leaf	Oral consumption	Vomiting
		bark	Oral consumption with curd	Piles
		Fruit	Oral consumption	digestion
Alangium salvifolium	ALANGIACEAE	Full plant	Oral consumption	Chest burning
Allophylus serratus	SAPINDACEAE	leaf	grinded leaf juice	ulcer
Amaranthus spinosus	AMARANTHACEAE	Leaf	Leaf paste with lemon juice	ulcer
Anethum graveolens	APIACEAE	seed	Chewing seed	digestion
Artemisia nilagarica	ASTERACEAE	leaf	Oral consumption of juice	Abdominal pain
Arundinaria densifolia	MORACEAE	leaf	Oral consumption of juice	Stomach problem
Aristolochia tagala	ARISTOLOCHIACEAE	Full plant	Oral consumption of plant paste	Abdominal pain
Artocarpus hirsutus	MORACEAE	Bark	Oral consumption of grinded bark	piles

Atalantia racemosa	RUTACEAE	leaf	Oral consumption of leaf juice	acidity
Baliospermum montanum	EUPHORBIACEAE	Root	Paste is applied on swelled part	piles
Cuscuta reflexa	CONVOLVULACEAE	Full plant	Leaf and root mixture paste is applied on affected area	piles
Boerhaavia diffusa	NYCTAGINACEAE	Full plant	Oral consumption with adding cumin	Digestive problems
Oxalis corniculata	OXALIDACEAE	Full plant	Decotion	dysentery
Rhaphidophora pertusa	ARACEAE	stem	Oral consumption of juice	Abdominal pain
Pongamia pinnat	FABACEAE	seed	juice	pinworm
Dioscorea bulbbifera	DIOSCORIACEAE	bulb	Oral consumption of boiled fruit	ulcer
Holarrhena antidysenterica	APOCYNACEAE	Bark and stem	Used as powder	Stomach issues
Gomphostemma heyneanum	LAMIACEAE	leaf	Used as paste	diarrhoea
Centella asiatica	APIACEAE	Full plant	Oral consumption (after mixing	piles

			with Allophylus serratus)	

Table 12; List of plants used for digestive problems by Malabar Mappilas.

There is a long tradition of using mint plants medicinally to ease the stomach, and there is anecdotal evidence of Malabar Mappila's alleged usefulness. Malabar is home to the perennial plant peppermint (Mentha x piperita). Typically, spearmint (Mentha spicata) and water mint (Mentha aquatica), two mint species, are combined to create peppermint (31). steam distillation in a traditional setup (only conducted by experts) is used to extract peppermint oil (PMO) from the plant's young leaves. Menthol, menthone, menthyl acetate, cineol, and various other volatile oils are among the many ingredients that it includes (31). Menthol, which naturally occurs as a pure stereoisomer, appears to be its main component and active element. For the treatment of a specific gastrointestinal issue, the Malabar Mappila subgroups that were interviewed utilise similar formulas. The dried and powered corm of the *Amorphophallus paeoniifolius* species, for instance, is eaten orally by the *kurikkals, pusalans, and Ossans* to treat jaundice. They also employed the *Ardisia solanacea* rubbed root paste, which was used to treat ulcers and decrease acidity.The four main subgroups of Malabar Mappilas utilise a variety of common phyto-medicinal treatments to treat digestive issues. It has been discovered that the treatments for stomach issues may also be used to treat worms (anti-helminthic), blood-dysentery, diarrhoea, and stomach pain. Malabar Mappilas use a variety of medicinal plant and fungus species to cure conditions ranging from newborn colic to stomach cancer. In many different regions of Malabar, particularly in northern and central Kerala, scientific herbal medicine, or phytotherapy, is frequently practised by both herbalists and doctors. Many plant species utilised in Malabar Mappilas traditional medicine have not been thoroughly researched. The knowledge of Malabar Mappilas traditional medicine may be lost if it is not passed down from one generation to the next, according to field data that has been documented. Many causes, including lack of knowledge among modern people, acculturation, and rural exodus, are responsible for the loss of this information that is related to local culture, physical settings, and biological habitats.

5.7. Excretory System

A crucial biological mechanism called the excretory system eliminates waste and surplus material from the body in order to keep equilibrium. In reality, the majority of these items are

utilised and broken-down metabolic waste products that exit the body as urine, perspiration, or faeces. While many organs are indirectly involved in the removal of metabolic waste, the term "excretory system" refers to those organs that are used exclusively for the elimination and excretion of these broken-down components. As a result, the urinary, or renal, system, which is made up of the kidneys, ureters, a bladder, and a urethra, will be the primary focus of a discussion of the excretory system. . The excretory system is made up of a distinct group of organs, although there are other supporting organs that act in other important bodily systems and aid the excretory system in its work.

5.7.1 Excretory system; disorders Care and remedies

Results from earlier research indicate that the rural population of northern Kerala has a high prevalence of renal illness (4.86%). The prevalence rates showed no gender differences. Diabetes was determined to be the main contributing cause to renal failure (34) . The high prevalence of renal failure and its link to diabetes and hypertension highlight the importance of improving the management of these conditions. This must be taken into account in addition to the fact that Kerala's supposedly rural population has access to diagnostic and treatment services. It appears likely that the sole method of therapy for diabetes or hypertension is to take a pill, omitting self-care and lifestyle modifications, and failing to check to see whether control has been established, ultimately leading to problems like kidney failure. Malabar Mappila's heal renal disorders and associated ailments in this situation, preventing it from getting worse. In addition to being an essential component of the Malabar Mappilas' history and cultural practises, as we have already described, plants have always played a key role in traditional medicine therapy of Malabar. For millennia, people have known that medicinal plants are a great source of therapeutic substances for preventing and treating a wide range of conditions linked to excretory system diseases. The choices of those who received Malabar Mappilas healing medicine and initially preferred informal healthcare to mainstream healthcare options depends on their experiences or early interactions with the Malabar Mappilas practitioner. The majority of the ethnobotanical data produced by this investigation, according to results, was provided by individuals who had benefited from Mappilas' curative techniques.

SCIENTIFIC NAME	FAMILY	USED FOR	USED PART	MODE OF ADMINISTRATION
Foeniculum vulgare Mill	APIACEAE	Kidney stones, renal	Leaf, seed	Decoction

		detoxification and colic		
Curcuma longa L	ZINGIBERACEAE	Kidney stones, renal detoxification and colic	Rhizome	Decoction
Zingiber officinale	ZINGIBERACEAE	Detoxification, swelling, renal pain	Root rhizome	Decoction
Urtica dioica	URTICACEAE	Inflammation, swelling, renal pain	Whole plant,	Oral consumption
Citrus sinensis	RUTACEAE	Renal insufficiency, kidney stone	fruit	Oral consumption of juice
Citrus _ aurantium	RUTACEAE	Renal pain, kidney stone	fruit	Oral consumption of juice
Citrus limon	RUTACEAE	Kidney stones, renal detoxification	Bulb, fruit,	Oral consumption of juice
Ziziphus jujuba	RHAMNACEAE	pyelonephritis	fruit	Oral consumption
Nigella sativa	RANUNCULACEAE	Diuretic, ,Detoxification of kidneys	seed	Oral consumption
Pennisetum glaucum	POACEAE	Pyelonephritis, renal pain	seed	Powder form (oral consumption)
Hordeum vulgare	POACEAE	Diuretic, kidney stone	seed	Oral consumption
Avena sativa	POACEAE	Diuretic, renal pain	Seed, fruit	Decoction (oral consumption)
Piper cubeba	PIPERACEAE	Pyelonephritis, kidney stone	fruit	Oral consumption
Syzygium aromaticum	MYRTACEAE	renal colic , Renal detoxification	leaf	Decoction (oral consumption)

linum usitatissimum	LINACEAE	Diuretic, renal diseases	Seed	Oral consumption
Mentha spicata	LAMIACEAE	Renal pain	leaf	Decoction (oral consumption)
Trigonella foenum	FABACEAE	Improving kidney performance, renal pain	seed	Decoction (oral consumption)
Arachis hypogaea	FABACEAE	Urine retention	Bark, seed	Decoction (oral consumption)
Glycyrrhiza glabra	FABACEAE	Diuretic, renal diseases	Root, stem	infusion
Cucumis sativus	CUCURBITACEAE	Renal pain	fruit	Oral consumption of juice
Citrullus lanatus	CUCURBITACEAE	Renal insufficiency, kidney diseases	fruit	Oral consumption of juice
Cucumis melo	CUCURBITACEAE	Renal pain	Fruit	Oral consumption of juice.
Cucurbita pepo	CUCURBITACEAE	Kidney stone, renal pain	Seed, leaf	Decoction (oral consumption)

Table 13; list of plants used by Malabar Mappilas for treating excretory system disorders

The dominated families that are used to treat and relieve renal disorders were the Apiaceae, Zingiberaceae, Urticaceae, Rutaceae, Rhamnaceae, Ranunculaceae, Poaceae, Piperaceae, Myrtaceae, Linaceae, Lamiaceae, Fabaceae, Cucurbitaceae. Numerous ethnobotanical investigations conducted in other parts of India (34), as well as in other nations like Turkey and Italy [34], have previously demonstrated the dominance of Apiaceae. However, these botanical families control the Malabar Mappilas flora and are virtually ubiquitous across the Malabar area. Malabr Mappilas uses many plant species' components as medicine. The leaves were the component of the plant that was most frequently used for medicinal purposes, followed by the entire plant, aerial parts, fruits, seeds, rhizomes, and other sections (stems, flowers, roots, bulbs, bark, and twigs). In herbal medicine, the amount of an active component determines which parts are used more frequently than others. When it comes to renal problems, plant components that are most frequently used are the leaves. They both serve as locations for photosynthesis and as stores for secondary metabolites, which may help to explain this (35). Decoction is the

preparation technique that Malabar Mappilas most frequently utilise to treat renal diseases, followed by infusion, powder, juice, and oil. This significant amount of decoction indicates that the local population is expanding and that they believe this kind of preparation to be effective for sanitising the plant and warming the body. However, the decoction allows for the collection of the most potent substances and reduces or eliminates the poisonous effects of some formulations. Traditionally, the Malabar Mappilas use the species mentioned in table 13 in this study to treat the wide range of kidney symptoms. Nevertheless, it is also founded that the most reported uses were for kidneys symptoms such as kidney stones, diuretic renal colic, kidney detoxification, and Pyelonephritis.

Although urinary tract infections are one of the most common kinds of infectious disorders worldwide, research into novel treatments for these infections is still mostly underfunded. UTIs can be uncomfortable, but unless a person has a damaged immune system, they seldom result in death or significant morbidity. Below is a list of the top 3 herbs that Malabar Mappilas utilise to cure urinary tract infections.

SCIENTIFIC NAME	**FAMILY**	**PART USED**	**MODE OF USAGE**
Diosma oppositifolia	Rutaceae	Leaves	Drinking tea
Prunus persica	Rosaceae	Leaves	Drinking tea
c*ardiospermum halicacabum*	Sapindaceae	Stem and leaves	Drinking tea

Table 14; plants used for UTIs

5.8 Neurological system

The term "neuroprotection" refers to the methods and supporting systems that can protect the central nervous system (CNS) from neuronal damage brought on by both acute neurodegenerative illnesses like Alzheimer's disease and Parkinson's disease (AD/PD) and chronic neurodegenerative disorders like stroke and trauma. When combined with a healthy lifestyle that includes proper eating habits and moderate physical exercise, such as Malabar Mappila healing therapy, several CNS illnesses can be prevented rather than treated. By virtue of their dietary therapies (phytochemicals), plant foods can therefore give health advantages beyond just serving as a source of nutrients and energy when consumed as part of a normal

diet. The prevalence of neurological illnesses is a significant public health issue due to the ageing population. Sensu lato, an age-dependent degenerative disorder is a condition in which the structure and/or function of the affected tissues or organs gradually deteriorate over time. Examples of such conditions include immune senescence, sarcopenia, and diseases of the cardiovascular and nervous systems, as well as diseases of the immune system. Ageing is a complicated physiological process that encompasses morphological and biochemical alterations in both individual cells and the entire organism that take place over time.

Alzheimer's disease, one of several neurodegenerative disorders, is the most common, deadly, and leading cause of institutionalisation in the aged population. A typical beginning of Alzheimer's disease is after the age of 65 and is characterised by gradual and permanent memory problems, cognitive decline, and personality abnormalities. Motor and sensory functions are not impacted until later stages of the disease, although memory impairment shows up in the early stages. The second most prevalent age-related neurodegenerative illness that can significantly lower quality of life is Parkinson's disease. PD is a movement condition, as opposed to AD's cognitive abnormalities, and its hallmark symptoms include resting tremors, bradykinesia, extrapyramidal stiffness, and loss of postural reflexes, including problems with walking or balancing. The costs associated with treating people as a result of these disorders are likewise quite high. Age-related exponential increases in the incidence of neurodegenerative disorders like AD and PD are seen. By the middle of the century, neurodegenerative illnesses will surpass cancer as the second biggest cause of death worldwide, predicts the World Health Organisation (WHO) [35]. 4.5 million Americans were diagnosed with AD in 2000, at an estimated cost of $100 billion annually [35]. If no treatment or preventive strategy is discovered by 2050, the estimated number of AD sufferers in the US population might be somewhere between 11 and 16 million.

Comprehending on Malabar Mappilas traditional healing techniques to cure and prevent neuro disorders is as follows. Unlike remedies for other disorder system, neurological remedies of Malabar Mappilas have very less treatment techniques. This is especially because the major treatment of neurological disorders among them are treated with spirituality. the verses and gospels of holy Qur’an is used to heal the diseases as because unlike the diseases of other system neurological disorders is believed to be the one which effects the mind than the body. As contrast to other meditation-like techniques, less study has been done utilising contemporary neurotechnological instruments to examine the melodic Quran, therefore the neurological basis of the effect of listening to Quranic verses is still in its infancy. Studies on

the neurological mechanisms of hearing verses from the Holy Quran read, namely employing EEG and the related brainwaves produced, had just lately been conducted. But according to the most recent research, hearing Holy Quran verses activates the same brain areas and has therapeutic benefits similar to music rhythmic treatment (i.e., inducing a calm mental and spiritual state (36). The recent development of neuroimaging research opens the door to accepting the use of Quranic verses as an alternative rhythmic therapeutic technique. There is a need for more clinical research and neuroimaging investigations to determine the potential impacts of listening to Quranic verses (including on post-operative, rehabilitation, pre- and post-partum care, pain, and psychological parameters, among other outcomes). The acceptance and establishment of Quranic verse listening as a mind-body alternative therapeutic technique to replace and/or enhance traditional treatments in the near future is highly intriguing. The major qur'anic versus used for neurological disorders used by Malabar Mappila community are (Note; it is primarily recited by a member from *Thangal* community);

1.

إِلَّ تَنصُرُوهُ فَقَ ْد نَصَرَهُ ٱللَّهُ إِ ْذ أَ ْخرَجَهُ ٱلَّذِينَ كَفَرُواْ ثَانِيَ ٱ ْثنَ ْين إِ ْذ هُمَا فِي ٱ ْلغَا ر إِ ْذ يَقُولُ

لِصَحِبِۦهِ لَ تَ ْحزَ ْن إِنَ ٱللَّهَ مَعَنَ ا فَأَنزَلَ ٱللَّهُ سَكِينَتَهُ عَلَ ْيهِ وَأَيَدَهُ بِجُنُ

و ِد لَ ْم تَرَ ْوهَا وَجَعَلَ كَلِمَةَ ٱلَّذِينَ كَفَرُواْ ٱلسُّ ْفلَ ىٰ وَكَلِمَةُ ٱللَّهِ هِيَ ٱ ْلعُ ْليَ ا وَٱللَّهُ عَزِي

ز حَكِي م ,

Illaa tansuroohu faqad nasarahul laahu iz akhrajahul lazeena kafaroo saaniyasnaini iz humaa filghaari iz yaqoolu lisaahibihee laa tahzan innnal laaha ma'anaa; fa anzalallaahu sakeenatahoo 'alaihi wa aiyadahoo bijunoodil lam tarawhaa wa ja'ala kalimatal lazeena kafarus suflaa; wa Kalimatul laahi hiyal 'ulyaa; wallaahu 'Azeezun Hakeem

If you do not support the Prophet, remember that Allah has previously stood up for him when he was one of two people expelled from Makkah by unbelievers, when they were in the cave, and when he comforted his companion by saying, "Do not be sad; indeed Allah is with." And Allah made the words of the unbelievers the lowest, while the words of Allah are the greatest, and He brought down his peace upon him and supported him with angels you did not see. And Allah is Mighty and Wise, Exalted.

2.

إِنَّ ٱلَّذِينَ قَالُواْ رَبُّنَا ٱللَّهُ ثُمَّ ٱ ٱسۡتَقَٰمُواْ تَتَنَزَّلُ عَلَيۡهِمُ ٱلۡمَلَٰٓئِكَةُ أَلَّا تَخَافُواْ وَلَا تَ ٱحۡزَنُواْ

وَأَبۡشِرُواْ بِٱلۡجَنَّةِ ٱلَّتِي كُنتُ ٱم تُوعَدُونَ

Innal lazeena qaaloo Rabbunal laahu summas taqaamoo tatanazzalu ‘alaihimul malaaa ‘ikatu allaa takhaafoo wa laa tahzanoo wa abshiroo bil Jannnatil latee kuntum too’adoon

Indeed, angels will descend upon those who responded, "Our Lord is Allah," and then continued on the correct path, saying, "Do not fear and do not grieve but receive good tidings of Paradise, which you were promised."

3.

وَقَالُواْ ٱلۡحَ ٱمۡدُ لِلَّهِ ٱلَّذِيٓ أَ ٱذۡهَبَ عَنَّا ٱلۡحَزَ نَ إِنَّ رَبَّنَا لَغَفُو ر شَكُو ر

Wa qaalul hamdu lillaahil lazeee azhaba ‘annal hazan; inna Rabbanaa la Ghafoorun Shakoor

They will then declare, "Praise be to Allah, who has taken away from us [all] grief.
Yes, our Lord is gracious and forgiving.

4.

وَلَا يَ ٱحۡزُنكَ قَ ٱوۡلُهُ ٱم إِنَّ ٱلۡعِزَّةَ لِلَّهِ جَمِيعًا ۚ هُوَ ٱلسَّمِيعُ ٱلۡعَلِيمُ

Wa laa yahzunka qawluhum; innal ‘izzata lillaahi jamee’aa; Huwas Samee’ul ‘Aleem

And don't allow their words make you sad. Indeed, honour [resulting from authority] belongs wholly to Allah. He is the One Who Hears and Who Knows.

5. وَلَا تَهِنُواْ وَلَا تَ ٱحۡزَنُواْ وَأَنتُمُ ٱلۡ ٱعۡلَوۡنَ إِن كُنتُم مُّ ٱؤۡمِنِينَ

Wa laa tahinoo wa laa tahzanoo wa antumul a’lawna in kuntum mu’mineen

In order to be better, if you are [real] believers, do not weaken and do not weep.

Comprehending on the major plant products used in dietary therapy of Malabar Mappilas with reference to treating neurological disorders has been listed below.

- ***Embilica officinali***;

  The following neurological diseases benefit from the use of embilica officinalis. mental exhaustion, memory loss, anxiety and unrest in the mind, restlessness and

sadness, aggressive behaviour, and attention deficit disorder. Memory loss, mental weariness, vertigo, and brain and nerve-related headaches with a burning feeling and migraine headaches with pulsating and throbbing pain can all be greatly helped by amla [36]. psychological illnesses include sleeplessness, intense mental agitation, sadness with aggressive behaviours, and anxiety with these symptoms. Fruit is utilised, both fresh and dried. It improves intelligence. Embillicannin, ascorbic acid, polyphenols, and gallic acid are the active ingredients.

- ***Aegle marmelos***

Numerous studies have demonstrated the existence of flavonoids in *Aegle marmelos*, which act as anxiolytics by binding to benzodiazepine receptors. Therefore, the anti-anxiety function of *Aegle marmelos* may be due to its flavonoid content. Studies on *Aegle marmelos* have revealed the existence of additional phytochemicals than flavonoids, including tannic acid, phenols, marmesinin, ascorbic acid, eugenol, , and saponin, among others, which may have calming effects [37]. *Aegle marmelos* is a potentially useful and safe medication for treating a variety of anxiety disorders. Extracts of ethanol can be found in the fruit. These are used to treat depression, anxiety, and exhaustion.

- ***Curcuma longa***

The Zingiberaceae, the same family as Zingiber (ginger), includes the Curcuma genus. Curcuma longa is a perennial plant with a short stem (less than 100 cm in height) that grows in nature all throughout the Indian subcontinent and in tropical Asia, notably in Southeast Asia. Curry contains the spice turmeric, which is the dried, powdered rhizome of the *Curcuma longa*. It is used in numerous culinary preparations and recipes to provide taste. Curcumin, the primary bioactive component and colouring agent contained in the powdered rhizome, gives turmeric its vivid yellow hue. Turmeric has long been utilised in Islamic medicine in addition to its uses in traditional Indian cuisine as a spice, colour, food additive, and preservative. Following their visits to India in the 12th and 13th centuries, Arab traders and Marco Polo brought it, along with other spices, to Western nations. In many areas of Kerala, where it is regarded as a "blood purifier," turmeric is still frequently used as an alternative medicine to treat common

illnesses like dyspepsia, flatulence, liver disorders, arthritis, urinary tract diseases, wounds, jaundice, eye infections, and skin diseases like acne and pemphigus.

Each geographical subregion of Malabar has established its own unique food habits. The Mediterranean cuisine was assimilated into Malabar's cultural environment as a result of its arrival of Arabs to Malabar and their (Arab's) relationship with Mediterranean regions. These eating patterns traditionally came from regions where wine and olive (Olea europaea L.) were grown. Olive oil and Wine without alcohol are commonly prepared and eaten. Along with these items, whole grains, fruits, vegetables, legumes, nuts, yoghurt and ricotta as dairy products, fish and white meat as protein sources are other staples of Mediterranean diets which has been used by Arabs and Malabar Mappilas through Arabs. There is strong evidence that populations in the Mediterranean region have lower rates of cancer, cardiovascular disease, and neurodegenerative diseases than people in other industrialised nations. This is likely due to Mediterranean diets, which are high in fruits and vegetables [38].

- **Grape (Vitis vinifera)**

In addition to the religious, social, and academic contexts (at the symposium) in which wine was first consumed, Persians also paid close attention to the medicinal applications of the beverage, as documented by Hippocrates' research (460–370 BC) [39]. He advised drinking wine as a tonic, analgesic, antibacterial, diuretic, and remedy for fever. The Romans also believed that wine had curative virtues, and Galen (129–200 AD) in particular gave a thorough account of how he used wine in his medical practise [39]. According to the religious belief of Islam, which is the one that is followed by Malabar Mappilas, wine is not acceptable and considered its drinking as a taboo. But due to the medicine potential of wine, Malabar Mappilas as like any other community are also permitted to use it for treatment purposes.

- **Salvia officinalis**

Salvia is a significant genus in the Lamiaceae family with around 900 species, some of which have been grown for use in food and medicine. Salvia, which derives from the Latin word *salvus* and means "healthy," is used in traditional medicine to treat various ailments. Textual sources from the ancient Egyptian, Greek, and Roman civilizations discuss the cultivation and use of salvia in the Mediterranean region.

Plants are a limitless supply of molecules that may be used to enhance human health in the form of meals, spices, and herbs. Nevertheless, a single plant may produce hundreds or even thousands of secondary, bioactive metabolites, a chemical variety that has been crucial to the success of plants' evolutionary development and has favoured their ability to adjust to changing environmental conditions. the dietary therapies thus prevent Malabar Mappilas from severe neurological disorders.

5.9 Statistical summary of the data obtained

This chapter contain data on different healing practices of Malabar Mappila community associated with Musculoskeletal system, cardiovascular system, integumentary system, respiratory system, Digestive system, excretory system and finally nervous system. It has been identified that there were in total 156 plants from 59 families in the traditional healing practices of Malabar Mappilas. The obtained species of plants were crosschecked with the ethnobotanical study conducted in Kerala and also from other parts of the world.

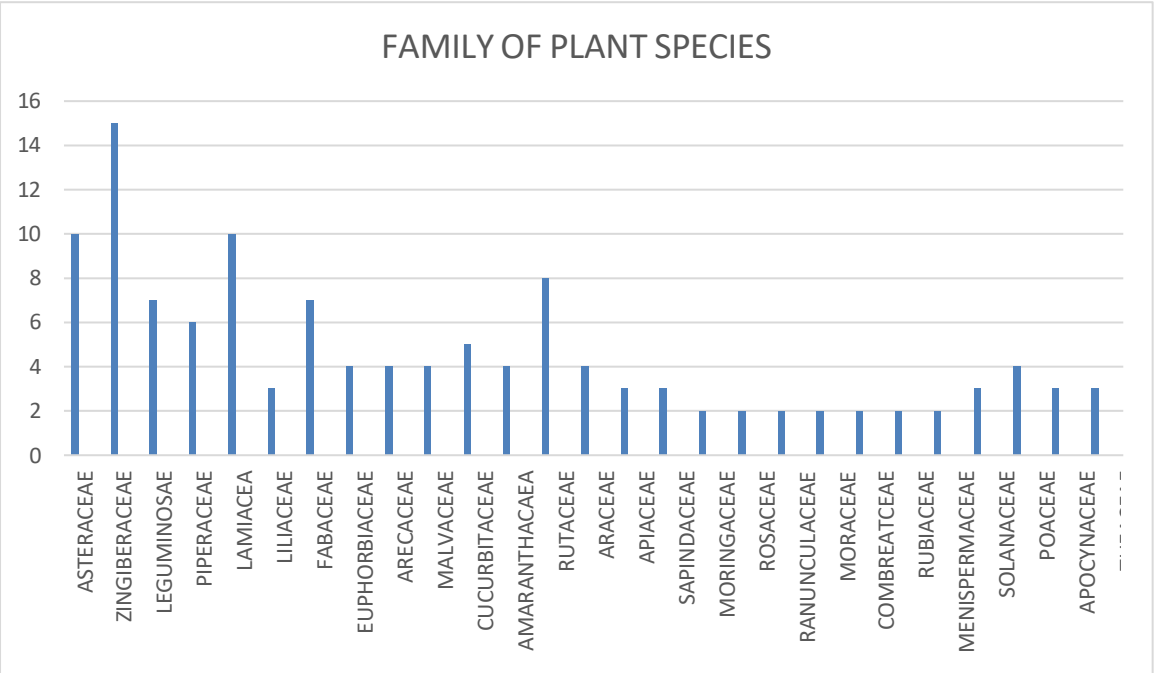


Figure 12; the top used families of plant species.

Out of the 59 families, 124 plant species were reported from the family shown in Figure 12 which is the list of top used 27 families of plant species. Remaining 32 families were reported each plant species. The highest preference of plant species used by Malabar Mappilas belong to the family of ZINGIBERACEAE followed by ASTERACEAE, LAMIACEA, RUTIACEAE, FABACEAE and LEGUMINOSAE.

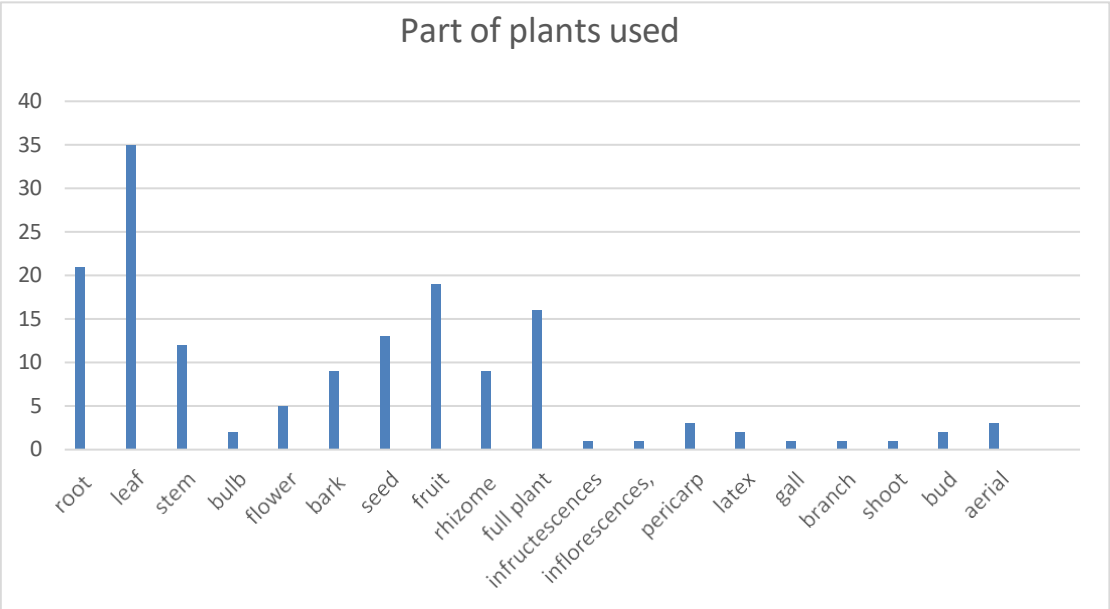


Figure 13; Plant part used by Malabar Mappilas

Different parts of plants have been used by Malabar Mappilas for the healing tradition they practice. Among them, the most exploited part of plant is leaves as like we already discussed in previous sections of this chapter. Other than leaves, the followed part of plants has been mostly used for medicinal purpose is root, fruit and even the full plant itself.

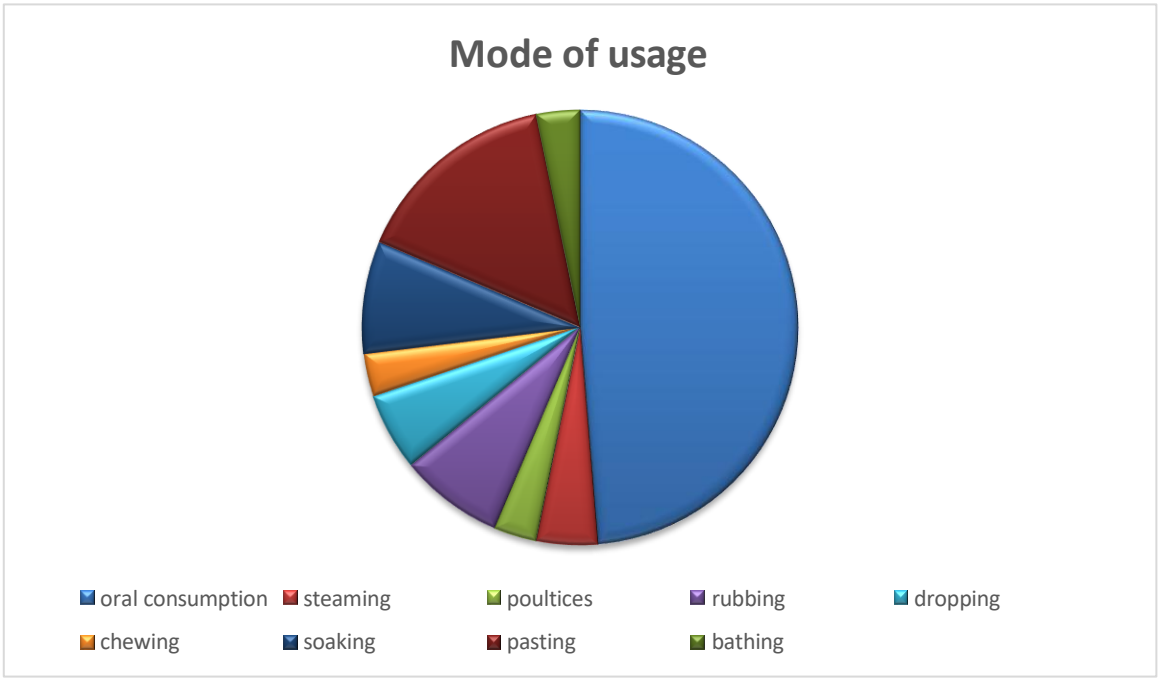


Figure 14; Mode of usage of different plant species by Malabar Mappilas

Malabar Mappilas healing tradition reported 9 types of usage of plants they used for healing therapies. Among them, the most cited from the field is oral consumption. It included decoction, juice form, grinded and powdered form and burned form of different parts of the plants mentioned in figure 13. The second most important method of usage is in paste form.

The Malabar Mappila community's traditional healing practices show that they have community-sponsored understanding of human body and its problems. Those knowledge systems are organized in a way that makes sense in both social and bodily hierarchies. Thangals treat brain and mental health problems, Kurikkals treat musculoskeletal problems, and Ossans and Pusalans treat reproductive, digestive, and skin problems. Each role is based on personal experience and careful observation. The community uses 156 plant species from 59 families, including Zingiberaceae, Asteraceae, and Lamiaceae.They make decoctions, pastes, or powders out of leaves, roots, fruits, and whole plants. Many of these plants contain active ingredients that are used in mainstream medicine. The use of the cited plants and their components has been cross-verified with Islamic medical texts, Ayurveda, and Unani manuscripts to understand the historical context. This shows that traditional knowledge and modern pharmacology can work well together. Through the documentation of these practices in accordance with known body systems, this research exemplifies the cultural and scientific significance of Malabar Mappila traditional medicine. Through the identification and incorporation of practices like these helps in conjunction with the modern healthcare and can expand treatment choices; sticking to the concept of holistic medicine that are accessible and community grounded

6. CHAPTER- IV

Delineating The Health Associated Customs And Rituals Of Malabar Mappila Community

6.1 Introduction

Individuals carry out several customs in their daily lives. They follow customs related to eating, waking up, greeting, religion, and so on. These rituals serve to balance and smooth out the majority of our continuous social lives. However, a lot of people mistakenly associate religious rituals with the sacred most of the time. "Rituals frequently fall into two categories: sacred and secular," claims Schechner. Religious views are expressed or carried out through sacred rites. Religious belief systems are said to entail praying, speaking with, or in some other way interacting with supernatural forces. He asserts that these abilities may be found in Gods, Goddesses, and other supernatural entities, or they could be represented by them. Conversely, secular rituals are connected to public events, daily activities, sports, and any other non-religious pursuit (Schechner, 2013).It becomes clear that rituals are an essential component of daily life.

Previous chapters examined the perspectives and knowledge of ethnomedicine of Malabar Mappila community with regard to health, sickness, and their methods of healing. And also documented their recognized body systems based on mainstream phytochemicals used in popular medicine and acknowledged its 'Who possess the right to treat' specifically through unpacking the hierarchy of Malabar Mappilas. As a continuum, this chapter is intended to document the rituals of Malabar Mappilas which is exclusively dealing with 'health arena' of the community. During the preliminary stage of this research, researcher referred to earlier ethnographic studies in different communities and analysed those studies (especially medical anthropological/ ethnomedical approach studies) and drawn conclusion that there is critical significance for rituals and ritual performances in therapeutic practices of studying communities. Similarly, Researcher investigated the rituals of Malabar Mappila community in order to analyse whether it share any concern on health. Through judgemental sampling using key informant, researcher identified important rituals associated with health sphere of Malabar Mappila community. Therefore, it become not

only significant, but also mandatory to comprehend Malabari rites and performances as well as their connection to therapeutic modalities in order to fetch a conglomerated understanding of healing practices among Malabar Mappilas.

The literature on Kerala's faith, ritual, and religious healers pays only scant attention to the Malabar Mappila healers. They are just briefly or never discussed in the majority of studies as part of a larger conversation regarding mainstream healers and their methods. Therefore, the goal of this chapter is to address the study topic of Malabar Mappila's position as a healer and the significance of rites and ritual performances in healing practice. The chapter is partitioned up into five sections: the first discusses different rituals used in healing practices; the second section discusses the ritual chants, the ritual art forms and performances, such as *Ratheeb* in the Malabar Mappila healer's healing practices; and the third section discusses about the significant member / immortal gnostic personalities of the Malabar Mappila community, the fourth section deals on symbols used in rituals and performances (including Islamic astronomy) and the final section deals with the prominent space of women healers within the community. The rituals identified here also have a serious gender dimension as because most of the rituals consider the role 'women healer'.

6.2 Section -1; The healing practices and ritual performances.

Healing customs serve as a metaphor for Malabar residents' daily lives. Possession, , affliction, embodiment, trance ,dislocation are the successive performances controlled and managed by the people to cope with the body and the universe and mind (Ferrari, 2011) . The major health associated rites practiced by the inhabitants of Malabar are *Muttarukkal, Nercha Kodukkuka, Uzhinjumattal* . The community's well-known Mappila healers described the several rites they employ in their healing procedures as follows;

6.2.1 The ritual in simple possession; Uzhinjumattal

People do experience psychological problems due to their living conditions. The social, cultural and even political reasons disturb a person's equilibrium of peace and make him emotionally vulnerable. It can also be stimulated by the very private reason such as death of the beloved one. During such crisis period, people may start to behave differently/ newly and sometimes the person become anonymous to his own self. For Malabar Mappila's such kind of mental illness is more has to do with religion than medical. The words of the old practitioner among Malabar Mappilas are given below;

"*As because the disease caught up on mind, the medicine should be given to mind. If the person in mental illness made wound on himself, you can treat it with any medicine including the ointments of English medicine. But it won't treat his urge to cut his own body again. That is the ill mind play and can only treated by religion*." (15/5/2023)

Through lived experiences, different **practitioner respondent (PR**) of the Malabar community has their own stories of *uzhinjumattal*.

"*Yes, I provide my patients with Uzhinjumattal. In essence, uzahinjumattal involves expunging the body of supernatural abilities like Jinn, Shaitan, Ibleese, and others. They might exert mental and physical power over individuals if they were endowed with a human body. Thus, in accordance with the supernatural being, I will gather an arecanut and a betel leaf, read verses from the Quran, and then wrap the nut and leaf around the person who is possessed. I can expel the Jinn from the patient's body by doing this repeatedl*y (PR-1; *Thangal* community; 12/06/2023).

While the PR-2 explained his comprehension of *Uzhinjumattal* as follows;

"*Hajara arrived at my place with her folks. I was able to discover that someone had sent Jinn to conduct Sathrudosham on her through her Abjad. I determined that Uzhinjumattal is the best course of action for her issues. I have made all the necessary preparations for it. I made a circle with the assistance of my two assistants, and I instructed her to sit inside of it. Concurrently, I recommended that my assistants recite Soorath-Ul-Yaseen. I then placed a penny on her head and began to recite verses from the Quran. A few minutes later, she began acting differently, speaking in a strange tone, and screaming and yelling. She became aggressive. We were reciting Ayaths from the Quran even then. She eventually lost consciousness. I carried on with this therapy for a further seven days. I ordered her parents to throw that in a river and summoned the Jinn into the coin. (PR-2; women healer;* 27/06/2023).

PR-3's explanation on *Uzhinjumattal* is also similar to the PR-1 and PR-2

"*In my healing chamber, I'll sketch a circle that the possessed would either sit or stand in. My assistants will blow onto her body while loudly chanting the Quranic Ayaths. I will ask her questions at the same time, and the possessed shaitan or jinn will then begin to answer me. The patients occasionally start talking in a strange voice, get agitated, and occasionally even turn violent. However, occasionally they might not be answering my*

*inquiries. When that moment comes, I'll whack her severely with a rattan. Chooral prayogam is the term for using rattan. Following this ceremonial prayer, I would call the Jinn into various items like sticks, money, bones, etc. The items might differ from healer to healer or from ailment to ailment." (*PR-3; 27/06/23)

PR-4 added his way of *uzhinjumattal* as follows

"I would determine the appropriate course of therapy based on the possession. I used to favour the Nercha and Dua at times to expel the Jinn or Shaitan from the possessed person's body. For that, I would strike the possessed person's body while reciting different Ayaths from the Quran. The Jinn would then be summoned and either placed inside a piece of wood or a clay figure, where they would drown in a river or the sea. If not, I would ask them to create a pothole and set it there. Additionally, I like to prefer the intake of "kalkandam," which is a kind of sugar (not the commercial sugar) that is imported from holy locations like Medina or Mecca." (22/06/2023)

These are the several *Uzhinjumattal* modes that the Malabar Mappila healers elucidate. As like the responses from PR-1, PR-2, PR-3, PR-4 indicate, *uzhinjumattal* is; From the possessed person's body, healers would call upon the Jinn, Shaitan, *Ibleese*, and other supernatural forces. During the healing rituals, they would recite different *Ayaths* from the Quran and offer dua. In the process, the female healers are conducting rituals and setting the tone for their therapeutic techniques. The women healers assert that *Uzhinjumattal* are collaborative processes and recommend to perform it in group only (unlike the male healers). In this group process, scholars and apprentices are constantly their aids. Due to their ability to recite Quranic Ayaths, the patient's family members participate in these ceremonies and activities concurrently. The Malabar Mappila healers stated that the *Uzhinjumattal* technique always takes many hours to complete. Moreover, these rites would be initiated following their *Magrib* Namaz. Additionally, one of the women healers claimed that occasionally she used to recommend the 'case' to other healers in her region and obtain support from other veteran healers specialised in it.

6.2.2 The ritual in extreme possession; Mutturakkal

One of the most effective ways for Malabar Mappila healers to expel the Jinn, Shaitan, *Ibleese*, and other supernatural forces from a patient's body is through *muttarukkal*. The Jinn, Shaitan,

Ibleese, and other supernatural forces can refuse to leave the possessed body. This statute is used in such circumstances. Since "*Arukka*" means "to cut" and "Muttu means "barrier," the literal meaning of *Muttarukkal* is "to chop away any obstacle." Aside from possession, the healers claim that obstacles can take many different forms, including as setbacks and a stagnation of business progress. As because this is more severe than a simple possession, only healers more tha15 years of service or the descendants of known Malabar Mappila healers can practice this. While doing the process of *Mutturakkal*, the healer splits the coconut and then recite a few verses from the Quran. However, occasionally the patient is sent by the Malabar Mappila healers to a Hindu Healer who is able to assist them in performing this deed. The Mappila healer claims that after breaking a coconut, Hindu healers recite the Jaladhara mantra. In a similar vein, Hindu healers use wine and the blood of goats and chickens. They contend that the conduct of *Muttarukkal* ought to be more potent if the wicked deed is really strong. As part of this ritual, researcher interviewed the Hindu healers and documented their response who were prominently quoted in the words of Malabar Mappila healers when it comes to the act of *Mutturakkal*.

"*People believe in Muttarukkal, a powerful deed, regardless of their religion. In Muttarukkal, a coconut is handed over to the poojari (Priest) in a temple along with the person's name and Malayalam birth star after the husk has been removed. In front of Bhagavati, the Poojari then splits the coconut. It is thought that the impediment or Muttu has been cut if the coconut breaks evenly. The individual (devotee) is requested to bring along another coconut if it breaks unevenly. This practice is continued until the coconut breaks uniformly, signifying that the hurdle has been removed. They can be certain that their difficulties will be resolved if they stand before the sanctum sanctorum with an uncluttered mind, focusing on the Holy Presence with the highest prayer while the sacrifice is being made on their behalf ''* (Kaladan Narayanan Poojari, 23/08/2023).

He has described the above-mentioned *Muttarukkal* procedure. In addition, he mentioned that the strongest temple for *Muttarukkal* is the shrine of Sree *Kadampuzha* Bhagavati. People gathered to *Muttarukkal* regardless of their gender, caste, class, or religion. Three incarnations of Bhagavati, also known as Devi, are revered at this temple. She is revered in the mornings as Vidya Durga (Saraswati), bestowing upon everyone knowledge and professional brilliance. Her devotion has two forms: She is worshipped as Aadi Durga (*Mooladurga* - Lakshmi) in the evening, granting money and general success upon the devotees, and as Vana Durga (Durga) in the *Twaritha* Devi form, rewarding her devotees with health, young marriage, and family

harmony in the afternoon. In this instance, the self-manifested Divine Presence is only revered as a presence. *Kadampuzha* is distinct from other temples in that it lacks idols of Devi or Bhagavati.

On the other hand, *Muttarukkal* been performed by the Malabar Mappila women healers as well. One of the female healers in this research, Madheeha Beevi, spoke of *Muttarukkal* as follows:

"*I would recommend doing Muttarukkal at any of the Hindu temples as part of the healing process for patients who arrived with possession-related issues. In similar circumstances, Muttarukkal will be performed at the Sree Kadampuzha Bhagavati temple in the Malappuram district's Kuttippuram. However, I shall use Quranic ayaths to do the Muttarukkal for the Muslim patients." (22/08/2023)*

Researcher also documented the experience of cured people through using Muttarukkal.

"*As part of my therapy, Beethatha instructed me to perform Muttarukkal. I was unable to enter the temple. Temple of Kadampuzha in Kuttippuram. She received payment from me for doing the act on my behalf. She performed the task for me and informed me that she would continue the action till the coconut broke evenly" (Respondent-1,23/8/2023)*

According to the narratives given above, *Muttarukkal* is one of the rituals involved in the healing process. This is what healers who practise Islam and Hinduism are doing for their patients when the effect of possession is extreme. For this deed, they both utilise coconuts to chop through barriers that stand in their path for different reasons. The Muslim healer discloses that she incorporates the reference into her therapeutic techniques. Regardless of gender, caste, class, or religion, individuals use this act as part of their healing rituals. In addition, goats, chickens, and wine are used by Hindu healers for *Muttarukkal*. If the patient was Muslim, this act would be performed with assistance from other Hindu devotee in the patient's community. This demonstrates the Hindu-Muslim religious systems intersection in the Malabar region and also one of the significant illustrations of cultural Islamisation happened in the Malabar Mappila community as like we discussed in the first chapter of this study.

6.2.3 The concept of Nercha; Nercha kodukka or Nercha nearuka

Nercha is mostly used to represent an offering made to a deity, such as God, Auliya, Shuhada, or another. On the other hand, an offering can take any other form, meaning that it can be made to additional individuals as well. The term "*nercha*" is acceptable among Malabari. As part of their therapeutic techniques, all Malabar Mappila healers employ *Nercha Neruka* or *Nercha Kodukkuka. Nercha* was once practiced for a variety of reasons, such as health, wealth, success, education, and family life, among others.

One of the practitioner respondent (PR-5) shared their concept of *nercha*

"*All of Allah's creations are divided into many degrees. He feels that each and every person in the world has a unique role and significance. Humans, Malak, Jinn, Shaitan, and Ibleese are among the significant creatures created by Allah. But some people are far closer to God than others, and as a result, he has given them some supernatural talents and skills. In Malabar, those people are referred to as Auliya, Shuhada, or Thangals. Because of this, I used to advise people to perform Nercha to any local Makhams or Jarams in hopes that their blessings would help them recover from illnesses."*

Women healers in this research, PR-6 and PR-7, related their stories as follows:

"*Dharmam Thala Kakkum (Nercha will protect) is a common usage among us. Nercha was once done by people for a variety of reasons. In light of the course of therapy, I would advise them to perform Nercha to several Makhams in Malabar. Typically, I advise my patients to donate food, clothing, or cash to the Makham or Jarams in Shuhada or Auliya*'' (PR-6, 16/8/2023).

"I instructed PR-6 (she went by PR-6) to provide anything to any Yatheem that lived in her neighbourhood. It will support her medical care." (PR-7, 16/08/2023).

"While therapy is going on I instructed her (a patient) to do Nercha to either of the Kali temple in her region…" (PR-8, June 5, 2019)

Another Malabar Mappila healer stated,

"*I suggest they do Nercha to Mamburam Thangal with my treatment." His Karamat will free us from several health issues as well as other issues*." (PR-9, 18/08/2023).

The aforementioned accounts demonstrate how Malabar Mappila healers advise their patients to perform *Nercha* to different *Makhams* or *Jarams* in their neighbourhood. They shall be

shielded from all issues by the Auliya or Shuhada in that specific *Makham* or Jaram. In order to get Barakat from the Auliya and Shuhada, the majority of people perform *Nercha* to the *Makham*. In addition to doing *Nercha* for *Makham* or Jaram, individuals are advised to perform *Nercha* for *Yatheem* (the orphan kids) or underprivileged individuals within the patient's community. They had a great belief in Karamat of Auliya and Shuhada, as well as magical powers.

6.3 Section 2 - Reverence for Sheikh/ Auliya / Shaheeda and Deities in the Curing and healing process of Malabar Mappilas

The stories stated above demonstrated the significance of *Ustads/Sheikh/ Auliya /* Shuhada and Deities in the healing process of Malabar Mappilas and the lives of people in Malabar. It demonstrates how the Malabari people have always treated Auliya, Shuhada/ shaheed, and Sheikh with humility and reverence. They used to get visits from laypeople seeking Barakat, and now it is a common practice among the Malabar community. In a same vein, they also hold the Shuhada (Martyr) in high regard. They hold that the *Shuhadakkal*, also known as *shaheedins*, perished in jihad. *puthiyangadi Thangal Paappa, idiyankara sheikh, Sheikh Kunhi Mohammed Musaliar of ponnani, Mamburath thangal , Bhagavati* and *Kali* are the major Auliya/ sheikhs /shaheed and deities commonly referred in the health associated healing process of Malabar Mappilas.

6.3.1 Mamburath Thangal

In Malabar, Mamburam Thangal is a prominent member of a renowned family, and his *Makham* is regarded as the most significant pilgrimage site in South India. He's well-known for his *Karamath*. He demonstrated his *Karamats* in a number of ways, including dividing the sea and walking on water, reducing the distance between locations, exchanging liquids, speaking of inanimate objects, curing diseases, making animals obey commands, reducing and lengthening the duration of time, receiving answers quickly after praying, foreseeing hidden matters, displaying patience by abstaining from food and drink, observing the long sight even from behind him , accepting different

Image 2 : Mamburam thangal mosque

body structures, being knowledgeable about earth's minerals, writing a number of books in a short amount of time, and being free from impact of poisons . As a result, he gained widespread acceptance throughout Malabar. Aside from that, Mamburam Thangal and his relatives were significant figures in Malabar's Mappila Muslim history (Sathar, 2012). People believed in the power of *Karamats* of Mamburam Thangal to heal sickness, disease, pests, and even fatal injuries with a touch of blessing, regardless of caste, class, religion, or gender. The history of Mambaram thangal has widely transferred through oral words. The reiterated *karamath* of *Thangal* discussed by one of the practitioner respondents who referred his client to visit Mambaram is as follows;

"*Mohammed Haji is one of Tanur's impoverished laymen. He was the father of four grown daughters. He lacked the funds for their union. He made the decision to go to Mamarabram Thangal in order to discuss his predicament. A few days later, he met Mamburam Thangal and confided in him about his issues. After then, Mamburam Thangal instructed him to prepare on a voyage. He offered to pay for the trip and advised going to meet Jaar Mohammed in Calcutta. Simultaneously, Thangal offered him some sugar in a jar, advising him to utilise it for his travel as it had therapeutic properties. Mohammed Haji sailed from Bombay to begin his adventure. His fellow travellers had made fun of him for his dishevelled look. Nevertheless, he had carried on with his travels. One of his fellow passengers was weeping in between because he had a terrible stomach-ache. He had been offered a small amount of sugar at that point by Mamburam Thangal. His fellow traveller recovered after consuming the sugar. After that, he arrived in Calcutta and began looking for Jaar Mohammed. At last, he went to Jaar Mohammed's house to meet him. In Calcutta, Jaar Mohammed was a billionaire. At his place, he had many enterprises. Regretfully, he has had mental illness for a few years. Mohammed Haji sought to speak with Jaar Mohammed and asked all the questions he had, but the attempt was unsuccessful. Then he made the decision to treat Jaar Mohammed's mental ailment with "Sugar." Jaar Mohammed was treated with that sugar by Mohammed Haji. He overcame his mental disorder. Jaar Mohammed recovered and was delighted; he had given Mohammed Haji a lot of presents and cash."*

People used to perform *Nercha* to Mamburam *Makham* because they believed in his *Karamats*. The healers claim that the offerings include bits of silk, coconut oil, black pepper, and a bunch of plantains. Rich individuals, however, provide rice and sugar bags, litres of coconut oil, and cash for *Makham's* upkeep according on their financial situation. People engage in *Nercha* to achieve Barakat as well as a part of their recovery process. Similar to this, they offered silk,

flags made of silk fragments, coconut oil, and the holy book as a safeguard. Visitors to the *Makham* will get a tiny pack of rice, black pepper, and coconut oil. They think coconut oil has the ability to treat medical issues. People are likely to read the Quran in the title of Mamburam Thangal when they are visiting *Makham*.

6.3.2 Yahum/ Puthiyangadi - Thangal paappa

In Malabar, Yahum Thangal/ puthiyangadi thangal paappa of Puthiyangadi Palli is a significant Auliya. His *Jaaram* is in B. P Angadi in Malappuram district. In Malabar, people have a strong belief that his *Karamats* may cure a wide range of illnesses. So, they would do *Nercha* to Jaaram. Typically, people present the Jaram with a bunch of plantains. The main ritual that people used to do when they visited the Jaaram was called Jaaram *Moodal*. To do this, individuals can either bring silk fabric or offer cash to the *Usthad*, who is there to perform the Jaaram *Moodal* rite. The *Usthad* who covers Yahum Thangal Pappa's tomb after praying with a silk fabric wrapped over his or her head. We call this procedure "Jaaram Moodal." The healers claim that throughout their healing process, they used to recommend the Jaram Moodal ceremony at Yahum Thangal Pappa's Makham. This is to obtain the Auliya's Barakat (blessing) in the therapeutic process. One of the practitioner respondents shared his experience with the researcher as part of discussing the *karamats* of *puthiyangadi paappa*

Image 3: Pudhiyangadi mosque

"*X (he used the name), a resident of Purathoor, Malappuram, is adamant about his powers and his connection to Puthiyangadi Thangal Pappa. He once brought his daughter, who a few days later lost her voice. I examined Abjad and gave her a treatment plan, part of which included telling him to pray for her improvement and perform Jaram Moodal in Puthiyangadi Makham. He has completed Jaram Moodal at Makham, as I mentioned. He instructed him to put coconut oil on her tongue after obtaining it from the Makham. They submitted an application, and a few days later, she was able to speak again*." (PR-8, 28/08/2023)

6.3.3 The Sheikh of Idiyangara

In the sixteenth century CE, Sheikh Shamsuddhin Muhammad Bin Allauddin Al-Himsi resided in Kozhikode. In the Malabar area, he is referred to be a Sheikh and is credited with building the

Image 4 :*Idiyangara* Sheikh Masjid

Idiyangara Masjid in Kozhikode in 1551. As a result, the *Makham* and Masjid are sometimes referred to as *Idiyangara* Sheikh Masjid. People of all castes and creeds pray at the Sheikh of *Idiyangara*. For a variety of reasons, they perform *Nercha*; in particular, the Masjid presents an unusual image of healing. Appam, or baked sweet rice cakes, is offered by people to Sheikhs in order to treat various illnesses. People visit the mosque during the yearly remembrance celebration and present the mosque with textiles, various offerings, and crops that have been planted. In addition to these, individuals present the Masjid with little replicas of human bodies and organs.

6.3.4 Kunhi Mohammed Musaliar (Sheikh)

Perumpadappu's Sheikh Kunhi Mohammed Musaliar in Malabar, Puthan Palli Jaram is a renowned Auliya. This Jaram is located in Malappuram's Perumpadappu. He was raised in an agricultural household and was born into one. *Kithabs* was taught to him by a scholar. After that, he relocated to Panoor Dars, where he gained knowledge. He began to display his *Karamats* gradually, and Malabar saw his rise to fame. He got ingrained in the community and was well-known for his *Karamats*. The commonly circulated statements referred to his *karamats* has discussed by one of the practitioner respondent of the research.

"*Sheikh Kunhi Mohammed Musaliar had once intended to travel to the Holy Mecca, but even his absence during his pilgrimage would not settle the people who firmly believe in his Karamats. Nevertheless, he firmly believes in the choice he made. Subsequently, he blessed and blew on a glass of water, and instructed them to fill PuthanPalli's well with it. He then stated, "You can use or consume this water for therapeutic purposes. People continue to drink this water today to treat a variety of ailments, including poisoning, and they recover*" (PR- 10, 1/9/2023)

People in Malabar therefore trust in *Karamats* and the magical abilities of these *Auliyas*, regardless of caste or faith. People now often visit the Makham/Jaaram, perform *Nercha*, and engage in other rituals.

6.4 Section 3- The ritual chanting / The ritual art

6.4.1 Mala, Manaqib and Moulid; The ritual chanting/ recitation

Islam in Kerala is deeply rooted in the recitation of the Prophet Mohammed's Moulid and *Manaqib*, as well as the writings of his family, Auliya, Sheikh, and Shuhada. The devout individuals are praised via Moulid. The biographies of the religious leaders are published in Arabic and *ArabiMalayalam*, demonstrating the people's deep devotion to these endearing individuals. People genuinely think that ceremonial recitation bestows great blessings upon them. They pray to Allah through their Shuhada, Sheikh, or Auliya, believing that doing so brings them closer to the Almighty. Additionally, spreading and reciting virtues by devout people is seen as a good action that brings wealth, heals illness, and eases adversity, among other benefits. People chant Mala throughout daily life, just like *Moulid* and *Manaqib*. *Malas* are Arabic-Malayalam devotional songs that laud the masters of various Sufi groups for their *Karamats* and miraculous lives. The Malas are highly favoured by the Mappila Muslims of Malabar since to their use of local idioms and similes, as well as their vernacular writing style. The Mala that is most well-liked in the area is Muhyidheen Mala. Furthermore, Muhyidheen Mala had a significant influence on the spread of several customs and ceremonies among Malabar residents. However, individuals chanted these Malas for a variety of reasons; in particular, they were meant to prevent illness and heal ailments. Some well-known Malas include Malappuram Mala, Mamburam Mala, and Manjakkulam Mala; among these, Manjakkulam Mala was chanted to treat mental sickness, prevent smallpox (in the 16th, 17th, and 18th centuries), and prevent from perpetrators. For instance; Should you repeat this Mala

"You'll *have relief from the smallpox witches at the moment, you complete your chanting (Manjakkulam Mala, 1970)."*

6.4.2 The inclusion of deities and God in Malabar Mappilas healing process.

Malabari use a variety of deities in their *Mantravadam* and healing practices. Badrakali is one of the main deities in numerous *Mantravadams* and the healer, as defined by Kattumadam Krishna Kumar. Many think that the *Badrakali* may have manifested as the Chamundi, the Durga, the *Chudala Kali,the Karimkali, the Rudhirakali*, and other forms. All these regional names, meanwhile, have ties to *Badrakali* due to several folktales and legends.

Additionally, the four Varnas are the source of the names of the gods. The many Malabari groups still worship *Chathan, Chundalayandi, Chamundi, and Neeli*. Certain god's names, such as Pilla Marutha becoming *Balapradkshni, Ummama Chathan* becoming *Unmadha Bhairavan*, and *Choora* Marutha becoming *Raktha Rakshas*, were rendered into Sanskrit by the astrologers (Gopal, 2008).). These deities are still used by the *Panar, Parayar*, and *Pulayar* people in Malabar for *Maranam*, *Abhicharam*, and *Odi* rituals.

Many deities (Manthramurthy) are utilised in Kerala for *Mantravadam* and healing activities. As stated by Narayanan Poojari (2018), the most revered gods of *Mantravadam* are *Raktha Chamundi, Karimkutty*, Hanuman, Bhairavan, and *Kutty Chathan*. Despite this, Kali is the principal goddess of *Mantravadam* and its healing arts. However, some families who follow *Mantravadam* and heal themselves revere *Kutty Chathan* as a key figure in their religious practices. The *Kalakkadu* family in Kerala worships *Kutty Chathan* as part of their ritual. Many thinks *Kutty Chathan* is descended from *Kalakkadu* Mana. However, even though the Islamic texts of Malabar Mappilas strongly consider devoting deities as "shirk" / sin, the Malabar Mappila healers (except a few) shown interest in seeking the help of Hindu healers especially if the cases of possession are highly dangerous. Rather than the traditional healing practices of Malabar Mappilas which is also influenced by the Islamic medical texts of Muslims, this aspect of including Gods and deities is largely a part of cultural Islamisation process as like we already discussed.

6.4.3 Ratheeb- The Ritual Art form of Malabar Mappila community.

One of the well-known Sufi rites that the Malabar Mappilas of Kerala frequently perform is *r* *atheeb*, a compilation of *Aurad* or Adkar written by the relevant Sheikh, Khalifa, or Saint. They conduct the Ratheeb for a group of individuals at a certain time and location. Among the Mappila Muslims of Malabar, *Mohiyiddin Ratheeb*, *Rifai Ratheeb, Shadili Ratheeb*, *Haddad Ratheeb, and Jalaliya Ratheeb* are still highly revered (Kunhali, 2004). The primary task of the *Ratheeb* is to pronounce *Dikr* aloud and completely. First, the group would loudly pronounce *Dikr*, and then everyone would reiterate it and finish the numbers according to the Sheikh's instructions. There are two forms of *Ratheeb*: *Daffu Ratheeb* and *Kuthu*

Image 5: Ratheeb tools /weapons

ratheeb, and *ratheeb* made up only of *Adkar* (sing. Dikr) and *Aurad* (sing. Wird). In the *Daffu Ratheeb*, a group of individuals would stand across two rows, reciting the Adkar while holding a *Daffu*—a kind of drum—with their left hand and beating it rhythmically. The Adkar is written in verse and is included in the *Duffu Ratheeb*. However, in Kathu *Ratheeb*, the rite is carried out using swords, daggers, knives, and sticks. Additionally, the rite involves piercing one's own body, including the stomach, ears, and tongue.The ritualists fervently believe that they would be protected from injuries by the Almighty and the sheikh's blessings and devotion. In light of this, the artists should rehearse Namaz. The adherents of Rifai Tariqa popularise Kuthu *Ratheeb*.

At Kerala, *ratheeb* such as Haddad and Mohiyudheen *ratheeb* are also held at mosques and other locations. The Adkar's rhythmic recitation is one of the *Ratheeb's* main draws. The repeated Dikr sung in the *Ratheeb* is "Hu HayyunYaHayyu,","Ha Hi Hu Hayyun" and "Hu Hu Allah," The performers would adopt various postures during the performance, including standing, leaping, and sitting (Muhammed, 1992). They will begin slowly, proceed quickly, and stop when they are in a state of euphoria. Shadili Tariqa's disciples are mostly in charge of Shadili *Ratheeb*. There are a lot of Shadili Tariqa supporters in various Kannur and Calicut areas. The Khalifa leads the *Ratheeb* and stands inside the circle while the other performers create a circle around him to perform Shadili *Ratheeb*. The actors reciting Dikrs while standing in a circle grasp hands with one another. Later, the Khalifa gave the performers orders to walk slowly at first by reciting Dikrs, and then to move faster and faster. The key element of this *Ratheeb* is the performers' hand-held hopping and the rhythmic humming of Dikr.

From the fieldwork, researcher also analysed the role of audience or benefit received to the audience in *ratheeb*. The Malabar Mappilas who frequently attended the ritual said that it is more like a holy violence where there is no place for pain. Any person who gets wounded inside the circle (drawn for *ratheeb* presentation) will not feel pain. This 'no pain' meaning attached to the ritual further states that, the person who gets close to almighty doesn't feel pain. If he/she sense pain, then it is more likely to connect and read with the person's degree of faith. This ritual is unique as because unlike unintentionally made wound, the wound made in *ratheeb* is intentional. The curing of the wounds helps to regenerate faith in almighty and his power to heal (not only among the performers, but also among the audience of Malabar Mappilas).

6.5 Section 4- The symbols; Rituals and ritual performances.

According to Mahapatra, 1985, the people of Malabar are deeply linked with the social and cultural and religious life through a set of symbolic gestures and rituals, which are related with belief. Symbols and signs, according to Mahapatra, are the universal language across all civilizations. It is impossible to think without symbols. The sociocultural and religious lives of the inhabitants of Malabar are strikingly similar. They may communicate their religious experiences and sentiments via rituals and performances using a plethora of signs and symbols. However, each of these rites and acts serves as a symbolic depiction of human life. The section above described the rituals and ceremonial acts associated with the healing techniques of the Malabar Mappila healers. Every ritual and every ritual performance make extensive use of signs and symbols. Fawcett state that;

“Symbols are not made; rather, they emerge from life. They do not originate from the imaginative creativity of man. For example, a man was endowed with the symbols of water, light, and darkness in relation to his presence in the world. It seems that symbols are ingrained in human experience. As a result, man is a universal symbol maker and some symbols are universal”

As a result, the Malabar Mappila healers and people see symbolism in their ceremonies, performances, and healing methods to be global. During numerous healing rituals, the Malabar Mappila healers utilise oiled lamps, fire, water, areca nuts, coconuts, flags, betel leaves, joss sticks, Oudh scent, Frankincense, lime, turmeric powder, Knives, Appam, rice, and pepper (black). Every substance has a unique symbolic meaning.

An essential component of ceremonial healing procedures is water. According to Joelle Allouche-Benayoun, the rites of water symbolise the transition from the profane to the holy, from the "outer" to the "inner," and from the present state of nature to the state of civilization, above all, though, they appear to be a symbolic means of releasing the existential suffering that is a part of being a thinking human as stated by Benayoun,1999. It also serves to detoxify the body and the environment. Because of this, all Malabar Mappila healers do *Wulloh* prior to performing any rituals in their healing practices. Conversely, the *Zam Zam* water is essential to their healing process. They provide the patients with water that has been infused with air while chanting different *Ayaths* and *Sooraths*. *Zam Zam*, in the opinion of the female Muslim healers, acts as a medication for a number of ailments. It is useful medicinally and is revered. Another

tool in the healing process is *kindi*. A typical Malabari *kindi* is a water container made of gold and silver. They filled it with water or holy water (Zam Zam) for ceremonial purposes in order to maintain the ritual purity of the healing procedure.

Since frankincense, perfume, and aroma are integral to rites, they have played a significant role in Malabar culture. They were an inevitable component of it, the ceremonies extending from birth to death. The usage of smell and perfume reveals its significant function as well as its symbolic and sanitary elements. The Malabar Mappila healers introduced exclusivity and divinity into the therapeutic area with the use of Frankincense, Oudh, and scent. The therapeutic place should have a holy and sanitary atmosphere. They employ it to appease the God/Deity on a moral level. Similar to this, people employed a concoction of herbs, incense, and fragrances to invoke their god or goddess or to appease the saints' celestial bodies. According to Corbin (1986), the unpleasant smell was mostly associated with bad health and well-being as well as the removal of physical, moral, and verbal pollution. A common element in many traditional healing rituals is pepper. People utilised it for a variety of ceremonies in addition to the common activity of preparing meals. People give pepper to *jaaram* of pudhiyangadi regardless of caste or creed in order to protect themselves against chickenpox. People in Malabar practise it extensively. However, it plays a significant role in the preparation of incense for a number of rites. *Guruthi* is a ceremonial practice that people in Malabar call "*Kuruthi*." During the *Guruthi* ritual, the healers provide for the needs of God and the gods by offering the blood of animals as sacrifices. Guruthi split into two, according to the healers, *Uthamam* and *Madhyamam*. In *Uthamam*, red water is created by mixing ground turmeric and lime in a copper bowl of water; this red water is referred to as blood. They later present the red water, which represents blood, to the god or deity. However, in *Madhyamam* they sacrifice bird and its blood are offered to the God/ Deity at Guruthi. Simultaneously, the performer creates a wound on his body, incorporates blood into the water, and presents it to the God/Deity. It represents the widespread practice of human sacrifice to a deities or deity in Malabar. But such practices are now very rarely practiced. During fieldwork, the respondents from the Malabar Mappilas referred it as “Hindu practices”. Another respondent’s response has documented below;

“This practice of blood offering is haram, if we are doing it just to make the almighty happy. It is the practice doing in Hindu temples, not us. But I think, my fore fathers used to do it, but I don’t have any vital evidence for this nor I encourage this.” (PR-11, 10/9/2023)

6.5.1.The healing practices for human mischiefs

Family and marital problems

Vignette-1

The Malabar Mappila healers say that they sometimes open Abjad and other times they have an open conversation with the client in order to address these marital and family issues. On behalf of her mother-in-law, a young married Hindu woman went to see a Malabar Mappila healer to discuss her brother-in-law's desire to live apart from the family. Their family's circumstances grew worse as a result of this. The client was initially asked by the healer what she desired and what she believed would be the greatest result. After detailing the family circumstances, the client acknowledged that she believed her brother-in-law's move out would be the wisest course of action. The healer/*thangal* provides her *Thakid* to burn in the fire to "close their mouths" when she fights with her mother. According to him, they can only think and behave appropriately at home if the arguments are put an end. The statement from the healer is as follows;

"I made a Thakid for X (PR used the name of the client) and wrote Soorath-Ul-Murswalath on a copper sheet. Then I instructed her to store that Thakid—where he used to sleep—under the coat. Without a doubt, the circumstances will change" (22/09/2023)

Vignette-2

A young guy who complained that his wife was no longer paying attention to him and his mother. "She used to listen," he remarked, "but now she does as she pleases." She is bothering my mind since she continues stating that she needs to go to her mother's, or to relatives' or friends' house. He desires an ideal, submissive wife. The healer responsible for the treatment started a conversation with the researcher on how he dealt with the client. A piece of his words relevant to the research has given below;

"I unsealed and saw into his spouse's Abjad. It demonstrates that another lady was the reason behind her shift in attitude. For X, I prepared an Elas. If he bought an Elas, he was positive his wife would not wear one. So, I handed him one handwritten in his spouse's name to put in his private purse. I also provided a Thakid to submerge in a river and attach to a piece of stone." (22/09/2023)

Vignette-3

The healer indicated that although family issues are the most common reason individuals come in, as conversations with them develop and they are given careful attention, a more comprehensive and complex issue usually surfaces. A young Muslim woman complained that her husband, who was considerably older, "would not look at her." She is from a middle-class household, and as her parents cannot afford to provide a dowry, she married an older man. She initially believed that this dowry incident was the reason for his attitude shift. She gradually learns that her spouse had an affair with another lady. She spent an hour sitting with the healer. She then disclosed that the "other woman" is actually her sister. She was totally unable to handle this. She let out a cry. After that, healer whiffed air on some sugar while reciting *Soorath-Ul-Luqman*. Afterwards, it was given to her and instructed to be given to her husband. This woman gained knowledge from the healer that she could "do," along with hope for her husband's attitude to change and for recovery.

Contrary to common misconceptions about gender relations in Malabar, women healers reported that more women than men sought their help with issues related to marriage and relationships, including physical abuse and violence. Men, on the other hand, frequently experienced mistreatment from their wives and sought solace from the healers. In these situations, the women healers only converse with them and listen to their issues. Occasionally, when necessary, she will open and examine the disciple's Abjad. The women healers claim that when they wrote *Thakid* and *Elas* ordering the offending party, they would take the side of the person who came to them with strained relationships, whether they were between spouses, parents and kids, or neighbours. The women healers said that in the past, when strained relationships arose between neighbours, parents and children, or husband and wife, they would always take the side of the complainant approached them. After reading their letters *Thakid* and *Elas* ordering the offending individual to stop speaking. Of course, the other individual would have another narrative to tell, according to the women healers. Therefore, in these situations, their only action is to silence the offending party; they do not employ "black knowledge" tactics against them. The female healers continued by saying that males who came in with issues always had relationship issues, failed businesses and agricultural endeavours, and other issues relating to their jobs. But the female patients who visited the healers were there for special needs and health issues.

The problems of childhood and Children

The majority of issues that Malabar Mappila healers deal with are childhood illnesses and concerns. Due to their intrinsic beauty and familial worth, children are believed to be especially vulnerable to the evil eye in all of its manifestations throughout Indian religious traditions (Flueckiger, 2008). In Indian culture, people think that a person's level of beauty is directly correlated with the evil eye. As the chapter previously stated, Mappila Muslims believe in the concepts of *Karinakk* and *Karimkannu*. As a result, babies frequently wear *Elas*, *Karivala* (Black Bangles), *Koochi*, which are shiny, reflective inset stones, and black kohl marks on the side of their cheeks or foreheads to draw attention away from these concepts. However, if Karinakk or Karimkannu are successfully cast, the newborns may not thrive, struggle to nurse or sleep, get a fever, or lose their mobility.

Many of the newborn and child patients of the Malabar Mappila healers had previously received allopathic treatments from hospitals. According to healers, patients don't first disclose the past therapies they've received, but eventually they will. Through Abjad, the healers identify the type of evil eye present in these situations. If the diagnosis indicates either the human or *Jinn/Ibleese/Shatanic* evil eye, they write a solution for the issue. Regarding a patient, one of the healers (PR-12) described is that:

"*X (healer used the name) arrived with her four-month-old infant, lamenting the child's incessant wailing and refusal to sip milk. I instructed her to chant "Ya Thawwabu" seventy times a day, blow bubbles on the infant, and give her a massage. It aids in their defence against the evils of both the Jinn, Ibleese, and Satan*" (25/09/2023)

PR-13 also shared her experience in childhood healing treatments

"I often visit Y (Healer used the name), who came for her grandchild. He is incredibly passive, refusing to attend Madrasa and school, and cries for no apparent reason. She was sobbing and distraught when she spoke with me. I took Abjad of her grandchild and attempted to help her. Next, I blew air into a clay basin while reciting "Ya haseeb Ya Mukheedu" seven times. I then gave her a small amount of water that I had poured into the basin and recommended carrying out the same action in the days ahead" (25/09/2023)

In addition, people used to see healers to give their newborn children names. During the conversation, healers also discussed their experiences following treatment. observed that moms frequently bring back their infants to flaunt after treatments are effective. They frequently bring

"something" for the healers, which might be money, clothing, or other items. The healers believed that for the rituals to be effective, participants had to follow all instructions; otherwise, they would not function. In most cases, parents are content to adhere to the regimen and the medication until their ailing kid gets better. Additionally, before seeing the healers in instances involving children, individuals have sought allopathic physicians.

Vignette-1

Parents who visit the healers often complain about their son's misbehaviour and disobedience. Parents typically don't bring the kids along in these situations. However, unless the person is quite young, they occasionally bring. A young Muslim couple named X and Y arrived with their seven-year-old son Z, who had been biting both his parents and other students. He was causing instructors and other people at his school endless problems. The healer shared the healing modality she proposed in this case;

"*About their son, they were both agitated and worried. They described all of the events and issues that their kid brought up at school. I informed them that their son would need a costly course of therapy. I opened their son's Abjad, had a look at it, and determined the course of action. To do this, they must round their son's head with a live chicken and donate it to the Kaliyatta Kavu temple. I whiffed air up on his head and proposed that they recite Soorath-ul-Kafiroon every day following Magrib Namaz*." (PR-14; 26/09/2023)

Furthermore, the healers clarified that the majority of their disciples arrived with misbehaviour for their teenage sons, an aversion to labour, and the seemingly serious issue of just "wandering around" for many young men in Malabar

Vignette-2

A wealthy man named X, who worked in Dubai, spent a week meeting the healer (PR-15) virtually every day when he was on a 12-month leave of absence from his job in Dubai. The last time he visited, he said that his kid had begun to verbally abuse his mother in the absence of his father and had also stopped going to work and making money. All he does is squander the money the person has made. X went on to say that his son aspired to wed a woman of a different faith. X wants to obtain healer's counsel on this situation. The healer PR-15 remembered her response and shared it with the researcher only after using the probing method.

"I didn't look at him or his son's Abjad to see whether he had a spiritual imbalance or whether Karimkann was applied to him. I just listened to his concerns and thoughts. I instructed him to bring his son to me and to recite Soorath-Ul-Luqman daily following Subhi Namaz. A few days later, he returned, but this time he was by himself. It's possible that his son declined to accompany him" (26/09/2023)

According to PR-15, the healer, her disciples came for several purpose. Similarly, more often than one might think, individuals come to the healers with stories of runaways, lost children, missing animals and belongings, extramarital affairs, and love affairs. The prominent women healer (a *Beegum*) spoke of the folks who came to her for animals and missing items. She often refers them to other experts for "*Mashi nottam*," wherein he may be able to discern the whereabouts of the object or animal in a vision. Occasionally, she also writes *Thakid* to summon the animal and then to have *Thakid* burnt to bring it back to the thief. Additionally, the healers instructed their patients to chant "*Ya jamih*" seventy thousand times in a week. was handed a *Thakid* with many Arabic alphabets inscribed on it. The healer will compose and get ready *elas* or *Thakid* for the individual, following the Abjad. The healer will then go over how to use and put on the Elas or *thakid*.

The economic failures- the spiritual solace

Only male followers bring with them stories of collapsing farms and businesses. The healers claim that occasionally the issue is with the person running the company or engaging in agriculture, and other instances the issue is with the location or structure itself. The preceding section covered the issues related to location or business. The female healers will open both of their Abjads, identify the issue, and choose the best course of action based on their findings. The prominent healer dealing with the economic disruptions shared one of his experiences.

"*X (PR-16 used name) arrived with a business complaint. He has been struggling with business failure for the past three months. His family's only source of income comes from his hotel. His family is struggling financially as a result of the business's demise. Then he made the decision to see me. I made him a Thakid to keep in his hotel. It will result in success and prosperity*." (27/09/2023)

These are the main issues that the Malabar Mappila healers in the study region are treating. Numerous stories are far more straightforward and serve as reminders of the state of humanity in general. Individuals come with a variety of issues and fears, and they just open up to their

healer about anything. They firmly believe in the spiritual strength and healing skills of the healers. Islamic astrology is a significant factor in the ways that Malabar Mappila healers have evolved their understanding of therapeutic techniques. It aids them in the diagnostic and therapeutic processes as well. The Islamic astrology that the Malabar Mappila healers employ in their healing rituals will be covered in the next section.

6.5.2 Islamic Astrology for healing

The preceding sections discussed how Islamic Astrology is used by the Malabar Mappila healers to diagnose and treat patients that come to them. The 16 Malabar Mappila healers (female and male) that are highlighted in this chapter all acquired their knowledge of Islamic astrology in various ways. Among them, ten practitioner respondents of this study were willing to share their archaeology of knowledge on Islamic astrology and the same has been recorded below.

"I was raised in a Thangal household, where my father was a well-known religious healer in the Malabar region. He taught me every lesson I needed to know. I am putting what he gave me into practice after he blessed me. (PR-1, 8/09/2023).

"In our community, my father worked part-time as a religious healer and as a Mulla of a madrasa. At our house, he performed religious healing rituals and ceremonies. I had thus witnessed all of his behaviours since I was a little child. In brief, my father was my instructor in healing practice" (PR-2 ,10/09/2023).

"I am eldest daughter of Sayyed Muhiyudheen Thangal; who was a religious and ritual healing practitioner in Pallikkal. Thus, my father himself could teach me everything there is to know about religion and ritualistic healing" (PR-3, 25/09/2023).

"My father was my primary instructor when it came to teaching me the lessons found in the Quran and Hadiths. Then he taught me the fundamentals and provided me several books on Islamic Astrology" (PR-4, 17/08/2023).

"Like every other female in the Madrasa, I learnt kithabs. Additionally, my father, a seasoned religious healer in Malaba, bestowed blessings upon me" (PR-5, 16/08/2023)

The aforementioned accounts demonstrate that the five healers received their foundational knowledge of religious and ceremonial healing techniques from both their father and the Madrasa they studied. One of them recounted receiving several books on Islamic astrology as

a present from her father. She can read that material for additional practice (thanks to her Madrasa schooling). However, the explanations of the other five healers are as follows:

"I had the insight to start healing others when I needed it. Then, I discovered a variety of therapeutic modalities from diverse sources. Like every other Muslim, I attended a madrasa to learn the Quran" (PR-6, 11/08/2023)

"I read the Quran and the Hadith in my daily life because I received my education at a madrasa when I was younger. I didn't learn anything about my faith or the Quran when I was younger. Two years after my husband's death, I began learning more about religion. Next, I begun visiting the Dargah, Makhams and Jaarams in different parts of the nation. After seeing Auliya, I was blessed by him, and he instructed me in dreams to practise for people" (PR-7, 22/09/2023).

"I received the blessings of Ervadi's Auliya. I then had a conversation with our mosque's Mulla. He helped me with the healing techniques" (PR-8, 21/09/2023)

"In my dream, Mamburam Thangal appeared to me and instructed me to begin curing the impoverished. After that, I met Usthad in Mamburam Makham, and he gave me some materials to read so I could learn it on my own. I was able to read and write the texts because to my Madrasa education" (PR-9, 12/08/2023).

"After having a revelation, I began practicing at home. For reference, the Usthad in our mosque recommended a few books, including Latheef, Mujarrabat al-Dayrabi al-Kabir Shamsul Anwar, Majmuh, Shamsul Maariful Qubra," (PR-10, 14/9/2023)

The five stories of the Malabar Mappila healers mentioned above provided insight into their training as practitioners of ritual and religious healing. Five of them had enlightenment and blessing from the Auliya, whom they had previously visited. The *kithabs* recommended by their mosques' *Usthad* have subsequently been taught to them. Like every other Muslim, they received an education at Madrasas where they learnt the fundamentals of the Quran and Hadiths, which aided them in reading the additional works recommended by the *Usthad*. This is how Islamic Astrology is taught to healers, and they use it in their therapeutic practices. Islamic astrology and the intricacies of the numerals and letters found in the Quran are being unlocked by Malabar Mappila healers. The fundamentals of Islamic astrology will be examined in this part, along with its connection to and function in the healing process.

Mansila- Thwali-Burooj (Starts-Planet- Zodiac) are the essential parts of Islamic Astrology. By the grace of God, every *Mansila, Thwali*, and *Burooj* (Stars, Planets, and Zodiac) have unique powers. The foundation of Islamic astrology consists of 28 signs and activities. Islamic astrology has its pioneer in the person of Prophet Sulaiman. He paved the path for his astrological students. He imparted the knowledge to his followers. *Avwa, Badheen, Baldath, Dhabraan, Dharfath, Dirah, Gafr, Hanhath, Haqath, Iqleen, Jabhath, Kharsil, Maqadham, Muaqar, Naayim, Nasrath, Qalb, Qbiyath, Rasha Sabanan, Sahdubalq, Sahdudabih, Shardheen, Shawlath, Simak, Suhood, Surayya, Swarfath*, are the twenty-eight starts in Islamic Astrology. There are five phases in a star's life cycle, which correspond to the stages of childhood, adolescence, adulthood, old age, and death in humans as well as the seasons of winter, spring, summer, and autumn. Thus, much like in the practice of healing, the changes, location, and time of each start are significant in astrology. Many people think that variations in the zodiac and star movements can lead to a variety of health problems. Therefore, the very same stars and zodiac are used for therapeutic practices by religious and ceremonial healers.

Many people think that variations in the zodiac and star movements can lead to a variety of health problems. Therefore, the same stars and zodiac are used for therapeutic practices by religious and ceremonial healers. In the same way, if one believes in the existence of *Burooj*, one may identify twelve of them:*Aqrab, Asad, Dalv, Haml, Hooth, Jausih, Jayd, Meesan, Qaus, Sarthan, Sour, Sumbulath.* Buroojs are compared to various bodily parts in Islamic astrology; *Aqrab* related to privities, *Asad* related to chest, *Dalv* related to ankle, *Haml* related to head, , *Hooth* related to feet, *Jausih* related to neck ,*Jayd* related to knees, *Meesan* related to under navel, *Qaus* related to thigh, *Sarthan* related to shoulders, *Sour* related to face, *Sumbulath* related to stomach

Thwalis is the third component; they are *Athwarid, Mirreeq, Mushthari, Qamar, Shams, Suhal Suhrath,*These are the three fundamental components of Islamic Astrology. Moreover, these 28 Mansila are divided into four seasons: Shidah (winter), Rabeeh (spring), Swaif (summer), and Kharif (autumn). The main diagnostic technique in Islamic Astrology is abjad. Every Arabic letter has a number value according to the Abjad tradition. Another name for the Abjad is the

Image 6 : Abjad tradition

Table of Sequential & Gematrical Values of the Arabic Alphabet

Sequential Value	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Arabic Letters	ا	ب	ج	د	ه	و	ز	ح	ط	ي	ك	ل	م	ن
English	alif	be	jim	dal	he	vav	ze	ha	te	ye	kef	lam	mim	nun
Gematrical Value	1	2	3	4	5	6	7	8	9	10	20	30	40	50
Sequential Value	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Arabic Letters	س	ع	ف	ص	ق	ر	ش	ت	ث	خ	ذ	ض	ظ	غ
English	sin	ayn	fe	sad	kef	re	jin	te	se	he	zel	dad	zi	gayn
Gematrical Value	60	70	80	90	100	200	300	400	500	600	700	800	900	1000

Jumulul Kabeer numbers. The abjad has given below;

Let’s take the example of a name to better comprehend the abjad. The name ABDUL’s total numerical value as per abjad is 7;

ABDUL= 1+2+4+6+3= 16= 1+6=7

The Malabar Mappila healers write down each patient's name in Arabic script after asking about the patient's mother's name. They then total the numerical values associated with each name and add the value associated with the lunar day of the week in question. The final quotient, which the women healers divide by three to four (based on what yields a full quotient), explains the reason for the patient's ailment or issue and aids in determining the best course of treatment. The healers explained the meaning of the numbers when they were divided by three or four. The women healers had supplied an explanation for the numerical value of dividing by 3 or 4, the figure four symbolises that the four corners of the world and similarly with 3; it denotes the three levels of the universe correspondingly heaven, earth and hell.

Before computing Abjad, the healers have to follow specific regulations. In the name of Prophet Mohammed, they must recite Soorath-Ul-Fathiha, Soorath-Ul-Ikhlaas, Muvadhidhaini, and Swalath 10 times. They can then compute Abjad after that. The healers claim that they can use Abjad to grasp the many kinds of illnesses and problems. To do it, write the patient's name and the day in Arabic, then compute Abjad and divide the result by four. The reminder may indicate the nature of the ailment or issue. According to the healers, if number one indicates an illness brought on by the body's extremes of heat or cold, number two indicates an illness brought on by Jinn*, Ibleese, or Shaitanic* issues, and number three indicates an illness or issue brought on by *Sihr*; if 0 would serve as a reminder that the disease or issue is either connected to Vata-Pitha-Kapha issues or cheating. The healers are diagnosing and providing therapies for the patients/people using this Abjad.

Additionally, the Abjad diagnostic may indicate that "nothing" is wrong in certain cases, even if the patient may have had a complaint or been experiencing issues. These cases do not indicate a spiritual imbalance that may be resolved by the treatment of healers. When that happens, the women healers may respond, "It's nothing; it's Allah's work" (*Allah nte masiraanu*). They will also listen to the patient's or people's complaints and stories and attempt to persuade them to come into contact with it. The healers, however, occasionally comply by offering *Thakid* or Elas for the patient or others, who frequently demand that they write "something" or prepare

"something" for them. According to the healers, they will only offer generalised Elas to ward off Jinn, *Ibleese*, and Shaitan. At other times, they just converse and listen to them.

The Malabar Mappila healers gave an explanation of the traditional healing methods and beliefs that are common in the Malabar region. Along with providing a thorough narrative and sharing their own experiences as healers, they also expanded on how people see and comprehend health, sickness, and healing techniques. In addition, they discussed various medical systems and the medical pluralism that has always existed in people's daily lives. The patient's history and sociocultural views always play a role in the consultation with a specific healer or physician. Additionally, the physicians' and healers' accessibility and availability are important factors in this case. The healer said that a few of their patients first see doctors for consultations. Conversely, a few of them are concurrently seeking advice from several medical systems. People are seeking treatment from several healers to such a degree that they frequently contact another after receiving inadequate or unsatisfactory results from one healer.

6.6 Section- 5; The women healer; Rituals and therapies

Males predominated in the therapeutic environments as well. The only people who practise healing in the Malabar area are men, particularly in the Mappila Muslim group. But gradually, the women healers who are familiar with life's rhythms and secrets begin to infiltrate the Malabar healing scene. When the 5 women healers (who we incorporated in this study) first started out in their careers, they all encountered several challenges. They all keep reiterating how right they are to hold the position of healers in Malabar. They eventually gained respect and approval from individuals both inside and outside the state. During fieldwork, the majority of patients stated that they preferred religious and ceremonial healing methods, particularly when performed by women healers, mostly because they believe that women are more compassionate and understanding than male healers worldwide. In a similar vein, the female healers gave their patients' preferences for them based on a number of criteria and explanations for their wants and actions.

6.6.1 Why women healers? - Affordability?

The study found that the cost of treatment has a significant impact on health-seeking behaviour. The women healers discussed in various segments of the conversation that they charged little for their services. The Malabar region has access to multiple medical systems, despite the fact

that people use the women healers and receive therapy. One explanation for this is the lower cost of treatment. The women healers provided the following explanation:

"They gave me gold, money, food, clothing, and even Oudh. Their socioeconomic backgrounds and levels of capacity to pay differ. Thus, I don't make any specific requests. I don't mind if they don't have anything; everything they provide is acceptable." (PR-7, 22/09/2023)

"Their financial backgrounds differ from each other. While some of them happen to be quite wealthy, others are not. I thus don't set a set price for my services. Depending on their ability to pay, individuals can make a contribution" (PR-3, 25/09/2023)

"I am not paid directly for my work. It is a given. I have a box here that they can put everything they have in it. Other than that, I don't have any problems because I personally know them (PR-5, 16/08/2023)

The stories above demonstrate that all women healers are forgiving of their clients. They don't demand money up front for their services. Every one of them has a box on their table, and the followers or patients can put money in it according on their capacity or desire. The women healers claim that different social classes or strata are represented by their patients and pupils. They are male or female, married or single or divorced, wealthy or impoverished, educated or illiterate, employed or jobless, etc. Their ability to pay also differs. For this reason, each of the female healers stated that they did not charge a set fee for their services or treatments. One of the healers stated that she accepts anything they provide, including clothing, money, or even gold on occasion. It demonstrates that they remain sensitive to the expense of their care. In a similar vein, the female healers said they knew a great deal about each patient and follower that came to see them. They are well conscious of their personal and financial circumstances. According to one of the healers, several of her patients and followers visited them without getting approval from their in-laws or spouses. Therefore, they might not have enough cash to provide the female healers. Thus, others who are similar to them receive no requests from the female healer.

6.6.2 Why women healers? - Availability?

The community's availability of healers influences people's decisions to seek medical attention. Numerous studies demonstrate that the majority of Indians use traditional healing methods, rituals, and religion more often than other medical systems. According to Neki's (1979) research, the majority of Indians receive their primary care and assistance from local

indigenous and religious healers. A consultation with a certain healer is always influenced by a variety of circumstances, including the patients' history and sociocultural views, as well as the healers' accessibility and availability. Similarly, one of the explanations why faith healers end up being the patient's first option for consultation is the exploratory characteristics of disease. Moreover, community members, acquaintances, neighbours, and family members frequently participate in the decision-making process over the course of therapy. Based on their own experiences, these decision makers persuade the patient and family members to continue with contemporary medical procedures or faith-based or religious healing. The decision-makers advise anyone suffering from mental illness to speak with local religious healers. Many choose to receive treatment for a variety of ailments from the community's healers since they are easily accessible.

The 5 female healers offer therapies for a range of mental disorders brought on by *shaitanic* possession. They have different perspectives on and understandings of mental illness. Therefore, people have used traditional healers and religion even more than contemporary treatment. The main cause of such is the pervasive social stigma in the community. Numerous studies demonstrate that psychiatric therapies, which are widely used in India, are stigmatised. The patients themselves had a tendency to conceal mental illness from both their general population and their relatives. In a similar vein, many hesitate to seek treatment for their mental health conditions and are even unwilling to reveal them to community general practitioners. All of the female healers mentioned that their clients or patients are concerned about what other people in the neighbourhood would think of them. They wish to conceal mental illness and its treatment from their community since, should someone be known to have had treatment for mental illness, they may have to live with that stigma until they pass away. In addition, they said that the family's female patient is causing a lot of concern. One of the motivations for seeking assistance from Indian religious and ceremonial healing practitioners is the societal stigma attached to psychiatric therapy.

"They conceal it since they are aware of the widespread stigma in the neighbourhood. They therefore worry a lot about how other people will see them." (*PR-5, 16/08/2023)*

women healers make followers and patients from all walks of life stronger in addition to providing assistance. In addition to being healers, they also serve as decision-makers, mediators, preceptors, counsellors, and, most importantly, mothers. All of these positions confer influence and power on their patients, disciples, and the society at large. However, this

research is intendent on Malabar Mappila Muslims in general, getting information from the women healers of the community was quite difficult. Out of the 16 samples selected for practitioner respondents, only five of them were women. The demographic data of the selected samples or the practitioner respondents (PR) will be given in the research methodology chapter of this research.

7. CHAPTER- V

Reproductive Health

7.1 Introduction

The Policymakers associated with health have been more concerned about women especially her reproductive health throughout the past three decades. The example for this is in the wake of the Cairo, Egypt, international population and development conference of 1994 and the Beijing women's conference in 1995 (ICPD report, 1995). Since the 1960s, fields like medical anthropology and medical sociology, along with public health have studied rural ethnomedicine in numerous societies regarding the indigenous healing techniques that include indigenous beliefs and customs. The inquiry of this chapter is: Why, in the face of biomedicine's domination, are women and men of the Malabar Mappila community practicing ethnomedicine?

This chapter is a comprehension of the traditional reproductive health practices of the Malabar Mappila community, focusing on culturally embedded methods for managing fertility and infertility, family planning, and comprehensive reproductive care for both men and women. It examines Malabar Mappila's approaches to enhancing fertility and treating infertility, including the use of culturally acceptable contraceptive methods. The different phases of Malabar Mappila's reproductive care will be detailed in this chapter by covering male circumcision and paternal health in subsection of men's reproductive care , as well as menstruation, prenatal, postpartum, and postmenopausal stages under the subsection of women's reproductive care . Additionally, the chapter will discuss the community's traditional treatments for chronic diseases such as breast, cervical, and penile cancers, highlighting the unique healing practices that are still in use today. Malabar Mappilas acknowledged that hospitalised medical care is a "mandatory visit"; only required at the time of delivery. Except the moment of labor, the 1st, 2nd, 3rd trimesters of pregnancy is heavily reliant on "from-home therapies," which are a part of the therapeutic traditions of the Malabar Mappilas. Local beliefs and prior experiences have been determined to be the most influential factors in sticking on to these beliefs. It has been followed by any women of Malabar Mappila community regardless of their age, educational and occupational status. Numerous more approaches exist, such as those for local healing.

Some informants who have used a range of traditional healing methods for their reproductive health have provided information.

7.2 The participants

One of the crucial tasks for the researcher involves identifying current beneficiaries of treatments related to reproductive health. To achieve this, the researcher sought guidance from a prominent female healer within the Malabar Mappila community. The healer recommended visiting two significant mosques, namely the *'puthiyangadi* mosque' and the *'idiyangara* mosque'. These mosques are revered as holy places by the Malabar Mappilas, who believe that visiting them on the first Friday of their second and third trimesters instils courage and facilitates easier childbirth. While some individuals also visit these mosques with the hope of influencing the gender of their child, this specific aspect falls outside the scope of the current chapter, which focuses exclusively on the public health perspective of reproductive practices among the Malabar Mappilas. Over a period of three months, the researcher conducted semi-structured interviews with 40 pregnant women from the Malabar region, all in their second and third trimesters. These interviews were conducted within the prayer rooms of the mosques, chosen for their cultural and spiritual significance in the community. Previous chapters have detailed the religious and healing traditions associated with these mosques, providing context for their role in the community's reproductive health practices.

Additionally, the researcher gathered insights from male members, mostly the accommodated husbands of the pregnant women of the community to explore specific aspects of reproductive care tailored for Malabar Mappila men. Interviews with practitioners preceded those with beneficiaries, aligning with the comprehensive scope of the thesis. However, significant challenges emerged when attempting to collect data directly from practitioners regarding their roles and perspectives on reproductive health practices within the community.

7.2.1 The pause in research- Gendered Secrecy in Reproductive Health Traditions

Throughout the research, the challenging part of data collection was to access data related to reproductive health. Likely in anywhere in India, reproductive health and associated matters is a taboo to speak in public especially when it carries a ‘sexual meaning’. During the process of this research, researcher were faced with situations where participants hesitant to talk about reproductive health behaviour and practices as because they treat it as a very sacred process

that itself should kept secret in associated gender. Since the researcher is biologically identified as male, it was easier for him to get data on male reproductive behaviour even though the participants were very conscious in using terminologies associated with reproduction. The major problem researcher faced is when he tried to get data on women's reproductive behaviour. As we already discussed in previous chapter that, Malabar Mappilas do have hierarchy in treatment processes, phases of data collection for reproductive health shown that it also carries a gender dimension.

"Reproductive *health healing traditions among us are highly confidential and are shared only with gender-appropriate practitioners. For instance, my husband, a known Malabar healer, does not disclose his male patients' treatments to me, as these are strictly men's matters. Similarly, I do not share my knowledge of women's reproductive healing with him. These practices are private and gender-specific; only a female healer will treat women, and a male healer will treat men. So, why would I share these secrets with you, a man*?"

This script is from the interview with a women healer and most of the interviewed practitioners shared the similar view. Then the only option of the researcher was to take the interview with the help of a female field investigator. Initially those women healers denied sharing as because they know it's going to disclose to a male person, the researcher. But, once the female investigator tried to convey the aim of the research and the need for taking this interview, most of them agreed unless a few. One of the major reasons behind approving the interview is the talk on 'recognition'

"*finally, am happy that someone 'progressive' considering us as simply healers rather than spiritual healers . most of the people believe that what we do is solely spiritual mode of healing. No one see the single medicine therapies we offer , nobody look after the seasonal medicine therapies we offer, no body see the dietary therapies we offer; we do have more to talk than 'religion'* "

The data collected underscored the significant role gender plays in traditional healing practices within the Malabar Mappila community. This gender-specific approach highlights the community's deep-rooted commitment to privacy and confidentiality in reproductive health matters. The decision to employ a female field investigator was pivotal in overcoming these barriers, providing a more thorough understanding of the intricate practices involved. Reproductive health here is approached holistically, encompassing single medicine therapies,

seasonal medicine therapies, and dietary practices. These elements are often overshadowed by the spiritual aspects of healing, which tend to attract more attention from outsiders. Acknowledging these practices is crucial for a comprehensive understanding of the Malabar Mappila's traditional medicine. These insights underline the complexity and richness of the Malabar Mappila's healing traditions, which extend beyond mere spiritual practices to encompass a wide range of therapeutic interventions tailored to the specific needs of men and women. This nuanced understanding is vital for appreciating the community's approach to health and healing.

7.3 Family planning in Islam.

As is the case with many communities, the Muslim community's opinions have been greatly influenced by religious orientation and culture. There are still a lot of myths about family planning, and awareness is in process. Opposition from family members, especially spouses, and health concerns about the adverse effects of contraceptive methods have also fuelled resistance to family planning. Additionally, studies have shown that women fear the health risks linked to intrauterine devices (IUDs) and other forms of contraception, such as pills. For instance, in Pakistan and Kenya, both men and women perceive IUDs as foreign objects that could harm a woman's body (Coutinho, E. M. (2002)

7.3.1 Family and procreation in Malabar Mappilas

The Qur'an and hadiths, which document the words and actions of the Prophet Muhammad and his companions, emphasize that Muslims have a duty to populate and care for the earth, necessitating the growth of the human population. As such, one of the primary goals of marriage, according to the Qur'an, is to have children. However, it also highlights two other crucial purposes: enjoying companionship with one's spouse and avoiding immoral behavior.

"*Oh, people! Remember your obligation to Allah, who created you from a single soul, its mate, and from them both spread many men and women*." (Qur'an 4:1)

Hadiths also support this view:

"*Marry loving and fertile women, for I will boast of your great numbers before the other nations on the Day of Resurrection*." (Abu Dawud 21 1754)

For the Malabar Mappilas, Islam is seen as a compassionate religion that does not demand more than people can bear. They believe in managing fertility to ensure birth spacing if it affects the well-being of the mother or child or the parents' ability to care for their children.

"*Allah does not burden a soul beyond that it can bear." (Qur'an* 2:286)

Many Muslim scholars and religious leaders support this stance, arguing that controlling fertility is permissible to avoid the negative impacts of having too many children. These impacts include health risks for the mother and children, financial strain on the father, or the parents' inability to raise their children according to religious and social standards. This position statement has the endorsement of Maulana Abdul Kalam Azad, the Chairman of the Masjid Council for Community Advancement (MACCA) and one of the most renowned and well-known Islamic scholars in Bangladesh.

7.3.2 Birth spacing in Malabar Mappilas

During the fieldwork, practitioners and beneficiaries of Malabar Mappilas addresses the topic of birth spacing in relation to family planning. It is crucial to highlight the distinction between restricting the number of births and spacing them out; the latter is forbidden in Malabar Mappilas as it is forbidden in Islam. It is forbidden to restrict the number of births by promoting small families or enacting laws that restrict couples to having one or two children since these actions go against Islamic reproduction precepts. Crucially, gnostic personalities of the community have reached an agreement based on a Qur'anic passage that expressly stipulates the need to maintain a certain space between children. It is recommended that mothers nurse their children for two years, after which she should not get pregnant. This is in line with the poem that follows.

And we have commanded man to obey his parents in a decent and dutiful manner. He was born into a frail and difficult world, and it will take him two years to wean himself. (Qur'an 31:14)
Religious personalities of the community have reached an agreement, saying that the mother needs an additional year to heal. Therefore, 36 months is the recommended birth spacing in Malabar Mappilas. It is interesting that the World Health Organisation gives the same recommendation, stating that in order to lower the risk of unfavourable outcomes for mothers, pregnancies, and infants, it is advised to wait at least 24 months following a live delivery before trying another pregnancy (WHO,2010).

However, opinions on the kinds of birth control that are permissible in Islam differ somewhat. Most Islamic experts believe that a method of contraception known as *azal* (coitus interruptus), which was used during the time of the Prophet Muhammad, is acceptable. Due to the fact that this form of family planning is permitted by Islam, Malabar Mappilas too employ it. All scientific (modern) forms of contraception that attempt to provide the same effect as *azal*, including injections, the pill, condoms, and IUDs, are recognised by the community as legitimate .However, it is noteworthy to note that they maintain the belief that nothing can prevent Allah from creating a soul and therefore *azal*, nursing, and all other forms of contraception listed above are not entirely dependable. Excerpt from the interview with a member of *thangal* community has been given below.

"*We used to perform coitus interruptus, like the Companions of the Prophet did. There is a story in Qur'an where the Prophet responded to the inquiry of his followers when he asked about the legitimacy of using this method; this doesn't mean we are against modern contraceptives, discussions about the legitimacy of the new types are under discussion"*

Therefore, family planning is neither a novel concept in Islam, nor is it a Western scheme. Hence, Malabar Mappilas defines family planning precisely and offers guidance on when and how it is acceptable. Even though there are several ways to understand these lessons, many Malabar Mappilas like many other Muslim communities have historically framed their population plans around them. As a result, among Malabar Mappilas, "family planning" refers to more than just using contraception or making plans to avoid getting pregnant. However, it also covered the methods in which richer fertility may be achieved for them. As a result, Malabar Mappilas ethnomedicine has a history of developing strategies to treat infertility and increase reproduction. For Malabar Mappilas, this has been a crucial component of their reproductive health care. The majority of the "care techniques" included in the Malabar Mappilas supplements assist the recipients in meeting their pregnancy due dates. The Malabar Mappila's tradition of treating infertility, improving fertility will be covered in this section.

7.4 Improving fertility

In most parts of world, the usage of herbal treatments has been crucial and sometimes survival necessity for millennia in promoting their health, wellbeing, and overall management of disease. Herbs are used in traditional medicine to cure various diseases. Recent years have seen

a sharp rise in the demand for herbal treatment worldwide (Ifeoma and Oluwakanyinsol, 2013). In the Arabian Peninsula, traditional medicine is extensively practiced and has been utilised to treat illnesses that are particularly relevant to women, such menopause symptoms and premenstrual syndrome (PMS) (Hardy, 2000). P. The historical trading links shared by Malabar Mappilas with Arabic peninsulas have played a key role in adapting these herbal treatments to their geographical location. There are special safety notion when it comes to pregnant Malabar Mappilas women using herbal medicines. Other narratives also criticise the herbal components themselves on the basis of safety issues (Tamuno et al., 2010). However, Herbal treatments are frequently marketed as natural and secure. Pregnant ladies who are frequently worried about the welfare of their unborn child are drawn to these assertions. Malabar Mappilas attempted to adhere to traditional communal medicine, which has roots in Islam and Arabian culture, despite their scepticism of "English medicine," which they frequently associate with Christianity.

Forty pregnant women from the Malabar Mappila community provided their responses for the semi-structured interview. Eighty percent of them belonged to the 20–40 age range. It was discovered that 25% of them have enhanced their fertility using traditional herbal remedies. Thirty-two percent of them had sought medical advice before utilising these traditional herbal remedies. Among the 40 women, 19 of them were multigravidas and 90% of them (after childbirth) utilised traditional herbal remedies, with 47% preferring to consult the healer on the ingredients in these concoctions. While 7% of the female respondents spent more than 500 INR, the bulk of the respondents spent no more than 100 INR on these herbals. There were participants who acknowledged that they received free of cost services from the '*thangal* community'. However, the services of *Ossan* people are mostly cash oriented as because for most of them healing is also a profession. 85% of respondents said they were generally satisfied (good) with the services they received. The sources, methods of administration, and anticipated outcomes of these pregnant women's use of the herbal concoctions that the researchers gathered from the Malabar practitioners were explored. The primary herbal concoctions were noted.

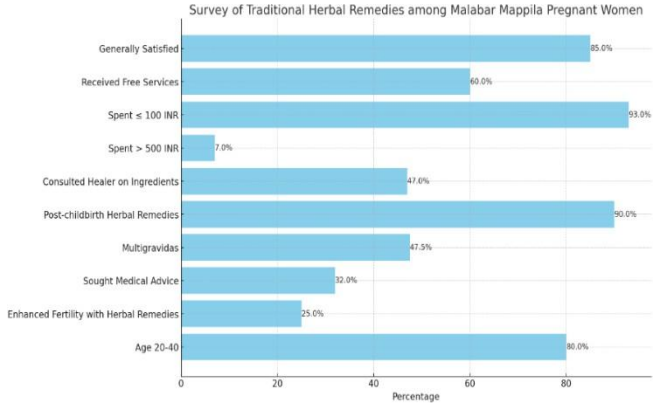


Figure 15: survey results

7.4.1 Herbal suppositories

Herbal suppositories are a traditional method used by the Malabar Mappila culture to facilitate pregnancy and improve reproductive health. Traditional healers, particularly the *Ossan* subgroup of the Malabar Mappilas, painstakingly construct these suppositories using their extensive knowledge of local plants and their therapeutic virtues, which has been passed down through the decades. Over the course of three months, the treatment plan calls for inserting these suppositories throughout the first three days of the menstrual cycle. It is thought that this precise time would maximise the healing benefits of the herbs by harmonising with the body's inherent cycles. Women are encouraged to wear thick clothing to stay warm in addition to using suppositories. This is primarily because of the belief that it is better to improve blood circulation and in facilitating the absorption of compounds.

These herbal suppositories used by Malabar Mappilas are primarily intended to cleanse the uterus; clearing it of any debris or obstructions that can prevent from conceiving. This procedure of cleaning is thought to be essential for establishing the healthy conditions for a fertilised egg to implant and grow. The major goal of the treatment is to improve the chances of getting pregnant by attempting to sure the uterine lining is strong and responsive. This practice of Malabar Mappilas demonstrates a holistic approach to health that incorporates physical, environmental, and occasionally spiritual factors as we discussed in previous chapter Malabar Mappila's treatments had a spiritual side as it refer to Qura'anic mostly. It also emphasises the community's dependence on traditional treatment. Typically, practitioners of *Thangal* recommend using herbal suppositories, and they recommend the "known *ossans*" who are very skilled in preparing these herbs.

- *Almtbokha*

Traditional reproductive health therapeutic methods are strongly ingrained in cultural and historical settings in the Malabar Mappila group, of which *Almtbokha* is a notable example. *Almtbokha* is a herbal concoction made by Malabar Mappila traditional healers, who have a wealth of information passed down through the years regarding indigenous herbs and their therapeutic qualities. This herbal mixture, which reflects the community's holistic approach to women's health, is especially recommended for usage throughout the menstrual cycle. During menstruation, the herbs are combined with sugar and warm water to make a tasty solution that

is administered that way. *Almtbokha's* major goal is uterine cleansing, which is said to be essential for preserving uterine health and boosting conception.

The herbal mixture is thought to improve the uterine environment for the implantation of a fertilised egg, thereby raising the likelihood of pregnancy, by eliminating contaminants and any obstructions. This custom highlight the value that the Malabar Mappila community has on reproductive health, since they consider maintaining the uterus cleanliness and health to be essential to a healthy pregnancy. The community's extensive knowledge of reproductive health and reliance on traditional medicine are demonstrated by the usage of *Almtbokha*. In addition to producing the herbal mixes and offering advice on how to utilise them properly, traditional healers are essential to this procedure. Such activities are becoming more commonplace in daily life, which is indicative of a larger societal focus on organic and holistic health remedies

- *Almardoud*

A traditional healer from the *Ossan* sub-community, renowned for their expertise in health practices, provides the herbal concoction known as *Almardoud* as part of the Malabar Mappila community's postpartum care regimen. This remedy is advised to be consumed on the tenth day following labor, mixed with either milk or a cup of water. The timing is chosen to align with the body's natural healing processes, ensuring maximum benefit. The milk not only makes the mixture more palatable but also adds nutritional value. *Almardoud's* prime facie purpose is to cleanse the uterus after childbirth, abandoning impurities and residual matter that could cause health issues if left unaddressed. This cleansing procedure helps restore the uterus to a healthy state, preparing whole body for future pregnancies and creating a favourable environment for conception. The practice showcases the community's reliance on traditional medicine and their holistic approach to health, with traditional healers playing a crucial role during the ‘vulnerable’ postpartum period. Understanding and documenting such practices highlights their potential benefits and contributions to contemporary healthcare, particularly in supporting women's health and enhancing fertility.

- Powder combo 1 (*onnampodi*)

Traditional healers are highly respected in the Malabar Mappila community, especially within the *Ossan* sub-group, due to their extensive knowledge and proficiency with medicinal plants.

A specific powder mixture that they offer is one such treatment for PCOS, or polycystic ovarian syndrome. The treatment for these type of health problems, which is marked by an imbalance in the body hormones and the development of ovarian cysts, is one of the comprehensive strategies ingrained in cultural customs of Malabar Mappilas. Crafted carefully by popular healers of *ossan* community, the powder blend mixes with certain herbs recognised for their therapeutic qualities to support hormone balance and lessen the symptoms PCOS. This medicine, which is taken one teaspoon in room temperature milk on the second day of the menstrual cycle, is intended to control the menstrual cycle, decrease the appearance of ovarian cysts, and reduce and heal the symptoms of acne and excessive hair growth. This method which is Malabar Mappila's customary in nature highlights the cultural relevance of holistic health practices that have been passed down through the generations; in addition to reflecting the community's reliance on natural treatment. Through comprehending and recording these customs, it may be possible to combine this conventional medical knowledge with cutting-edge therapeutic approaches, providing all-encompassing assistance for the female reproductive health, especially with intricate disorders like PCOS.

- *smoke- inhale (Pugakollal)*

A traditional herbal concoction called " smoke - inhale " is supplied for postpartum care by a healer from the Malabar Mappila group. The way to use this cure is to expose it to the smoke that is produced when the herbs are burned. The Malabar Mappila community's belief that the medicinal and fragrant qualities of the smoke contain properties which will help to successfully heal the inflammation that frequently follows delivery. Using organic medicines to treat various postpartum issues, this traditional practice exemplifies the community's holistic approach to health as like we discussed in the previous chapter.

Through the use of geographically available herb’s therapeutic qualities, traditional healers significantly contribute to women's reproduction and overall health during the delicate postpartum phase. Recording, and comprehending these customary methods is imperative not merely for safeguarding the cultural legacy of Malabar Mappilas but also for investigating their possible remedial advantages in contemporary settings.

- Powder combo- II (*randaampodi*)

specifically designed to enhance ovarian health, the traditional healer from the Malabar Mappila community will provide a powdered combination known as Powder Combo II. This remedy which is widely in practice of Malabar Mappilas consists of two distinct powder mixtures, each prescribed for different phases of the menstrual cycle. During the first three days of menstruation, one powder mixture is used, while from the fourth day until the end of the cycle, the second mixture is administered. The primary objective of Powder Combination II is twofold: firstly, to cleanse the uterus by removing blood clots that may hinder conception, and secondly, to strengthen the ovaries. During menstrual cycle, this is structured to coincide with the physiological changes and hormonal fluctuations happened in the body. This approach reflects the Malabar Mappila's holistic comprehension of reproductive health, where the timing and composition of community remedies are tailored to optimize their therapeutic results.
The use of such traditional remedies delineates the Malabar Mappila community's adherence on natural healing practices and the specialized knowledge of traditional healers. By addressing ovarian issues, uterine cleansing and ovarian strengthening, Powder Combination II aims to create a favourable condition for conception and overall reproductive health.

Oral herbal supplements that were provided by a traditional healer are known as (*Vaymarunn*) herbal tablets for pregnant women. The recommended course of action was to take them twice daily for a week, and then one tablet every day until they were pregnant. Male and female patients were both prescribed them. It is anticipated that this will result in conception. They were intended to boost ovulation in females and semen fluid production in males to promote fertility. Other than these prescribed remedies from the healers, Malabar Mappila women also tried certain medicinal plants which they have historical knowledge on its fertility capacity. Such home remedies were documented below. Unlike the above mentioned one, these herbal remedies are prepared and made from home by the women or her relatives itself. but certain remedies were only used during menstruation period as it contains abortifacient elements.
The Vitex agnus-castu shrub, commonly known as the Monk's pepper in Malabar, is a highly valued therapeutic remedy in Arabian countries. The Malabar Mappilas attempted to include it into their reproductive healthcare due to the curative virtues stated in the Quran. The unsuitable topographical conditions of Malabar for cultivating certain plant, seeds are often imported from the Middle East. this is typically associated with *Thangal* families, who are directly linked to Saudi Arabia; in most of these situations, the seeds were presented to the community members as presents and tokens of 'love' and *'zakat'*. When someone has dystocia, they utilise this seed. it also helps to facilitate labor . It is said that boiled seeds and cumin seeds can decrease

postpartum haemorrhage, but soaking seeds might induce more menstruation. The seed prevents lactation and has dopaminergic and FSH-suppressive properties. According to research conducted in Saudi Arabia, the seed helps with PMS symptoms by suppressing the production of prolactin (Brendler et al., 2000). Its formulations are used in Malabar to treat mastodynia, low milk supply, premenstrual problems, irregular menstrual cycles, and menstrual abnormalities caused by corpus luteum insufficiency. Treatments for impotence, prostatitis, spermatorrhoea, sexual neurasthenia, testicular swelling, sterility, uterine discomfort, amenorrhoea and ovarian swelling are among its other applications.

Menstruation can be induced by consumption of Juniperus communis (*chooorachedi* in local language). *chooorachedi* is widely used among Malabar Mappilas to tighten their uterus. The Qur'an mentions Juniperus's therapeutic qualities and using it internally to control menstruation and ease discomfort during the periods. Myrrh (Murr Makhi in local language) is said to stimulate the uterus and improve blood flow. It is applicable to the management of dysmenorrhea. Additionally, abdominal tumours and amenorrhoea are treated with it. Because myrrh stimulates the uterus and can result in an abortion, it should not be taken when pregnant. similar perspective of the Myrrh can also see in Quran where the verses strictly prohibit the use of Myrrh during pregnancy (Brendler et al., 2000). Another home remedy is the Nigella sativa seeds, or black cumin. The therapeutic importance of this seed has already discussed in the previous chapters.it has to be taken orally once a day by combining a half-teaspoonful with two-thirds cup of water. The therapy of dysmenorrhea is the anticipated outcome. Because black seed oil causes abortions, using it while pregnant ought to be forbidden.

The results of the infertility treatments of Malabar Mappilas showed that a total of 7 plants from 7 families used for the treatment of infertility in females, meanwhile 9 plants from 7 families used for the treatment of infertility in males shown in the table 15 & 16. Infusions and decoctions were the most frequently used methods of preparation for treatment of infertility in females as presented. Meanwhile, decoctions, juices and infusions were the most frequently used methods of preparation for treatment of infertility in males . Flowers, leaves, and seeds were reported to be the most frequently used parts of plants for the treatment of infertility in females. This was followed by fruits and rhizomes. Correspondingly, seeds and leaves were reported to be the most frequent parts used of plants in the treatment of infertility in males. This was followed by fruits, flowers, and bulbs. The utilization of herbals in the treatment of various physiological disorders and diseases goes back to several generation. For huge numbers of childless people, infertility disease considered a personal social and psychological problem, which equitably distributed between males and females. Hence, in the history of Malabar,

herbal remedies are considered one of the most available methods in the treatment of this disorder. Various isolated natural compounds or crude plants extracts are widely used in the treatment of infertility in males such as low sperm accounts, sexual asthenia, erectile dysfunction, the absence of libido and other psychological and physiological disorders. However, for the diagnosis of the actual cause of the infertility, Malabar Mappilas tend to rely on modern diagnosis technique; usually, the couple first goes to a *thangal* member and based on his suggestion diagnose the actual medical problem by using any medical institution. Once the cause of infertility is diagnosed the practitioners provide guidelines of infertility treatment in their community medicine

Usually, the selection of herbs and remedies by these practitioners is based on their experience and information that have been inherited from their ancestors, as like we already discussed in the introductory chapter. The results may be of scientific value and good credibility in some way, since these informants may be struggling to find the best results in order to maintain their clients. Beneficiaries acknowledged that these plants-based treatments were reported to be effective in the treatment of infertility. However, there are different plants species were used to treat infertility in females and males.

Table 15; infertility treatments for men in Malabar Mappilas community

Family	**Scientific name**	**Local name**	**Mode of preparation**	**Part used**	**Mode of consumption**
Cucurbitaceae	Luffa cylindrica	Peechinga	approximately 5 millilitres of fruit juice twice a day for two weeks.	Fruit	juice
Myristicaceae	Myristica fragrans Houtt.	Jaadhikka	a cup of goat milk and two drops of seed oil has to be consumed;(Before sexual intercourse)	seed	oil
Brassicaceae	Lepidium sativum L	Aaashali	500 ml of water and 100 g of seeds are boiled for 15 minutes. One hundred millilitres of this concoction should be taken orally once day.	seed	Decoction
Zingiberaceae	Zingiber officinale Roscoe	enji	50 g of honey should be combined with 75 g of roasted	Rhizomes	paste

			rhizomes. The patient should take a teaspoon of this paste one hour before to having sex.		
Cucurbitaceae	Cucurbita pepo	Mathanga	concoction made by boiling 100 g of crushed seeds in 350 ml of water (Take one daily sip of the concotion).	seed	decoction
Anacardiaceae	Anacardium occidentale	andiparipp	For six hours, steep 50 grammes of the ground seeds in 100 millilitres of water. This infusion should be consumed three times a day in an amount of around 20 ml.	seed	infusion
Brassicaceae	Raphanus raphanistrum	Vella-sheemamullanghi	Equal parts of honey and crushed fruit should be combined. should feed one spoonful of this paste.	fruit	paste
Amaryllidaceae	Allium cepa	vallyulli	5 ml of apple vinegar is combined with 20 ml of onion juice. A dose of this combination should be consumed each day in the morning; preferrable early	bulb	juice
Arecaceae	Phoenix dactylifera	karakka	2 Dates mixed with one 1 g of honey . This paste to be given 2 h before each sexual intercourse	Fruit	paste

Table 16; infertility treatments for women in Malabar Mappilas community

Family	Scientific name	Local name	Mode of preparation	Part used	Mode of consumption
Arecaceae	Phoenix dactylifera	karakka	After boiling two date fruits in around 50 millilitres of water, combine the resulting mixture with the same amounts of honey and olive oil. This	Fruit	Decoction

			combination should be taken once a day in the early morning.		
Euphorbiaceae	Ricinus communis	Aaavanakk	One Castor seed steeped overnight in 200 millilitres of water. The resulting infusion was used as a vaginal douche before to sexual activity.	seed	infusion
Lamiaceae	Rosmarinus officinalis L	Rosemaryila	For 10 minutes, bring 500 ml of water to a boil with around 50 g of leaves. Use 100 millilitres of this concoction as a vaginal douche before to each sex.	leaves	Decoction
Pedaliaceae	Sesamum indicum	ellu	Once daily, a handful of seeds should be consumed.	seed	powder
Iridaceae	Crocus sativus L.	kumkumapoo	For ten minutes, boil two grammes of the blossoms in a cup of milk. Uses 50 millilitres of this infusion as a daily oral dose during menstruating	flower	Decoction
Rosaceae	Prunus mahaleb	punyava	100 ml of goat milk is mixed with 50 g of the seeds . soak it for 3 hours and consume it after meal .	seed	infusion

Myrtaceae	Syzygium aromaticum (L.) Merr. & L.M.Perry	Karampoo	For 12 hours, soak one gramme of the buds in 100 millilitres of boiling water. Before engaging in sexual activity, the generated infusion should be utilised as a vaginal douche.	Flower buds	Infusion

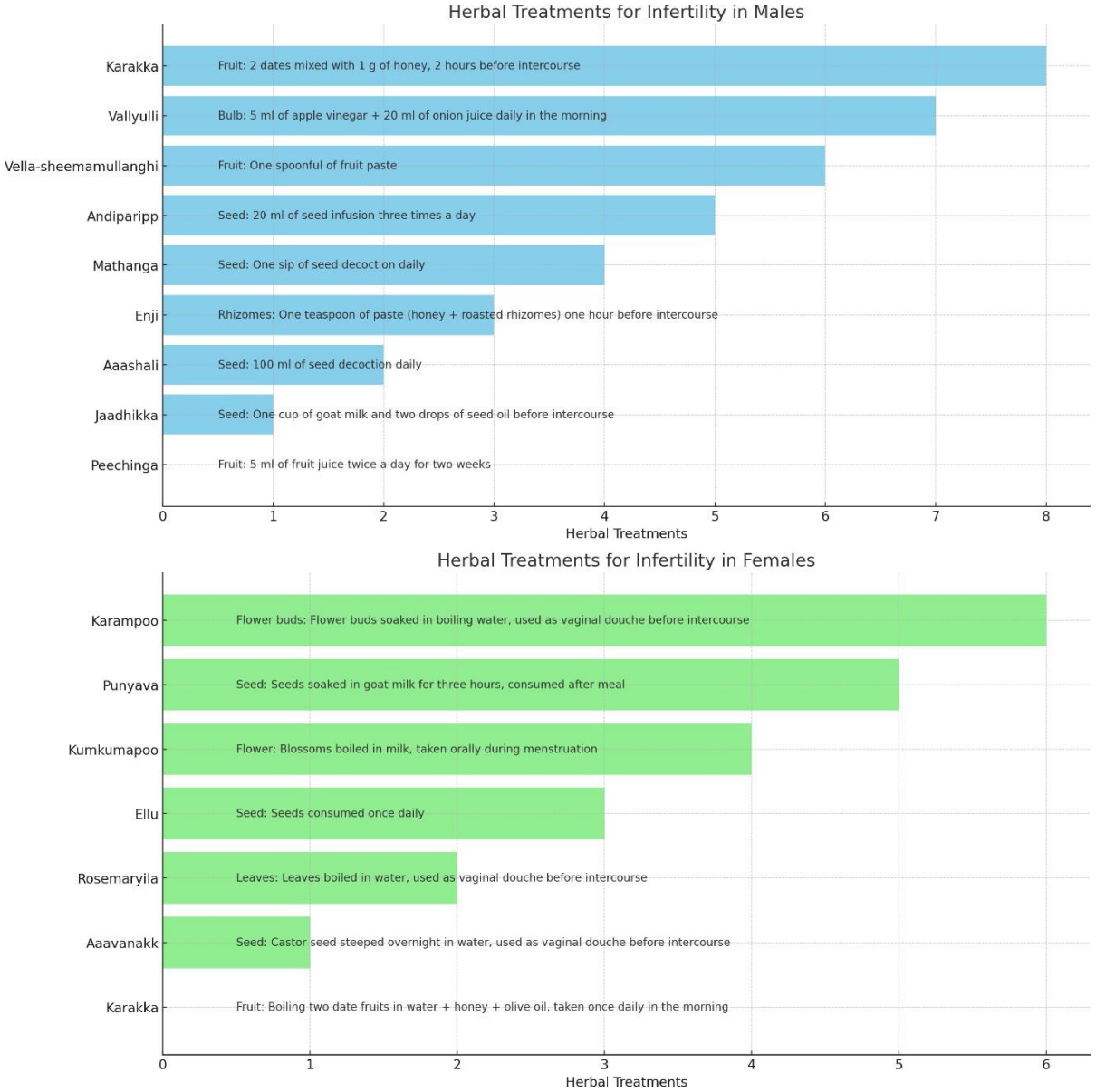


Figure 16; arrangement of herbal treatments of infertility among Malabar Mappilas based on first preferences

The chart presents a detailed overview of the herbal treatments used by Malabar Mappilas for addressing infertility, arranged by preference from most to least favoured. The ranking has given after the discussion with the practitioners of Malabar Mappilas. For male infertility, the most preferred treatment involves the use of dates. This treatment consists of consuming 2 dates mixed with 1 gram of honey, taken 2 hours before intercourse. This combination is believed to enhance fertility and is the top choice among the available remedies. Following dates, other preferred treatments include onion , which involves a mixture of 5 ml of apple vinegar and 20 ml of onion juice taken daily in the morning, and radish , where one spoonful of fruit paste is consumed. The list continues with various seeds, fruits, and infusions, each with specific preparation and consumption instructions, illustrating the diversity and specificity of these traditional practices.

According to the chart, clove is the leading treatment for female infertility. In the treatment of this ailment, women are advised to douche their vaginas with flower buds soaked in boiling water. It is a common belief that this act can enhance fertility. Other important treatments include *Punyava* where seeds are soaked in goat milk for three hours and taken after meals, and saffron which involves boiling the blossoms in milk and drinking them during periods. The use of various parts of plants such as seeds, flowers, and leaves highlight holistic strategies in enhancing fertility.

The chart generally shows that Malabar Mappilas have extensive knowledge on herbal medicine. It is evident from the preferences on treatments that they understand well the medicinal properties of different plants and natural substances. This traditional wisdom remains relevant up to date in how they approach health and wellness especially when it comes to matters regarding infertility. Through the detailed categorization as well as preference ranking, we learn about Malabar Mappila's cultural practices concerning herbal treatments for infertility.

7.5 Malabar Mappila Community's Traditional Medicine For Gynaecological Issues In Women

This section deals with forty-five plant species grouped into 29 categories of which ten out of many are enumerated below based on gynaecological disorders. The findings included components of trees: the barks, the leaves, and seeds; while in the searches for herb species, all parts of the plants were of interest. Since the therapies encompass offering of *zakat*, which is expected to take both the form of food and or money, they do not pose any side effects in the

treatment process; the other is recitation of prayers, mainly from the Qur'an. Sometimes the plants by themselves are used or they are sought in combination with other plants. The preparation methods involved, and the administration of the regimes are rather easy and suitable. The study reveals that for Malabar Mappila healers practices they took time to discover the details of the ethno-medicinal plants and their parts and how they could be used. Thus, only oral tradition can pass such information for generations to the generations. But as for the fact that some of the cures were noted, only a small proportion of the practitioners affirmed this, and it was mentioned that it is advisable to record them in a notebook in *Arabimalayalm*. What is peculiar is that few families which are *thangals* and some *ossans* are aware about gynaecology; while *thangals* are involved in handling spiritual compositions, *ossans* are into preparing medicines but also acting as care givers. Moreover, ideas are also there that the medication will not be effective the way it is until these specialists 'touch it' manually. And, in most situations, their diagnosis depends on the complaints of patients, the results of their current diagnostic check-ups and the experience they have gained in relation to other ailments affecting human beings. There are four types of procedures used to prepare herbal medicine: rubbing them on the affected part as a paste, squeezing juice from various parts of the plant, boiling the plant parts in water and combining it with other liquids, and bounding different parts of the plant.

FAMILY	**SCIENTIFIC NAME**	**LOCAL NAME**	**GYNEOACOLOGICAL PROBLEMS**	**MODE OF CONSUMPTION**	**THE PART USED**
Fabaceae	Indigofera tinctoria	neelayamari	amenorrhoea	Plant powder is combined with buttermilk for oral consumption.	Full plant
Menispermaceae	Cissampelospareira	vattavalli	dysmenorrhoea	Plant roots are ground into a paste by mixing equal parts 'clove and kalajira. For five days in a row, a pea-sized pill made from the paste is taken at night following a bath.	root
Apocynaceae	Catharanthusroseus	nithyakalyani	leucorrhoeas	Five millilitres of leaf juice combined with honey are administered once daily in the	leaf

				morning for a duration of seven days.	
Asteraceae	Ecliptaprostrata	kayyonni	dysmenorrhoea	Plants and apricot are crushed in a 2:1 ratio , and the resulting extract is taken twice daily for a month.	Full plant
Malvaceae	Sidarhombifolia	Aanakurunthotti	leucorrhoeas	For 21 days, a tea spoonful of root paste combined with milk is given twice a day to treat leucorrhea.	Full plant
Liliaceae	Aloe barbadensis.	Aloevera	amenorrhoea	Leaf gel, which is smooth, is consumed as such.	leaf
Liliaceae	Smilax zeylanica	karilanji	leucorrhoeas	Once the menstrual flow has finished, an oral decoction is prepared with water.	root
Lauraceae	Cinnamomumtamala	Vazhana	dysmenorrhoea	Both the plant's and Cassia senna's leaves are consumed in equal amounts and cooked in water. For three days, one cup of this concoction is administered twice a day.	leaf
Arecaceae	CocosnuciferaL	thenge	leucorrhoeas	Carnel is consumed as a paste made from goat milk.The immature bud is consumed orally.	Fibre and fruit
Anacardiaceae	Anacardiumoccidentale	Kashuvandi	Gonorrhoea	Deink made from the pulp of the fruit is consumed daily	fruit
Musaceae	Musa paradisiaca	vazhapindi	menorrhagia	For a month, consume one cup of stem juice twice a day.	stem
Caesalpiniaceae	Bauhinia malabarica	Aarampuli	leucorrhoeas	The decoction of stem and root bark was combined with a 3:1 ratio of black pepper paste	bark

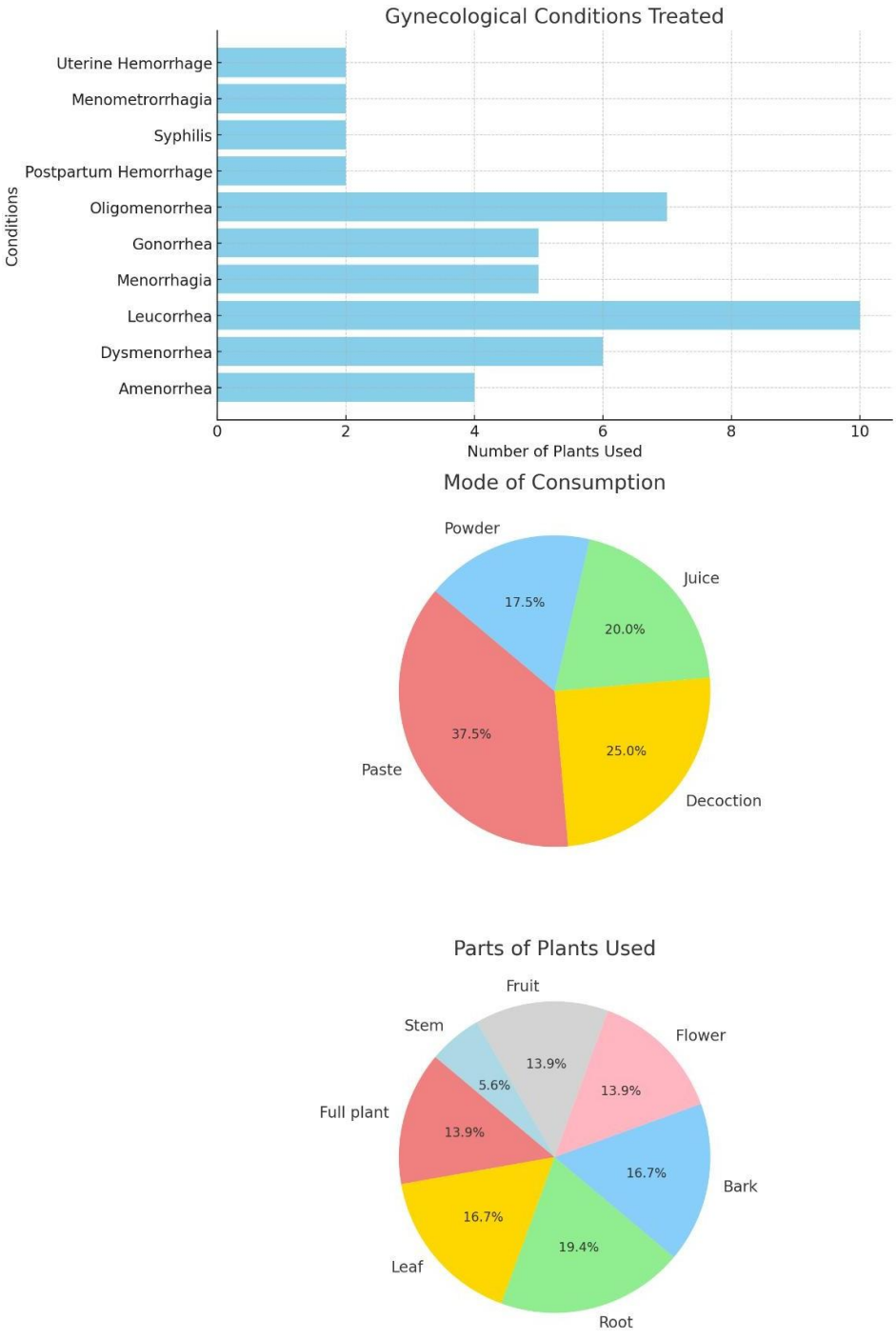
Fabaceae	Mucunaprurie ns	naykornna	leucorrhoeas	A tablet made from cooked powdered seeds combined with cow milk, sugar, honey	seed
Zingiberac eae	Curcuma longa	manjal	Syphilis	Paste of flower and rhizome used	Rhizome , flower
Magnoliac eae	Micheliacham paca	chambakam	oligomenorrhoea	Stem bark powder for 15 days mixed with water has to be given.	Stem's bark
Mimosace ae	Acacia leucophloea	vellavelm	dysmenorrhoea	Twice a week, one takes powdered bark juice and fresh leaves.	Bark and leaves
Fabaceae	Pterocarpus marsupium	venga	leucorrhoeas	One tea spoonful of bark paste combined with honey	Bark
Rubiaceae	Ixoracoccinea L	chethi	Gonorrhoea	crushed Flowers added to honey	flower
Malvaceae	Hibiscus rosa-sinensis	Chembaruthi	menorrhagia	goat's milk is used to boil and condense fresh flowers. taken for three days, once a day.	flower
Bignoniac eae	Oroxylumindi cum	palakappaya ni	menorrhagia	It is recommended to decoct 2 millilitres of stem bark with 1 gramme of common salt thrice a day for a month.	Stem/bar k
Liliaceae	Drimiaindica	narivenkaya m	dysmenorrhoea	A paste is created by combining one-sixth of a plant bulb with an equivalent amount of Allium sativum bulb.	bulb
Caesalpini aceae	Tamarindusind ica	puli	amenorrhoea	It is mixed with cow's milk/ goat's milk	rootbark
Fabaceae	Clitoriaternate aL	Shankupush pam	leucorrhoeas	Taken in the morning, one tea spoonful of black pepper root paste mixed with water	root

Amaranthaceae	Amaranthusspinosus	mullancheera	leucorrhoeas	Fresh root juice (one teaspoonful), slightly warmed, is administered twice a day.	Stem and root
	WedeliachinensisMerr	manjakannunni	uterine haemorrhage	21 days, in 5 ml of decoction has been consumed in empty stomach	Full plant
Apiaceae	Centellaasiatica	muthil	oligomenorrhoea	In empty stomach, Leaf juice mixed with water	leaf
Moraceae	Ficusbenghalensis	pearal	menorrhagia	To consume, various plant components are ground into a powder and combined with milk.	Full plant
Caesalpiniaceae	Cassia fistula	kanikonna	oligomenorrhoea	Stem bark powder /paste mixed with pepper powder is given for 7 days	Stem's bark
Caricaceae	Carica papaya	karmoosa	amenorrhoea	After being peeled, unripe fruit are sliced and fried with green chilli, onion, pulverised coconut Carnel, and enough salt. consumed with rice.	fruit
Fabaceae	Sesbania grandiflora	akathi	dysmenorrhoea	Twice a day, two teaspoons of the flower juice are consumed.	flower
Caesalpiniaceae	Cassia occidentalis	Uulan thagara	menorrhagia	Different plant components are ground into a powder and added to milk for oral consumption.	Full plant
Aristolochiaceae	Aristolochiaindica	eeshwaramooli	oligomenorrhoea	The mixture is applied on empty stomach that made by using root powder and water	root
Arecaceae	Cocosnucifera	thengu	menorrhagia	Carnel is consumed as a paste made with cow's milk. The	Fibre an fruit

				immature bud is consumed orally.	
Moringaceae	MoringaoleiferaLa	Morinja	oligomenorrhoea	Warm milk of goat is mixed with root and bark consumed for 15 days	Root/bark
Rutaceae	Aegle marmelos	koovalam	menorrhagia	Fresh leaves are crushed and made into a paste. One teaspoon of the paste is combined with a cup of warm water, and it is consumed once a day in the morning on an empty stomach for seven days.	leaves
Mimosaceae	Mimosa pudicaL	thottavadi	postpartum haemorrhage	Leaf paste is made and give to women	leaf
Scrophulariaceae	ScoparіadulcisL	Kallurukki	Gonorrhoea	Fresh plant extract is used daily morning	Full plant
Arecaceae	Areca catechu	kavung	Syphilis	Nut powder mix with pepper a consumed weekly once	nut
Sapindaceae	Cardiospermumhelicacabum L	Uzhinja	oligomenorrhoea	Consume leaf juice	leaf
Moringaceae	Moringaoleifera	morinja	Gonorrhoea	Mix root and bark with warm cow milk	Root, bark
Nymphaeac eae	Nymphaea rubra	thaamara	menometrorrhagia	Pill is made with mixing honey and the flower powder, consume for 5 days	flower
Solanaceae	Solanumindicum	manithakkali	postpartum haemorrhage	The fruit is converted into paste and consume every night	fruit
Acanthacea e	JusticiagendarussaBu	Vaadhamkolli	menometrorrhagia	Juice of the leaves freshly done has to be consumed in 3 teaspoons daily	leaf
Lamiacae	Ocimumgratissimum	Kattthulasi	Gonorrhoea	Full juice of plant is consumed	Full plant
Solanaceae	Solanumindicum	manithakkali	uterine haemorrhage	The fruit is converted into paste and consume every night	fruit

Table 17 : Traditional medicine for gynecological issues in women among MMC

Figure 17: graphical representation traditional healing medicines in women's gynaecological condition



Based on the study, it has been found that some of the combinations that incorporated the use of several plant parts were also made with the use of multiple preparation methods. While most of the species manage related but different diseases, further species manage individual issues. Sometimes one part of such plants may be used for treatment and at other times, several parts are used. Medication is taken in its solid form or with other contents like water, milk (goat or cow), honey, or Manufacturer oftentimes creates medicines with a specific colour, shape, form, and size, and they do not exist singly but are compounded with other ingredients such as water, milk (goat or cow), honey, or black pepper. When undertaking the field work, it was observed that medication was taken

in the morning on an empty stomach and an estimated 70% of the patients undergoing medication for some ailment had to take a course of therapy of at least five days to a maximum of thirty days. Portions were given in milliliters or teaspoon among others, but it depended of the patient and a lots of other factors including age and heath. Consequently, the healers, in general, purchase many market resources both imported as well as locally available instead of cultivating the therapeutic plants. Besides gynaecological disorders, these plant species were used in traditional medicine with reference to syphilis, gonorrhoea, impotence, and problems associated with coital practices before and after parturition. However, the key concern of this study is to present the comprehensive account of the medicinal plants used in the Malabar Mappila's traditional healing method. This information may be used in future to determine the presence of various active phytochemicals and pharmacological compounds which may be used to develop strong medications. Consolidated diagrammatic representation of the plant details has given besides in charts.

7.6 Reproductive care and problem in men

Various plants that have been utilised to care men's reproductive health in Malabar are compiled in the table below

FAMILY	SCIENTIFC NAME	LOCAL NAME	TREATED FOR	MODE OF CONSUMPTION	USED PART
Asparagaceae	Asparagus racemosus	Shathavari	Aphrodisiac	decoction	root
Menispermaceae	Tinospora cordifolia	chittamruth	Contraception	decoction	stem
Cucurbitaceae	Bryonia laciniosa	aiviralikova	Aphrodisiac	Juice extract	seed
Solanaceae	Solanum lycopersicum	thakkali	Reproductive cancer	sause	fruit
Asparagaceae	Chlorophytum borivilianum	musli	Aphrodisiac	juice extract	root
convolvulaceae	Argyeria speciosa	samudhrapacha	Aphrodisiac	Juice extract	Root, leaves,flower
Caricaceae	Carica papaya	karmoosa	Contraception	Juice extract	Seed, bark
Vitaceae	Vitis vinifera	mundhiri	Reproductive cancer	Juice extract	seed

Table 18: plants that have been utilised to care/treat men's reproductive health

In Malabar, Mappilas treated male reproductive health and wellbeing through using a variety of herbs found in its geography. They have been mostly used to enhance sexual performance, raise testosterone levels, and stimulate virility. There are various studies across world that address the use of herbal remedies as a contraceptive, to improve sexual desire, and to cure sexual diseases. Some of the well-known herbal remedies, particularly in China, are gossypol, which is extracted from the roots, seeds, and leaves of the cotton plant and is used as a contraceptive because it property to stop spermatogenic growth at low doses, and ginseng, which raises sex hormones and functions as a stimulant or aphrodisiac (Coutinho, 2002). Herbal remedies for reproductive health, are therefore regarded as a safe and cheap, and efficient substitute for pharmaceutical medications. Even though there is a lack of clinical and safety evidence, many are using these herbs just because of its 'community justification' since they are believers of a common religion. The practitioners further assert that.

"*Reproductive illness and healing are a matter of God; even if we use all these products, the desired result may not come; consistency is important; if everything comes to pass at some point, miracles occur; from my experience, I have seen many miracles*"

The conversation the researcher had with the pregnant woman in the mosque during their initial Friday visits corresponds with the experience notes provided by the Malabar Mappila practitioner.

"For the past 7 years, my spouse and I have been trying for a child. All treatments have been attempted, apart from the one our community provided. This is a result of the fact that my husband's family prioritised English medicine. But when I attempted our community treatment on my own, it was unsuccessful. Nevertheless, my spouse and I started the procedure together with faith, and we have since received the outcome. I recall Thangalpaappa stating reproductive care is a couple treatment."

Taking account of all these, adequate clinical evidence is desperately needed to back up claims and comprehend the molecular and cellular processes at play.

7.7 Dietary therapy during pregnancy

7.7.1 Food taboos

Food taboos and prohibitions among Malabar Mappilas caused many women to shun some meals while allowing the intake of others. Malabar Mappila women indicated that yellow and orange fruits and vegetables were not recommended since it was thought that if a baby ate them, they may get jaundice, which is a yellowing of the skin and eyes. While eating a lot of white food is appreciable, it was previously believed that this might affect an infant's complexion. The theory of signatures, which connects the colour yellow to possible impacts on skin pigmentation, may be connected to this notion.

The primary fear for restricting certain types of fruits during period of pregnancy included the fear of miscarriage and abortion as because Islamic law see abortion as a sin. However, it is allowed to do when it comes to affect the life of the mother. For example, as like in most of the parts of India, the consumption of "hot food" like papaya could lead to miscarriage.

Malabar Mappila practitioners also reported that there is a belief that avoiding ice and chilli during the period of pregnancy. this is because it could prevent the skin of baby having rashes, dark marks or burns or blisters before birth, diarrhoea in the pregnant women, and red spot on the back area of baby. The intake of commercial and packed juice, sweets in market, sugarcane was also considered taboo during pregnancy period as it could result in a drooling baby with a great deal of saliva and cause eczema. It is also believed to cause metabolic disease and increased risk of atopic asthma in baby.

There is a tendency for chewing ice has been reported by *ossan* women healers especially while the pregnant women visit for services. Rather than counting it as a pregnancy craving, the healers of Malabar consider it as a sign of iron deficiency and prescribe having dark green leafy vegetable along with some herbal medicines. Alcohol consumption is always a taboo in Malabar Mappilas, not only for women but also for men; hence there is no meaning in discussing about alcohol consumption during pregnancy.

7.7.2 Foods to compulsorily add during pregnancy

Unlike the neighbouring state (Tamil Nadu) belief on 'leafy vegetable' as a cold food and avoid its consumption during pregnancy, Malabar Mappilas of Kerala consider it as a necessary food which will help to get rid of iron deficiency in pregnancy. Iron deficiency will affect the body and brain of baby. Another important food item to be added in the diet is fruits except the

orangish colour fruits like papaya, orange, and peach. Including fruits will help to improve the appetite of mother and enhance baby's skin, also improves digestion.

Another food item is 'liver', especially of young mutton. However, it is also not advised to consume mature mutton liver as well as the liver of beef, chicken etc. Mutton liver is believed to increase and clean the impurities of blood. It enhances the volume of blood in the body and helps to foetal growth by improving immune system of the mother. Even though there is a WHO statement on abandoning liver consumption during pregnancy and substituting the quoted benefits of liver consumption through 'plant origin' which contain provitamins like carotenes, Malabar Mappilas adhere to mutton liver consumption. But they have indifferent attitude towards consumption of liver of other animals as because they believe it to be harmful. Fish is also highly appreciable during pregnancy especially sardine, however bloodless seafoods like prawns, crab, squid etc are not allowed during the period as because they believe it contains allergic elements that is harmful for baby and mother. The consumption of fish is believed to be provide minerals for the baby especially vitamin D, there is a local assumption that having more fish (mackerel and sardine) will helps for normal delivery as it makes women capable of delivering a baby like a fish swimming in water. An interesting assumption researcher found regarding this statement is the '*pusalan'* subgroup of Malabar Mappilas who consume more fish in their diet are mostly delivering baby through 'natural birth', not C-section. A statement from the pregnant women interviewed is given below

"*My mom frightened me by saying if you didn't have enough sardine, it will affect baby and may lead to a c-section. What you eat helps in delivering the baby normally*"

There is a widespread assumption that c-section is not a natural birth, and it actually considered as an effect of what the mother had or what the mother done during her pregnancy period. Out of the fear of getting 'large cut' on stomach, women of Malabar Mappilas try to adhere to all the dietary therapeutic practices whether it is liked or disliked for her pregnancy tastebuds.

7.7.3 Foods to compulsorily add after pregnancy

Malabar Mappila women is expected to have a full mutton within the 40 days of giving birth. each part of the mutton has to be consumed in an interval manner like if she had it on 1st day, she should have it on 3rd day, then 7th day and so on. It is advised to follow this sequence as it believed to provide the actual benefits. Also, if the women delivered baby in monsoon, then

she should also take the '*kozhimarunn'* which s a seasonal medicine therapy mandatory for men of Malabar Mappilas to consume in monsoon times. *Kozhimarunn* as like we discussed in previous chapters is made with domesticated chicken adding herbs provided by women of '*ossan'* subgroup of Malabar Mappilas. She is also advised to consume the juice of chicken bone, which in local term known as '*majja'* as because the domesticated chicken will be less in flesh but high in calcium. For this, 1 year old chicken which is domesticated in the women's house is used. It is not advised to buy the chicken from the market, instead asked to domesticate the chicken with all the protein it needed; by providing homely food.

soft foods like potatoes, banana and porridge foods like jeera porridge, rice porridge, and wheat porridge are advised to consume during post pregnancy period for enhancing milk quality and its production. While most of the vegetables are advised to consume after pregnancy, it must be consumed only in the form of '*thoran'* which is a course comes under a typical salad sautéed in coconut oil with mustards and garlics. among them 2 tablespoon of beetroot is advised to consume daily in whatever form – curry, *thoran* or salad. since it is read in colour, it is believed to help the loss of blood happened due to pregnancy. Likewise, tomatoes are also advised to consume in the form of salad, as because of its red colour and inside seeds which symbolise 'fertility'. Having tomatoes is believed to nurture women's body for next pregnancy. Similar 'fertility' narration is there regarding grapes as well. Taking tomatoes and beetroot for first 25 days is mandatory for every woman and any disturbance on this diet must be substitute by having two pomegranate a day.

Another interesting finding is that post pregnancy period acknowledges the consumption of pomelo even though some of it is 'orangish' in colour. One of the notions for consuming pomelo is the breast health concerns and the smooth function of mammary gland. Olives are also advised to intake after pregnancy, especially if the mom delivered baby through vagina. Olives are believed to strengthen the ovaries and regain normalcy if anything abnormal has happened. If the mom delivered baby through C-section, she is advised to take foods that contains more legumes. When it comes to egg, it is too advised to consume the egg of '*girirajan kozhi'*, a type of hen. This is because the eggs of '*girirraja kozhi'* contains 2 egg yolks and consuming it symbolise the egg's ability to provide nutrients for 2 persons: baby and the mother. Consumption of mutton brain' is also advised to have an intelligent baby

When it comes to beverages, women are advised to take '*kaava'* a typical Islamic drink usually serves in funeral rites of Malabar. But the difference is in adding milk to this drink where the '*kaava'* in funeral is served without milk. Hence the pregnancy period *kaava* is known as

‘*paalkaava’*. consumption of coffee is strictly prohibited in Malabar Mappila women as it believed it will affect the sleep cycle of the baby and mother. Whenever the parents approach healers of Malabar related to baby crying in night and sleepless issues, mother is advised to not take any caffeine products, as because they believe it will make the milk caffeinated leading to effect baby’s cycle of sleep.

7.8 Beliefs associated with pregnancy

The observance of traditional practices during pregnancy among Malabar Mappila women is motivated by several key objectives. These include predicting the sex of the foetus, ensuring the child's health and physical attractiveness, facilitating a comfortable and uncomplicated pregnancy, and preparing the expectant mother for a successful delivery. Practices intended to provide protection against the evil eye reflect the desire for a problem-free pregnancy. The Malayalam word for the evil eye is “*kanneru*.” ‘*Nazr’* the Turkish word of evil eye It is of Arabic origin, and means to take a look, or a glance; however, it is frequently used to refer to a glance of ill will. Certain individuals are believed to have the power to cause harm to others or damage their belongings, willingly or unwittingly, when they gaze at them with envy, excess pride, or even admiration. In this society, women try to protect themselves from such evil looks with various chanting, wearing a charms, putting black mark on some visible body parts of the child, wearing amulets with prayers inside, and carrying various minerals, glass, stones, or seeds and grains, such as black sesame seeds. In the study, Malabar Mappila community’s *thangal* subgroup distribute this traditional protective white bead imported from Mecca and most of the pregnant women (90%) interviewed wore an amulet, 10 % carried barley or lentils, and everyone, except 2 prayed to keep the evil eye away. After delivering the baby, the women also included beads in the baby’s dress to avoid ‘evil eye’.

Since, the sex detection of baby is illegal in India, Malabar Mappila’s have their own way of understanding the sex of the baby. The physical appearance of the pregnant woman, the foods she craves, and her behaviour are at times used to predict the gender of the child. pregnant women with peaked bellies would have a boy and rounded bellies meant a baby girl. Cravings for sour food were also associated with a girl and a desire to eat sweets with a boy. In addition, pregnant woman who is thought to get prettier during pregnancy is believed to be carrying a boy, while if the expectant mother is thought to become less attractive, the child will be a girl;

this is because mother is giving her beauty to the daughter. Also, if the foetus moves to the right in her mother's womb it is female, and if it moves to the left, it is male.

Another important event and belief is '*nalpuli'* of women; a ritual bath known as '*nifaas'* which has to be taken after childbirth. As because a women expected to bleed 40 days after pregnancy, the ritual bath has to be taken the very next day after the bleeding stops. At this time fasting which is a *sunnath* in Malabar Mappila's religion as well as a mandatory one in Ramdan month can be forbidden in women who is experiencing puerperium. However, the ritual of bath for c-section mothers are different and it is known as '*majnoon'*. The *majnoon* bath is the one which should take by the person who have gone to unconsciousness and regain his/her senses after a while. This is a common type of bath ritual for anyone who had experienced this stage. However, after pregnancy through c-section it is also advised to take this *majnoon* bath. Usually, both types will be employed if the women has underwent a c-section.

findings concerning traditional rituals and practices of Malabar Mappilas observed at the time of delivery are seen as harmless and aimed at helping women to concentrate on the delivery, ease their pain, and encourage belief in a smooth delivery. For example, the musical therapy of Malabar Mappilas where the expecting mothers are advised to hear *qura'anic* verses which have certain rhythms that will help to ease the pain by releasing dopamine and oxytocin in the body. Hearing the music not only helps mother, but also the infant by signalling the peaceful atmosphere awaiting him/her outside.

These are harmless customs such as mothers believing that if they eat fruit, their children will be intelligent and attractive; giving the pregnant woman anything she wants to eat (apart from forbidden foods); walking to facilitate a natural delivery; focusing on the birth by praying to God; and giving the pregnant woman a back massage. While there are no indications of dangerous behaviours, it is advised that innocuous, acceptable, or even potentially helpful activities that are seen during pregnancy, delivery, and the postoperative period be recognised as an important part of cultural heritage and encouraged.

7.9 Chronic illness – breast cancer / cervical cancer /penile cancer

TYPE OF CANCER	RITUAL PRACTICE	FOOD TABOO
Breast cancer	Herbal Baths: Mix turmeric holy basil, and ashwagandha in boiling water to bathe in once a week.	Avoiding High-Fat Foods: consumption of healthy fats like nuts, seeds, and fish. Reduce

	Steam Therapy: Breathe in steam with turmeric green tea leaves, and ginger for 10-15 minutes each week. Fumigation: Light frankincense, sandalwood, and holy basil then breathe in the smoke for a short time.	Alcohol: Limit or avoid alcohol consumption.
Cervical cancer	Herbal Baths: Combine neem leaves, aloe vera, and holy basil in boiling water to bathe in once a week. Steam Therapy: Breathe in steam containing neem leaves, aloe vera, and holy basil for 10-15 minutes each week. Fumigation: Light myrrh neem leaves, and holy basil then breathe in the smoke for a short time.	Avoid Spicy and Oily Foods: These foods are believed to create an imbalance. No Smoking: Strictly avoid smoking
Penile cancer	Herbal Baths: Blend ashwagandha, garlic, and turmeric in boiling water to bathe in once a week. Steam Therapy: Breathe in steam containing ashwagandha, garlic, and turmeric for 10-15 minutes each week. Fumigation: Light frankincense, ginger, and ashwagandha then breathe in the smoke for a short time.	Avoid Excessive Sugar: Limit high sugar intake. Limiting Processed Meats: Because of its potential cancer links.
General practice	Fasting and prayer : As like Ramdan month, Skip meals and drinks from sunrise to sunset on certain days, with a focus on purifying one's own spirit and mending the soul. The Community Healing Sessions: Shared ceremonies featuring drum-playing, singing, and group meditation guided by a Malabar Mappila healer or other gnostic personalities	Avoiding Processed Foods: Focus on whole foods and natural foods. reducing consumption of Red Meat: minimize dairy Products: limiting dairy intake to prevent hormone-related cancers.

Table; 19 Ritual practice associated with breast/cervical/penile cancer of Malabar Mappila Community

TYPE OF CANCER	HERB	MODE OF CONSUMPTION	ACTIVE INGREDIENT
Breast Cancer	**Turmeric (Curcuma longa)**	Turmeric Tea: Heat 1 teaspoon of turmeric powder in 3 cups of water for 8 minutes. consume the mix twice a day. advised Supplement: consuming 500-1000 mg curcumin extract per day	Curcumin
	Green Tea (Camellia sinensis)	green Tea: Let 1 tsp green tea leaves kept in hot water for 3-5 mins. consume 2-3 cups each day.	Epigallocatechin gallate (EGCG)
	Flaxseed (Linum usitatissimum)	Ground Flaxseed: Mix 1-2 tbsp ground flaxseed into smoothies, yogurt, or salads	lignans
Cervical Cancer	**Aloe Vera (Aloe barbadensis miller)**	Aloe Vera Juice: Gulp down 1/4 cup aloe vera juice before eating anything else.	Polysaccharides, Aloin
	Neem (Azadirachta indica)	Neem Tea: Heat 5-10 neem leaves in water for 10 mins. Pour through a strainer and drink once a day.	Nimbin, Nimbidin
	Holy Basil (Ocimum sanctum)	holy Basil Tea: keep 1 tsp of dried holy basil leaves in hot water for 7-10	Eugenol, Ursolic acid

		mins. consume 2 cups daily.	
Penile cancer	Ashwagandha (Withania somnifera)	Ashwagandha Powder: Mix 1 tsp ashwagandha powder in a glass of warm milk or water and drink daily before bedtime.	Withanolides
	Garlic (Allium sativum)	Raw Garlic: Consume 1-2 cloves of raw garlic daily.	Allicin
	Ginger (Zingiber officinale)	Ginger Tea: Boil 1-2 inches of fresh ginger root in water for 10 mins. Strain and drink 2-3 cups daily.	Gingerol

Table; 20 herb based practice associated with breast/cervical/penile cancer of Malabar Mappila Community

Diverse traditional practices of reproductive health characteristic of Malabar Mappilas are the focus of this chapter including the rich diversity exhibited in their conception, fertility and barrenness. The chapter is built upon a foundation that emphasizes indigenous systems to manage fertility and infertility. In terms of reproductive care, the community`s perspective underscores reliance on local beliefs and practices as enshrined within their culture. Many dimensions relating to reproductive health are considered in this chapter. Men's circumcision, paternal health, women's menstruations pregnancy and menopause are some examples given here. Moreover, it is evident from this analysis that these practices amount to more than mere medical interventions: they are integral components of identity for the society. The inclination towards "from home therapies" during gestation time signifies much dependence on ancestral treatment methodologies. This shows reliance on local knowledge and importance of family support. Similarly, it reveals how these activities have changed with time though they persist up until today. Traditional methods of managing chronic diseases form a significant aspect in the health care system among people living in Malabar. These accounts by interviewees confirm commitment to preserving these methods despite all odds

8. CHAPTER – VI

Theoretical Analysis of the Study

8.1 Rethinking the Hierarchy of Resort: A Cyclical and Stratified Model in the Malabar Mappila Context

This study offers a revisit of Hierarchy of Resort, a theory originally put forth by Lola Romanucci Schwartz in an attempt to explain the sequence in which patients in plural medical systems perform their health care choices. Conventional explanations treat the theory as inherently linear, whereby individuals are supposed to progressively work up from the least accessible and familiar options--such as home remedies--to indigenous or local healers, and then on to religious or spiritual interventions, with biomedical care ultimately being in itself the final and most authoritative resort. There is an assumption for escalation depending on the severity of the perceived illness and non-performance of the healing by the techniques earlier chosen, thus making it a rationalized step-wise pattern of decision-making in health-seeking behaviours.

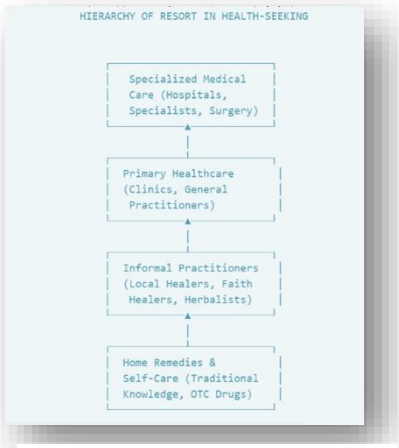


Figure 18 depicts the hierarchy of resort framework, Ross 1969

Yet, the wisdom of the Malabar Mappila people seriously complicates this picture. The community's health-seeking behavior defies neat, linear progression but instead shows a cyclical, fluid, and largely recursive pattern of resort, in which transition between multiple systems of medicine is ongoing, contextually dependent, and socially negotiated. Instead of considering biomedical care to be the end point, most in the Mappila community are involved in an active interplay of systems of healing, moving between traditional medicine, religious healing procedures, and biomedicine not only dependent upon the illness type, but also driven by cultural

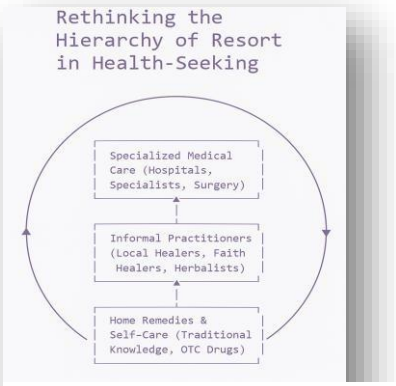


Figure 19 :the hierarchy of resort in the context of Malabar Mappilas

assumptions, social counsel, family experience, and the moral assessment of the results of treatment

Here, the concept of a counter-acculturative sequence stands out: the community's return to indigenous and religious healing practices after some engagement with biomedicine. This is not simply a retreat to fallback options. Here, the community affirms its loyalty to their nativist identity and culture while healing. Such a healthcare choice illustrates defiance against biomedicine's superiority, especially if the systems are deemed cold, foreign, or lacking in spiritual value. Therefore, for the Mappilas, health seeking is a more holistic approach that incorporates the need to belong socially and culturally. Additionally, the hierarchy of resort within the Mappila framework is not socially neutral. It is stratified, with access to specific therapies, types of healers and specific forms of knowledge arguably mediated by caste and class hierarchies in the community. Some healing roles, particularly those associated with specialized knowledge of herbs, rituals or prophetic medicine (Tibb-e-Nabawi), are affiliated to specific castes and social positioning, shaping both the availability of care and which healers are deemed legitimate over others. So, the stratification reaffirms that healing in the Mappila context is not simply a cultural practice, but again an activity that is socially hierarchical in nature, involving a complex negotiation of power, status and knowledge.

Another unique feature of the Mappila healing system is its openness to therapeutic pluralism. Mappila people are clearly invested in traditional and religious forms of healing, and at the same time, there is an openness to implementations of biomedicine particularly related to severe or fatal illnesses. Although Mappila people use biomedicine, from sociocultural perspectives, each person tends to remain skeptical about biomedicine in a way that continually evaluates its judgment against communal experiences, ethical judgments, and spiritual contexts. Ultimately, the point of skepticism is not to reject biomedicine but to keep an evaluative distance away from it where it cannot supersede local epistemologies or practices.

Together, the Malabar Mappila hierarchy of resort illustrates an intricate, negotiated, stratified process of health-seeking that resists reductionist, linear explanation. It represents an intended negotiation among the demands of cultural heritage, religious duty, social stratification, and perceived effectiveness of treatment modalities. This dynamic interaction does not only maintain conventional medical practices but also actively enlarges the community's therapeutic repertoire, providing a rich example to understand how marginalized or culturally different

communities cope with their health within plural medical regimes. Such understanding is important not only to debates in academia concerning medical pluralism but also to feed into inclusive policies for health that honor and incorporate diverse healing traditions without destroying their cultural basis.

8.2 The SDH Framework and Malabar Mappilas

The Social Determinants of Health (SDH) and Health Inequities framework developed by the World Health Organization (WHO) provides a normalized model for interpreting the complex relationships between health, culture, governance, and marginality in the area of Malabar Mappila traditional medicine. Specifically, the SDH framework conceptualizes health not just as something that is achieved through individual behaviour or biomedical treatments, but more holistically, as a product of large, interconnected social, economic, political, and cultural structures. The framework notes that inequities in health and well-being emerge from structure. Structures include complex governance processes, macroeconomic structures, social norms, and social goods, such as schools and education, income and resources, housing, and access to healthcare. Using this framework, we can examine the Malabar Mappila group - which is an important Muslim population in historic North Kerala - and how, through tradition, a marginal number of Mappilas could utilize traditional health practices, moving forward with research in India as complementary health practitioners, while traditional health practitioners, as labelled, were systematically marginalised and forced into marginal roles through the strict classifications in the AYUSH title of and as surrounded by bureaucratized institution.

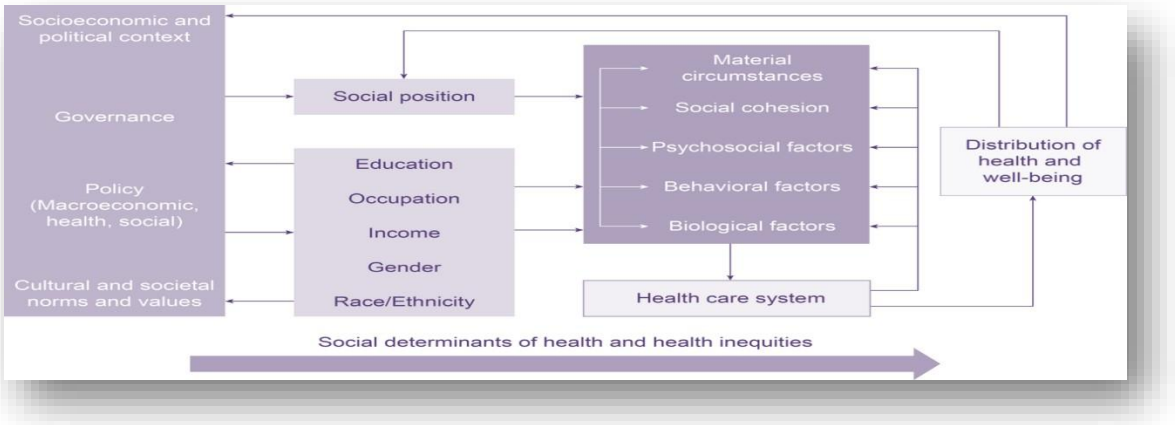


Figure 20 : The Social Determinants of Health (SDH) and Health Inequities framework

[*The Social Determinants of Health (SDH) and Health Inequities framework was primarily developed by the World Health Organization (WHO) through its Commission on Social*

Determinants of Health (CSDH) in 2005, led by Sir Michael Marmot. Wilkinson & Marmot (1998) were known for early work on social determinants and health inequalities, [WHO, 2008]]

8.2.1 Socioeconomic Ranks, Cultural Place and Exclusion in Policy Design

The framework presents a clear map of socioeconomic ranks including caste, religion, ethnicity, gender, and financial status that represents a social position that legitimately influences health outcomes as well as the legitimacy of traditional healing practices. The Mappila community has a long Islamic heritage and historically has connections through trade with Arabs (See Kunhimohammed, 2009). In developing a meaningful healing system, the Mappila community brought together Unani, Ayurveda, Tibb-e-Nabawi (Prophetic medicine), and herbalism from local environments. Traditional healers within each of these practices have been excluded from recognition in the institutional space because their practices do not meet the textual criteria that the Ministry of AYUSH insisted upon for legitimacy. Many Mappila healers are elderly men and women, spiritual practitioners, or community elders, that lack credentials. Their knowledge, albeit pervasive and trusted by community members, and usually easier to access, has been invalidated in favor of informal or unscientific knowledge. People who occupy such traditional healers have become temporarily exemplified marginalization and exclusion which directly contributes to health inequities, as social and political positions do not only contribute to how people access health services but also directly deny entire healing systems accountability to epistemic legitimacy.

8.2.2 Intermediary Determinants and Cultural Health Practices

As previously established, the social determinants of health framework strives for a structural approach that includes intermediary determinants of health, such as material circumstances, psychosocial stressors, health behaviours, and biological determinants. For the Mappila community, culturally specific psychosocial and spiritual health practices included the use of herbal remedies, Qur'anic recitation, talismans, protective diet practices, postpartum rituals, and healing for spirit affliction and jinn possession. Cultural practices like these are not simply "alternative" forms of health care but comprise the community's culturally specific ways of understanding well-being and ill-health. The lack of infrastructure, acknowledgment, and support for these health practices poses potential health vulnerabilities if health-seeking behaviour is conditional, particularly in areas like reproductive health, the mental health of women, chronic illness, and geriatric health. Concurrently, the erosion of intergenerational

knowledge through urbanization, loss of oral traditions, and the stigmatization of spiritual knowledge exacerbates health vulnerabilities and even erodes environmentally sustainable local health-care systems.

8.2.3 The health system as gatekeeper of legitimisation

Healthcare systems themselves are important in the SDH model in the mediation of health inequities. In India, the biomedical sector claims to be the dominant curative pathway for illness, while AYUSH is part of a competing and supported pathway. Malabar Mappila healing practices fall outside the boundary of both, not because they can't treat or can't be considered legitimate, but because they fall outside dominant regimes of authentication, knowledge production, and normalization. The denial of state integration has engendered a condition of double marginalization, including denial of resources and supports for Mappila practitioners, and the denial of culturally salient healthcare pathways for their communities. Being excluded from state supports ensures that these practices remain invisible and uninvest gated or unevolved through science. In the health system, invisible practices such as Mappila healer training and actual care can exist outside of the accountability of equity and pluralism and only be used as a mechanism of either reproducing health inequalities, or worse, erasing minoritized knowledges.

8.2.4 Distribution of Health and the Need for Epistemic Justice

The WHO framework ultimately signals to the "distribution of health and well-being" as a quantifiable result of the interconnecting determinants. In the case of the Malabar Mappilas, this distribution is downright lopsided. Although Kerala's public health indicators give a general impression of being excellent, communities like the Mappilas are induced by epistemic exclusion, spatial inequality, and have cultural dissonance when they try to access the health care sector. Most of them rely on their traditional healers but at the same time, they are still obligated to use the formal health system that doesn't recognize their needs and is not even compatible with their cultural expectations. Consequently, there arises a very important issue of the models of health equity that not only recognize biological but also epistemological diversity should be developed without further delay. In harmony with the SDH, Mappila traditional knowledge can be safeguarded in public health planning, and at the same time, its cultural essence should not be lost. This, of course, is a very important first step not only toward "health justice" but also toward the opening of the new roads of the documentation led by the

community, the protection of the intellectual property, and the ethical bioprospecting that will not be the mere exploitation but rather the sharing of the indigenous knowledge systems.

8.2.5 The SDH framework as a vehicle for reimagination

To conclude, the SDH and Health Inequities framework is a diagnostic tool for investigating the marginalization of Malabar Mappila traditional medicine, but also offers a forceful platform for imagining inclusive, pluralistic, culturally based health systems. This framework allows the study at hand to move from the ethnographic description and into structural critique, regarding traditional healing in the context of broader economic, political and cultural determinants that help to dismantle the conventional epidemiological and other policy frameworks to make health a more sophisticated concept that transcends a pure biomedical understanding that centres on faith, community, tradition, and local ecology within socio-cultural contexts. This framework supports the notion that health is not simply a clinical condition, but rather a socio-cultural experience based on access, recognition, dignity, and belonging; and that the Malabar Mappila healing system is a living, malleable system, not a relic from the past that needs to be boxed, and should have prominence in health considers and clinical practice today.

9. CHAPTER-VII

Pathways to Mainstreaming Traditional Medicine of Malabar Mappilas

The traditional health system of the Malabar Mappila Muslims of Kerala is a living heritage consisting of faith-based, plant-based, and ritualistic modes of treatment. They are stigmatised despite being used, and trusted by, the community. This chapter also considers potential roadways for the integration of Mappila traditional medicine into the health systems of Kerala as a whole. It could also provide a framework to be considered as a parallel part of the AYUSH and Traditional systems of medicine. It is based on ethnographic material, healing stories, community responses, and policy feedback. Mainstreaming in this sense does not mean a homogenization process in a biomedical context, but rather a process of establishing a parallel institutional legitimacy and recognition, and coexistence within a pluralistic health care system. It is proposed to be a complementary system to the existing systems of health care.

9.1 Echoes from the field: hope, trust, and future

9.1.1 Positive echoes

Culturally Resonant Care

Community members frequently used, to describe these healers, terms such as: honest, reliable, approachable, and empathetic, consulted for many types of physical, emotional, and spiritual problems. Contrary to the common public hospitals or private clinics, Mappila healers were felt to be accessible and non-judgmental. Local healers were preferred by many patients particularly for reproductive and fertility issues, spiritual afflictions and chronic pain because they had confidentiality and diagnosed using culturally familiar terminology.

Pluralistic Collaboration, not Assimilation

One of the main concerns raised by community members and healers alike was that mainstreaming could lead to indigenous ontologies being eventually erased and assimilated into the biomedical paradigm. Rather, they promoted coexistence models that allow for reciprocal referrals based on respect. Some proposed setting up "healing clinics" with clearly defined boundaries and areas of practice where physicians and traditional healers could collaborate. Others advocated for the creation of state-funded archives of traditional knowledge

protected by community intellectual property rights. One important realization is that mainstreaming cannot be one-way, requiring traditional systems to change without causing biomedicine's understanding of knowledge, evidence, and care to change in return.

9.1.2 Negative echoes

Challenges of Certification, Safety, and Regulation

In spite of community trust, a glaringly serious concern brought up several times by biomedicine practitioners was lack of record keeping, quantification of doses and records of treatment by the traditional healers. This creates problems in terms of safety, accountability, and collaboration. Their knowledge is frequently considered sacred and transmitted orally under tutelage and, than such an obscurity in the transmission and the formulation of the knowledge, it has become difficult to bring them to discourse with public health systems. For example, field observation indicated that although practitioners were well informed about local herbs, which largely overlapped with Unani and Ayurveda, they seldom recorded the proportions, contraindications or variations in batches. Some practitioners were hesitant, wary that if systematized, the act of healing would become adulterated, 'secularized' and not work, thereby reducing its spiritual potency. According to a women healer in her 50s;

"*People come to me when they can't find peace elsewhere. They say I listen without judging. I don't just give them medicine; I give them hope and dua. But now they ask if I have a certificate. For the inheritance our grandmothers left us, who will give us a certificate? If the government wants to work with us, they should sit alongside us, not above us. There is nothing against doctors. Some women wind up in the hospital following my treatment. We should respect each other's approaches and work together. But don't take what we know, call it your own, and then forget us."*

9.2 Recommendations for Long-Term Mainstreaming

The following routes are recommended for the long-term mainstreaming of Mappila traditional medicine based on field data and policy review:

Identification and Enrolment

The first step in establishing Mappila healers' legitimacy in public health systems is to formally recognize them. The strict frameworks employed in formalized systems like Ayurveda or Unani, which frequently call for institutional degrees or Sanskritized curricula, should not be

mirrored by this recognition, though. Rather, a community-sensitive, adaptable registration model should be created, perhaps via district AYUSH cells or Panchayats. This would make it possible for healers who have learned through apprenticeship, oral traditions, and life experience to be officially recognized. While maintaining their autonomy and distinctive epistemologies, such registration can provide them with formal collaboration opportunities, legal protection, and assistance in medical emergencies.

Projects Involving Participatory Documentation/ Digitalisation

One of the primary reasons why policymakers and biomedical professionals find it difficult to interact with traditional systems is the lack of written records. Participatory documentation initiatives should be started in cooperation with local universities, ethnobotanists, and anthropologists to address this. Herbariums, case books, treatment plans, and histories of healing lineages are a few examples of these projects. Crucially, the community itself must take the lead in this documentation to guarantee that indigenous intellectual property rights are respected throughout the process. Informed consent and benefit-sharing agreements must be in place to protect against biopiracy and unauthorized commercial exploitation of sacred knowledge.

Instruction and Ethical Standards

Collaboratively creating customized training programs is preferable to imposing traditional healers into biomedical education systems. These modules may cover topics such as basic documentation procedures, standardizing dosages, managing common communicable diseases, identifying warning signs that necessitate referral, and hygiene practices. Dialogue-based workshops can address ethical issues such as protecting patient confidentiality, providing gender-sensitive care, and avoiding harmful practices. This kind of training helps allay safety worries without sacrificing the core principles of Mappila healing, which frequently combines herbal remedies with spiritual rites.

Clinics for Integrated Health

One of the most promising mainstreaming strategies is the establishment of integrated health clinics. Traditional healers can collaborate with physicians and AYUSH practitioners in these clinics, either on their own or through referral networks. For instance, a patient seeking infertility treatment might see a traditional healer who offers dietary and spiritual interventions in addition to a biomedical physician. These clinics should strive for collaboration with distinct

ethical and professional boundaries rather than assimilation. With the addition of Mappila healing systems, these models—which are already in place in some areas under "pluralistic healthcare" frameworks—can be modified to fit the Keralan context.

Units for Research and Testing

It is possible to validate traditional formulations for wider use and prevent the erasure of local knowledge by establishing community-supported research and testing laboratories. In addition to investigating possible innovations, these labs can test the toxicity, effectiveness, and interactions of commonly used plants. To guarantee that their objectives—like safeguarding spiritual dimensions or keeping secret formulas safe—are honored, it is crucial that the research agenda be co-developed with healer communities. In order to promote an inclusive research environment, these research hubs could be located within Ayurvedic or Unani colleges that have specialized units devoted to Mappila medicine.

Cultural and Spiritual Protections

Mappila medicine is ingrained in local culture, ritual life, and Islamic spiritual cosmology, making it more than just a clinical practice. The non-material components of healing, such as ritual bathing, amulets (taweez), and Qur'anic recitations, must be respected in any mainstreaming initiatives. Standardization should not lead to secularization that strips these practices of their spiritual efficacy. Multiple epistemologies must be accommodated by policies, which must recognize that evidence-based public health objectives and spiritual belief systems can coexist. Sufi leaders and religious scholars (ulama), who frequently direct these therapeutic techniques, should collaborate.

Platforms for Policy Dialogue

For any mainstreaming initiative to truly survive, those needs to be built on a foundation of robust communication; It's essential to have reserved seats for the Mappila healer representatives. this ensures their represenation in key institutional frameworks, like district-level advisory councils or state-level plural medicine committees. These platforms can foster trust, provide valuable policy feedback, and help resolve conflicts. Unfortunately, the lack of these official channels has resulted in exclusion and a growing sense of mistrust. By encouraging open dialogue, Kerala's health policy can transform into one that is genuinely inclusive and reflects the diverse health-seeking experiences of its citizens.

Ensuring inclusive representation

integrating Mappila traditional medicine into the mainstream requires the representation to be inclusive and participatory, particularly regarding gender and language. Mappila healers rely on indigenous terms from Malayalam and local dialects to diagnose patients and evaluate their health. Any efforts to bring this practice into the mainstream should respect and preserve this linguistic heritage instead of pushing for biomedical or Sanskritized terminology. It's also vital to ensure the involvement of women healers, who often play key roles in reproductive health and domestic healing but tend to be overlooked in formal recognition and policy discussions. To maintain gender equity and cultural authenticity, historically marginalized groups, particularly non-male, non-Sanskritic, and non-institutional actors, must be given a voice when mainstreaming into public health systems.

9.3 Efforts towards Codification

Although very important first steps, documentation and digital archiving are but the beginning; the long-term goal is the codification of Mappila healing knowledge. By codification is meant a process whereby oral, ritual, and experiential modes of healing practices are systematically translated into written and validated frameworks without loss of cultural essence. This is very essential for the purpose of recognition by formal systems like AYUSH, safety reviews, and inter-system collaboration. The AYUSH department and research councils in Kerala could undertake pilot projects on preparation of pharmacopeias and therapeutic manuals that address the Mappila materia medica, terms of diagnosis, and ways of healing. But codification must be community-oriented and respectful of cultural wisdom so that while it does standardize, local variations and spiritual aspects of such therapies are not lost. A balanced strategy in which codification enhances

Figure 21: Framework for Mainstreaming Mappila Traditional Medicine

legitimacy but maintains secrecy and sacredness can therefore position Mappila medicine as a unique but complementary system within India's plural health scenario.

10. CONCLUSION

This thesis represents both documentation and advocacy to change the narrative for traditional medicine in public health. This thesis argues for a decolonized, interdisciplinary, and community-oriented vision of healthcare, one that is attentive to the pluralistic realities of health-seeking behaviours and the importance of cultural heritage as experienced by each individual, in the public interest, and the progress of science as it relates to humanity. The key findings were

- **Traditional medicine as a dynamic cultural system**

  This study shows the traditional healing practices of the Malabar Mappilas are dynamic systems in comparison to biomedicine. The dynamic aspect of traditional healing practices (cultural, religious, geographical, and historical influences) are preserved and passed on through generations, but are tempered by historical trade routes, coastal ecology, culture ties to the Middle East, and pre-colonial indigenous influences.

- **Hierarchy of resort in a cyclical model**

  The Malabar Mappila community demonstrated a hierarchical resort model that is cyclical rather than the classical, linear Hierarchy of Resort model first proposed by Romanucci-Ross (1977). Although processes were not strictly linear and could not be isolated from one another, Malabar Mappilas travelled fluidly between home remedies, religious healing, local herbalists, and biomedical care based on their social status, embodied or perceived effectiveness of a specific practice, and moral paradigm of health care.

- **Social determinants of health [SDH]**

  Utilizing the Social Determinants of Health (SDH) Framework (WHO, 2008), this study illustrated that the patterns of access to health care, belonging to social hierarchies, gender roles, religious beliefs, and caste identities in the Malabar Mappila community shaped health and health care access with influence on health outcomes along the way. Healing knowledge is established and stratified by gender and caste, which limits equitable access to practices and expertise for everyone.

- **Health-Related practices and reproductive health**

  Traditions, rituals, and religious ideologies are closely tied to health maintenance (and health practices), particularly in reproductive health. Ritual purity, gendered healing, and spirituality are important within maternal and newborn health. They provide supports and limits for women's health choices.

10.1 Theoretical contribution

Disrupting Linear Models: The research changed the Hierarchy of Resort model, from a linear conceptualization to a cyclical, stratified, layered model, through defined levels of freedom through counter-acculturative disposition and nativist loyalty.

Disruption of Social Determinants of Health: The research added to the social determinants of health framework by contextualizing cultural epistemologies and spiritual determinants in the discourse around health inequities

Linking Public Health and Social Science: The research reinforced the framing that sociological and anthropological knowledge must play a role in public health research, knowing that health systems do not merely take shape through biomedical paths.

10.2 Reflection on Methodology

Most often, conducting ethnographic research in public health as a sociologist came with its own set of challenges

Establishing legitimacy: Establishing a sense of belonging amongst community and peers in public health came with a sensitive issue of legitimacy, they are often engaged as a secondary consideration to traditional medicine in public health policy and health practice.

Inter-disciplinarity: The research benefited from the confluence of qualitative sociological methods with public health conceptual frameworks, but it established the need for working together across fields of study to produce credible and meaningful research.

Community-Based Participatory Research (CBPR): The context of the study being situated towards CBPR tended to contribute to a relatively ethical engagement with the community, and

reminded us that knowledge production was an intentional collaborative practice that acknowledged the epistemologies of the community being studied.

10.3 Limitations

While this research provides a thorough understanding of the healing processes of the Malabar Mappila community, there are limitations that have to be addressed. Being a male researcher meant that it was difficult and there was inability to document some gendered practices or rituals that were space-specific for women. Additionally, many healing ceremonies, that observed, were related to sacred or private events during which the opportunity to document was considered inappropriate in either audio or visual formats. Therefore, researcher was able to take detailed field notes rather than make audiovisual recordings. Although being an insider provided the researcher with a deeper reflexive engagement, some forms of knowledge particularly those deemed applicable to family members or spiritual successors—could not be accessed or were actively withheld, revealing more about the exclusive character of traditional transmission. Furthermore, as focused only on the geographic area of Malabar and the ethnic group, Mappila Muslims, it was not be able to address some regional indicants of the healing practices of other Muslims or South Indian traditions. Nonetheless, while documented some aspects of Middle Eastern medical systems including unani and prophetic medical traditions the connections between the narratives and local practices could not be verified through fieldwork outside of India. Ultimately, while the study identified 156 medicinal plants utilized by the community, it did not seek to identify novel botanical species or pharmacological attributes but rather situated the plants with respect to the lived healing traditions of the Malabar Mappilas. These delimitations, while informing the contours of the research, also indicate future directions that may pursue broader, more gender-considerate, transregional investigations.

10.4 Accomplishments and future scope

This study successfully completed the first phase of standardization through the exhaustive interviewed and systematizing of the Malabar Mappila healing practices, guaranteeing their preservation through the organization. The future scope is imagined as a second phase that includes scientific validation and practical implementation, ideally in the form of pharmacological studies, trials, and policy implementation. This would align hundreds of years of traditional knowledge with our modern infrastructure and also incorporate indigenous

medicine into formal health systems striving to ensure relevance, safety, and efficacy in current health practices.

10.5 Recommendations

- This study's findings highlight a number of recommendations that can best ensure the recognition, preservation, and equitable inclusion of Malabar Mappila traditional healer practices into wider health care and wider cultural context. First, there is an urgent need to document endangered plants, healing practices, and knowledge systems through community-based preservation of the botanical and cultural heritage of Mappila healers.
- Secondly, who can develop more inclusive health policies that move away from the rigid lines drawn with AYUSH and biomedical models and allow Malabar Mappila traditional healer practices and systems to have a legitimate, and publicly supported, place in healing.
- Thirdly, Educational curricula should be decolonized to reflect these indigenous knowledge systems to acknowledge and recognize localized healing traditions in socially responsible medical education that is interdisciplinary, and culturally responsive and humble.
- Fourthly, sustainable development goals (SDGs), should suggest including traditional practices that are locally derived, into healthcare planning practices which provide a way to think and add ethically, and ecologically to all systems. The inclusion and protection of intangible heritage like oral stories, ritual healing and spiritual practices through archiving, and community based digital documentation.
- Finally, ideally researchers and institutions should partner with healers utilizing ethical and participatory practices that recognize knowledge sovereignty, benefit sharing, and the respect for cultural dignity. Taken together, this proposed vision is a framework that helps to support epistemic justice, sustainability, and inclusive public health rooted in cultural pluralism.

10.6 Personal learnings from the study

As a sociologist conducting public health research, this study has reinforced the importance of bridging social science and biomedicine. Ultimately, one key takeaway is that healthcare can only be broadly understood through a cultural cum biomedical perspective. The healing practices of the Malabar Mappilas, including techniques of a pusalan (folk healer) and curd-

based treatments rooted in local meanings, are all embedded in a socio-cultural, immersive, historical, and ecological context. Pusalan's responses highlight (a) the need for interdisciplinary collaboration between biomedicine and social science, and (b) the importance of increased rigor in health policy, which social science can contribute to biomedical fields. This experience also taught me that conducting ethnographic health research is an ongoing negotiation not just for gaining access to the field, but for earning legitimacy within the community and among public health professionals. Even as a researcher from within the community, it has been found needing to negotiate trust and knowledge boundaries. Ultimately, this led me to value the principles of Community-Based Participatory Research (CBPR), emphasizing reciprocity, mutual learning, and respect for indigenous knowledge systems. It has made the researcher more conscious of developing methodologies that are not only scientifically rigorous but also culturally sensitive and ethically grounded. Lastly, an important lesson from fieldwork is that traditional medicine is not merely an amalgam of religion and medicine but a dynamic, adaptive system shaped by geography, climate, ecology, and trade. The unique coastal landscape of Malabar, along with its historic maritime trade with the Middle East, influences the availability of medicinal plants and healing structures within the community. This understanding helps us to avoid oversimplifying traditional material as just science versus belief, and instead, emphasizes detailed documentation and a nuanced view of the space between nature and culture.

10.7 Contribution, Advocacy, and Framework for Malabar Mappila Traditional Medicine

This study contributes to the knowledge base of medical pluralism by highlighting how the Malabar Mappila traditional healing system coexists alongside biomedical and AYUSH systems. It demonstrates that health-seeking behaviours are dynamic, contextually informed, and culturally grounded, offering nuanced insights into the layered, cyclical patterns of care that challenge linear, universal models of treatment. In addition to documentation, this study intends to promote the understanding and protection of Malabar Mappila's traditional medicine in the public health realm. Highlighting its cultural relevance, accessibility, and community confidence, the study urges policies and programs that safeguard such practices, uphold the knowledge and autonomy of practitioners, and incorporate their inputs into pluralistic and equitable health care systems. Building on these insights, the research also suggests a model for culturally and contextually appropriate health care in which traditional Mappila healers work alongside biomedical and AYUSH practitioners in integrated clinics, community-initiated

documentation, participatory codification, and policy forums that promote inclusivity, security, and legitimation. The model facilitates pluralistic partnership, maintains spiritual and ritual expertise, enhances trust, and provides a sustainable model for mainstreaming indigenous healing into public health systems.

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APPENDICES

APPENDIX A

Appendices

A.1 List of Publications from current thesis

Original article in Journal of Research in Traditional Medicine

Journal of Research in Traditional Medicine

Original Article - Traditional Medicine

Profiling the healing practices of Malabar Mappila community of Kerala: A review

*Muhammed Shareef Chakkittu Kandiyil *, Bindiganavale R Shamanna[1]*

ABSTRACT

Background: Prevailing in a contesting field of science and modernity, where high risks for traditional healing mechanisms to get undervalued in treatment hierarchy, Mappila of Kerala have maintained to stabilize their significant position in therapeutic practices of Malabar. As a community that ritually encourages the traces for better health through the mechanisms of mind-body therapy, they treat curing mechanisms not only as a remedial measure but also as a precautionary measure. **Objective:** To assess and determine the unrecognized therapeutic practices among Malabar Mappilas of Kerala. **Materials and Methods:** The explorative research design conducted through field study with Snowball sampling method and questionnaire, in-depth interview techniques has been used for data collection. Online databases and public health literatures was reviewed for the study. **Results:** Mappila's treatment mechanism can be generally categorized into three approaches; i) The practice assisted with herbal medicines, ii) The practice assisted with diet, iii) The practice assisted with spirituality. Assessments also revealed the influence of 'cultural Islamisation' and attributes of Malabarian terrain in leveraging the incorporation of certain natural materials into the healing episteme which helped in mastering in seasonal medicines and single medicine therapy. **Conclusion:** The curative potentiality of this community medicine will aid for enhancing the credibility and relevance of traditional medicine in general. The subsections oriented over these themes provide a holistic and evaluative understanding of the treatment modalities within Malabar Mappila community and helps to succinct the supplementing relationship within the triads. i.e., the nature, the human, the religion.

KEYWORDS: *Cultural Islamisation, Dietary therapy, Malabar Mappila Community, Seasonal medicines, Single medicine therapy, Traditional healing mechanism*

INTRODUCTION

The evolution of Traditional medicine in Kerala is a conglomerated journey assisted by medical and ritual knowledge of Buddhism, Jainism, Vedic followers, and Arabs. In the early days of colonization, the indigenous practitioners were extensively consulted and their medicines were widely used by the British administrators in their quest for adapting to tropical climate.[1] Even though evidence-based medicine possesses top rank in the treatment hierarchy,[2] traditional healing practices are still in circulation in Kerala due to their holistic and individualistic approach. Among them, the Mappila community has a significant role in enriching Kerala's heritage in traditional medicine through incorporating medical knowledge from *Arabimalayalam* (The traditional Dravidian language of Muslim Mappila community) Texts. A subtle observation of Mappila's healing medicines in Malabar revealed that there are particular ways of treatment in different subgroups of Mappila's in Malabar. This feasible ground for cultural Islamisation made Muslim Mappilas to reflect those same cultural traits of the society in which they live.[3] Hence, the reflection of hierarchical features [4] is not an exception and the same has been reflected in their treatment and healing practices as well. Accordingly, the Muslim Mappila community in Malabar can be grouped into four subgroups based on their occupation, namely *Thangals* (the gnostic personalities of the community), *Kaviklals* (subgroup engaging in physically adventurous activities), *Ossans* (subgroup engage in customary works), and *Pusalars* (subgroup engage in fishing activities).

J.res.tradit.med. 2022;8(2):72-77. ***Doi:10.5455/jrtm.2022/80526***
This article was published at www.tmjournal.org on 14/10/2022
[1]Doctoral Research Scholar, [2]Professor, Department of Public Health, School of Medical Sciences, University of Hyderabad, Telangana, India.

Original article in LISSAH Journal

TRANSFERENCE OF MEDICAL LORE; THE PEDAGOGY OF ETHNO MEDICINE AMONG TRADITIONAL HEALERS OF KERALA.

*MUHAMMED SHAREEF CK, **AMAL SANA FAIZAL KP

Introduction

The duality of epistemic knowing and gnostic knowing is debatable in understanding health pedagogy. Owing to the structure of knowledge, which is rooted in practical knowledge, inherited knowledge and people's ingenuity can be traced out in both biomedical and ethno-medical traditions. This particular knowledge structure is also accompanied with a lineage of transference. Inarguably, western objective medical knowledge sharing to the succeeders take a domination over non-western subjective medical knowledge based on heteroglossia and the same have been celebrated throughout medical episteme. This obsession kept away the ways in which folk health knowledge transferred over generation. In such a context, this paper tries to articulate the strategies through which folk healers preserved and offered their 'health knowledge system' to their generations. Along with this, the tradition of healing than curing which is based on pluralistic methods are also rearticulated in this article. The major population of the study is the traditional healers of Kerala, but the reachability of findings is far more applicable in every society, particularly in every functioning ethno-medicine and in understanding the credentials for a successive transference. This particular study attempts to put forward a comprehensive understanding on how informal education survive in the world of formal education through its distinct and complex ways of experiment and prospects particularly taking instance from the subtle processes in transference of medical lore.

Key Words: Traditional healers, Medical lore, Informal education, Ethnomedicine, Pedagogy, Kerala

Introduction

The domain of pedagogical endeavours is not free from the obsession of being 'scientific'. somewhere along the way, the latent effect of colonisation is still in practice, guerrilla efforts have been initiated

*Ph.D. Scholar, School of Medical Sciences, University of Hyderabad.
**MA Sociology, University of Hyderabad.

Original article in journal of Anthropological survey of India

Health-seeking Behaviour of Tribal Population in India: A Review

Pranav K, Muhammed Shareef C K, and B R Shamanna View all authors and affiliations

OnlineFirst | https://doi.org/10.1177/2277436X251336594

Abstract

An individual's conduct in seeking healthcare is directly associated with how they perceive different health issues within the context of sociocultural elements and accessibility of relevant institutions. The tribal population holds unique health-seeking behaviour (HSB) with their own identity and cultural context. Hence, understanding their health and HSB is a big concern for academia and the state to make health services affordable and accessible.

Considering the tribal HSB in particular, this article takes ideas from other literature and published works and conceptualises them for a wider application.

The materials for data collection have been co-opted after a filtration process comprised of four stages: (a) Collecting preliminary materials, (b) primary search, (c) identifying tools and methodologies, (d) data analysis and outcomes. Only 39 articles from those published from 2000 to 2020 were found suitable.

The themes are branded under three general orientations of HSB: (a) traditional medicine (e.g., *Chettu Mandu, Kattumarannu, Nattuvaidyam, Veru Mandu*); (b) supernatural (e.g., *Cillangi, chetabadi*); (c) modern medicine (e.g., *English mandu).*

A2 List of conference presentations from current thesis

FAROOK COLLEGE
AUTONOMOUS

TWO-DAY NATIONAL CONFERENCE

CERTIFICATE

OF PARTICIPATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Muhammed Shareef CK

For presenting paper titled ' Profiling Malabar Mappila Healers: health, culture and religion' in Two-Day National Young Scholars Meet, generously sponsored by RUSA, focusing on Empowering Youth for Sustainable Development: Strategies and Approaches held on 18-19 December 2023

DR. BADHRIYA BEEGUM
HEAD OF DEPARTMENT

DR. SHILUJAS M
CONVENOR

KERALA SOCIOLOGICAL SOCIETY

50TH ANNUAL NATIONAL CONFERENCE

THE IS TO CERTIFY THAT

Muhammed Shareef CK

HAS PARTICIPATED AND PRESENTED A PAPER TITLED

Reviving Community Medicine In Pandemic ; A Study On Malabar Mappila's Traditional Medicine Practices in the 50th KSS annual national conference of Kerala sociological society on the theme held on 'CONFLICT AND RESILIENCE ; SOCIOLOGICAL PERSPECTIVE' held on 21,22 march 2024 [online] and 23 march 2024[offline] at Bishop Chulaprambil Memorial college , Kottayam

DR.BUSHRA BEEGUM
president

DR.ALPHONSA KURIAN
convenor

A.3 Achievements

Qualified National Fellowship for Other Backward Classes And Maulana Azad National Fellowship [NFOBC & MANF]

सत्यमेव जयते

विश्वविद्यालय अनुदान आयोग
University Grants Commission
शिक्षा मंत्रालय, भारत सरकार
(Ministry of Education, Govt. of India)
बहादुरशाह जफर मार्ग नई दिल्ली– 110 002
Bahadurshah Zafar Marg, New Delhi-110 002

ज्ञान-विज्ञान विमुक्तये

NATIONAL FELLOWSHIP FOR OTHER BACKWARD CLASSES

FELLOWSHIP AWARD LETTER

No. F. 82-44/2020 (SA-III) **Date of Issue: 30.11.2020**

Muhammed Shareef C K
S/O Saidalavi
Kalpadakkal House, Kayalam, Mavoor, Kozhikode
Kerala, 673661, India

Roll No.: KL1351900065
Subject: SOCIOLOGY
UGC-Ref. No.: 200510627873

Dear Candidate,

I am pleased to inform you that based on your qualifying for Eligibility for Assistant Professor in the **June 2020 National Eligibility Test (UGC–NET),** you have been selected for award of fellowship under the scheme of 'National Fellowship for Other Backward Classes' for the year 2020-21 (June Cycle).

The tenure of the Fellowship is five years and it commences from the date of declaration of result for NFOBC i.e. **30.11.2020** (or) from the date of admission under M.Phil/Ph.D (or) from the date of joining M.Phil/Ph.D programme, whichever is later.

As per information provided by you while applying online for UGC-NET, you had already taken admission for M.Phil/Ph.D through regular and full time mode in a UGC recognized University / Institution. Accordingly, you are required to apply for fellowship not later than three months from the date of issue of this award letter. The University/Institution is requested to process for award of fellowship based upon this letter, in accordance with the Guidelines of the Scheme and Notification dated **17.12.2020**. The same can be accessed at https://www.ugc.ac.in/ugc_notices.aspx.

It may be noted that the fellowship amount shall be disbursed through Canara Bank to bank account of the awardee (any bank) directly. UGC has developed a dedicated web portal (https://scholarship.canarabank.in) for capturing data of the awardee. The Universities/Institutions will link the data of the awardee with the master data on the UGC web portal with unique Maker and Checker IDs which have already been provided to them along with the passwords. The Universities/Institutions shall update the information on the master data (regarding monthly payment confirmation, HRA, up-gradation, resignation etc.) of the beneficiaries on monthly basis. Based on the data updated on UGC web portal by the concerned Universities/Institutions, the payment of the fellowship will be made to the beneficiaries (Detailed process available at https://www.ugc.ac.in/ugc_notices.aspx?id=2153).

The e-Certificate of Eligibility for Assistant Professor has already been uploaded on https://ugcnet.nta.nic.in. The eligibility of the candidate for availing the fellowship is to be ensured by the University/Institution.

With best wishes,

Surender Singh

(Dr. Surender Singh)

Joint Secretary

विश्वविद्यालय अनुदान आयोग
University Grants Commission
शिक्षा मंत्रालय, भारत सरकार
(Ministry of Education, Govt. of India)
बहादुरशाह जफर मार्ग नई दिल्ली– 110 002
Bahadurshah Zafar Marg, New Delhi-110 002

सत्यमेव जयते

ज्ञान-विज्ञान विमुक्तये

Maulana Azad National Fellowship for Minority Students

FELLOWSHIP AWARD LETTER

No. F. 82-44/2020 (SA-III) **Date of Issue: 30.11.2020**

Roll No.: KL1351900065
UGC-Ref. No.: 200510627873
Subject: SOCIOLOGY

Name of Candidate: **Muhammed Shareef C K**
Name of Father: **Saidalavi**
Name of Mother: **Suhara**

Dear Candidate,

I am pleased to inform you that based on your qualifying for Eligibility for Assistant Professor in the **June 2020 National Eligibility Test (UGC–NET),** you have been selected for award of fellowship under the scheme of **Maulana Azad National Fellowship for Minority Students - 2020-21 (June Cycle)**.

The tenure of the Fellowship is five years and it commences from the date of declaration of result of UGC-NET, viz., **30.11.2020** (or) from the date of admission under M.Phil/Ph.D (or) from the date of joining M.Phil/Ph.D programme, whichever is later.

As per information provided by you while applying online for UGC-NET, you had already taken admission for M.Phil/Ph.D through regular and full time mode in a UGC recognized University / Institution. Accordingly, you are required to apply for fellowship not later than three months from the date of issue of this award letter. The University/Institution is requested to process for award of fellowship based upon this letter, in accordance with the Guidelines of the Scheme and Notification dated **17.12.2020**. The same can be accessed at https://www.ugc.ac.in/ugc_notices.aspx.

It may be noted that the fellowship amount shall be disbursed through Canara Bank to bank account of the awardee (any bank) directly. UGC has developed a dedicated web portal (https://scholarship.canarabank.in) for capturing data of the awardee. The Universities/Institutions will link the data of the awardee with the master data on the UGC web portal with unique Maker and Checker IDs which have already been provided to them along with the passwords. The Universities/Institutions shall update the information on the master data (regarding monthly payment confirmation, HRA, up-gradation, resignation etc.) of the beneficiaries on monthly basis. Based on the data updated on UGC web portal by the concerned Universities/Institutions, the payment of the fellowship will be made to the beneficiaries (Detailed process is available at https://www.ugc.ac.in/ugc_notices.aspx?id=2153).

The e-Certificate of Eligibility for Assistant Professor has already been uploaded on https://ecertificate.nta.ac.in. The eligibility of the candidate for availing the fellowship is to be ensured by the University/Institution.

With best wishes,

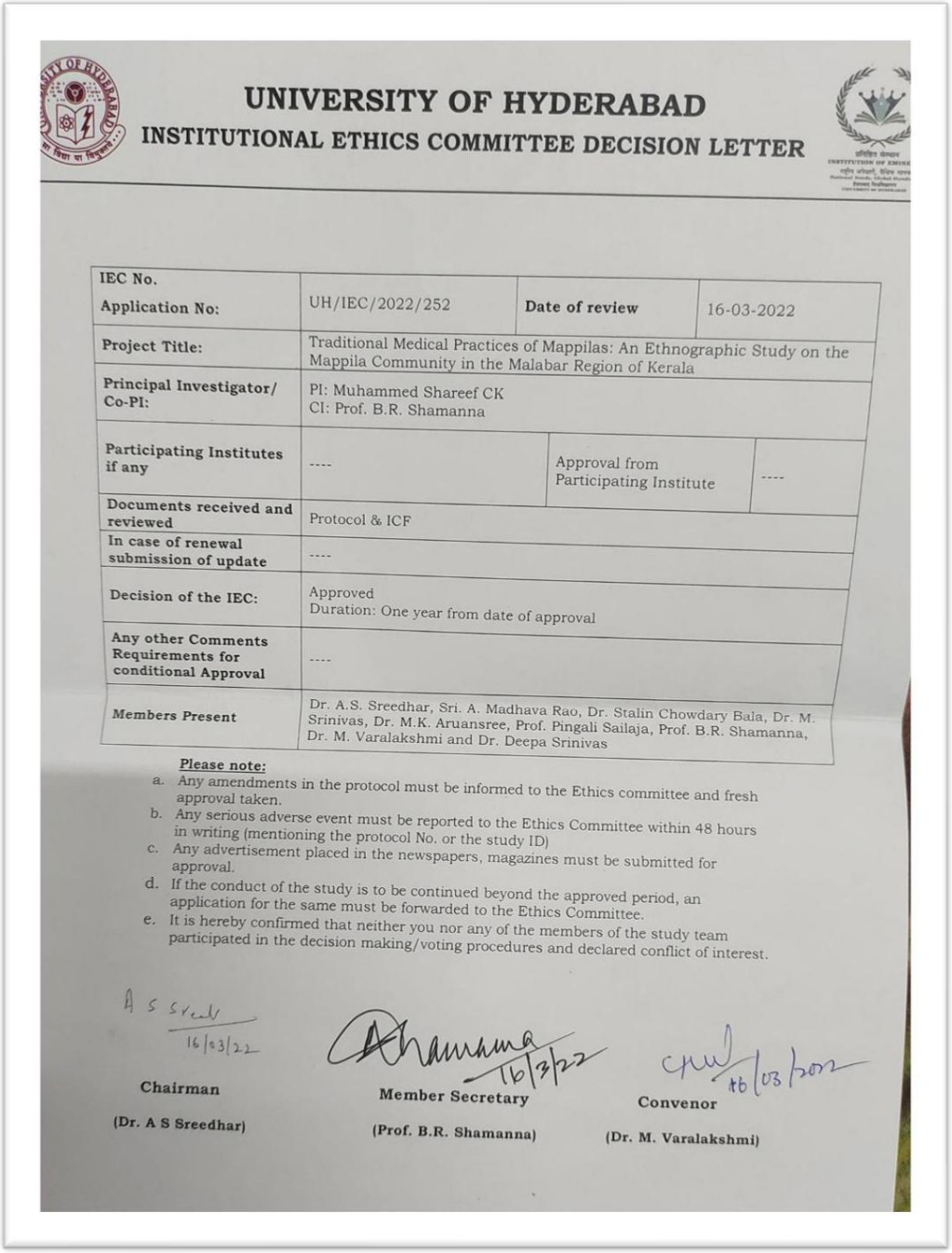
Surender Singh

(Dr. Surender Singh)

Joint Secretary

A.4 Institutional Ethics Committee [IEC] Approval

IEC Approval letter 2022



UNIVERSITY OF HYDERABAD

INSTITUTIONAL ETHICS COMMITTEE DECISION LETTER

IEC No. **Application No:**	UH/IEC/2022/252	**Date of review**	16-03-2022
Project Title:	Traditional Medical Practices of Mappilas: An Ethnographic Study on the Mappila Community in the Malabar Region of Kerala		
Principal Investigator/ Co-PI:	PI: Muhammed Shareef CK CI: Prof. B.R. Shamanna		
Participating Institutes if any	----	Approval from Participating Institute	----
Documents received and reviewed	Protocol & ICF		
In case of renewal submission of update	----		
Decision of the IEC:	Approved Duration: One year from date of approval		
Any other Comments Requirements for conditional Approval	----		
Members Present	Dr. A.S. Sreedhar, Sri. A. Madhava Rao, Dr. Stalin Chowdary Bala, Dr. M. Srinivas, Dr. M.K. Aruansree, Prof. Pingali Sailaja, Prof. B.R. Shamanna, Dr. M. Varalakshmi and Dr. Deepa Srinivas		

Please note:

a. Any amendments in the protocol must be informed to the Ethics committee and fresh approval taken.
b. Any serious adverse event must be reported to the Ethics Committee within 48 hours in writing (mentioning the protocol No. or the study ID)
c. Any advertisement placed in the newspapers, magazines must be submitted for approval.
d. If the conduct of the study is to be continued beyond the approved period, an application for the same must be forwarded to the Ethics Committee.
e. It is hereby confirmed that neither you nor any of the members of the study team participated in the decision making/voting procedures and declared conflict of interest.

A S Sreedh 16/03/22

Chairman
(Dr. A S Sreedhar)

16/3/22

Member Secretary
(Prof. B.R. Shamanna)

16/03/2022

Convenor
(Dr. M. Varalakshmi)

A.5 Informed consent form

INFORMED ASSENT FORM

Study title: Traditional medical practices of Mappilas; An Ethnographic study on the Mappila community in the Malabar region of Kerala.

Investigator: Muhammed Shareef CK

We are studying on developing an understanding of the Traditional medical practices of Mappilas, with special reference to the Malabar region of Kerala. It will help out to explore this particular medical episteme along with the understanding of the social ecology of Mappila community, thereby aides in mainstreaming these practices for further health benefits. If you are willing to participate in the study, you are required to answer a set of questions about your specific medical practices in general and this would not take much time. This will not cause any harm to you. Ifyou are not comfortable during the interview, you may wish to withdraw from the study. After we finish the study, we will write a report about what we learned. This report will not disclose your name or any other sensitive details.

If you decide you want to be in this study, please sign your name.

I have been explained about the study to my understanding and have had the opportunity to ask questions or doubts regarding the study. I understand that my participation is voluntary andthat I can withdraw at any time without giving any reasons. I also understand that no personal identifying information will be revealed to anyone.

I,_____, want to be in this research study.

_____ _____

(Sign your name here) (Date)

Principal investigator: Witness signature:

A.6 Interview Guide

INTERVIEW GUIDE

Interview Guide 1: Malabar Mappila Healers (Thangals, Ossans, Kurikkals, Pusalans)

Purpose: To understand the worldview, practice, and transmission of traditional healing among Malabar Mappila healers, focusing on spirituality, ethnobotany, and cultural continuity.

A. Background Information

- Name / Code:
- Age:
- Gender:
- Education level:
- Type of healer (Thangal, Ossan, Kurikkal, Pusalan, other):
- Years of practice:
- Source of training (family, religious education, apprenticeship, self-taught):
- Location of practice (village/town):
- Mode of healing (faith/spiritual/herbal/combined):

B. Pathway into Healing

1. How did you first become involved in healing?
2. Who taught or inspired you to learn these healing practices?
3. Do you consider healing a profession, a community service, or a spiritual duty?
4. How has your practice changed over time, especially after the COVID-19 pandemic?

C. Nature of Healing Practice

1. What types of health issues or illnesses do people bring to you?
2. Can you describe the general process you follow when someone comes for healing?

3. How do you decide whether to use herbs, rituals, prayers, or dietary recommendations?
4. Do you keep any written records, or is all knowledge passed orally?
5. How do you evaluate whether a person has been healed or not?

D. Spiritual and Ritual Dimensions

1. What role does spirituality or religion play in your healing work?
2. What are the main rituals or religious practices (e.g., Maulid, Uroos, Dua) associated with healing?
3. Can you explain how prayer, divine invocation, or Quranic verses are used in treatment?
4. Are there any foods or restrictions connected to spiritual healing?
5. How do you see the connection between faith and physical health?

E. Ethnobotanical and Food-based Healing

1. Which plants or natural ingredients do you commonly use in treatment?
2. How do you collect, prepare, and preserve these herbs?
3. Are there any specific rules or rituals when collecting plants?
4. How did you learn about the healing properties of these plants?
5. Can you share any recipe or preparation for a common ailment?
6. How important is food or diet in your healing system?

F. Transmission of Knowledge

1. How did you learn your healing knowledge — through family, religious learning, or observation?
2. Are younger people learning and continuing this tradition?
3. What challenges do you face in transferring your knowledge to the next generation?
4. Do you think your healing knowledge should be documented or formalized?

5. How do you feel about working together with doctors or AYUSH practitioners?

G. Social Status and Recognition

1. How does the community view your work as a healer?
2. Are there differences in respect or recognition among healers of different social or religious backgrounds?
3. Do you face any challenges from government authorities or medical institutions?
4. What do you think is needed to preserve and promote Mappila healing traditions?

Interview Guide 2: Beneficiaries / Community Members (Patients, Women, Elders)

Purpose: To explore the experiences, beliefs, and perceptions of individuals who seek care from Malabar Mappila healers, focusing on health-seeking behaviour, dietary and reproductive traditions, and trust in traditional healing.

A. Background Information

- Name / Code:
- Age:
- Gender:
- Education level:
- Occupation:
- Location:
- Relationship with healer (patient / family member / observer):

B. Health-Seeking Pathways

1. When you or your family members fall ill, what kind of treatment do you prefer first?
2. How did you come to know about this healer?
3. Why do you prefer going to traditional healers instead of hospitals or clinics?
4. Have you ever used both traditional and modern treatments together?

5. What factors influence your choice of treatment — cost, faith, accessibility, trust, or experience?

C. Experience of Healing

1. Can you describe a healing experience you or someone close to you had?
2. What rituals or prayers were part of the healing process?
3. Were there any specific food or fasting rules given by the healer?
4. How long did the healing process take, and how did you know it was successful?
5. How do you feel during and after the healing sessions — physically, mentally, and spiritually?

D. Beliefs and Community Views

1. How do people in your community view these traditional healers?
2. Do you think traditional and modern medicine can work together?
3. What do you believe causes illness — physical, spiritual, or social reasons?
4. How important is prayer or divine blessing in recovery?
5. Have you noticed any change in how young people view traditional healing today?

E. Reproductive and Women's Health (for women respondents)

1. Can you describe any traditional practices during pregnancy or childbirth?
2. Are there particular foods, herbs, or rituals followed for safe delivery?
3. What role do women play in healing or caregiving in your family?
4. How do mosque spaces or community rituals (like Dua or Uroos) connect to pregnancy care?
5. Do you feel traditional healing gives emotional or social support compared to hospitals?

F. Reflection and Future

1. What do you think makes traditional Mappila healing special or different?
2. What challenges do you see for these healers and their knowledge today?
3. Do you believe these practices should be recognized or supported by the government?
4. Would you like your children or grandchildren to continue using these healing traditions?

Traditional medical practices of Mappilas: An ethnographic study on the Mappila community in the Malabar region of Kerala

by Muhammed Shareef CK

Submission date: 04-Nov-2025 04:31PM (UTC+0530)
Submission ID: 2803097651
File name: Shareef_thesis_pdf.pdf (7.92M)
Word count: 67966
Character count: 375958

Traditional medical practices of Mappilas: An ethnographic study on the Mappila community in the Malabar region of Kerala

ORIGINALITY REPORT

8%	5%	5%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Muhammed CK, BR Shamanna. "Profiling the healing practices of Malabar Mappila community of Kerala: A review", JOURNAL OF RESEARCH IN TRADITIONAL MEDICINE, 2022 Publication	1%
2	www.ncbi.nlm.nih.gov Internet Source	1%
3	ijbpas.com Internet Source	1%
4	doi.org Internet Source	1%
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