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Content Analysis of the Palm-leaf Manuscripts Containing Indigenous Medicine in Sri Lanka

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Abstract: The purpose of this research was to study the contents of the palm-leaf manuscripts containing medicine, in Sri Lanka. A qualitative research methodology was used for this research. A sample of 68 indigenous medicine manuscripts in the National Museum of Sri Lanka was selected for this study. The study used a qualitative methodology based on secondary sources (palm-leaf manuscripts), and content analysis was used in the context of qualitative data analysis. The results show that, in the past, indigenous knowledge was largely contained in the manuscripts. It is suggested to physically care for and preserve these indigenous knowledge-possessed manuscripts, and it is also suggested to provide digital copies to the researchers who come for palm-leaf manuscript research so that the damage caused by the use of the original manuscripts could be minimised. This research has identified a large number of herbs used in indigenous medicine, and action should be taken to preserve those herbs. Therefore, it is proposed to plan and implement a comprehensive program at the national level for the preservation and protection of local knowledge, theoretically as well as practically.

Keywords: Indigenous medicine, Indigenous knowledge, Museum Library, Palm-leaf Manuscripts, Sri Lanka

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1. INTRODUCTION

Advanced civilisations had been built in Sri Lanka because of the inquisitive experiences of our ancient ancestors. At a time when the people of the West were living in barbarism, the people of Sri Lanka were prosperous, with an opulent economy based on agriculture and irrigation, a moral culture built on Buddhism, and all the pleasures reflected in art.

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The indigenousness of a country varies from time to time, both quantitatively and from a different point of view. Before the advent of Buddhism, indigenous knowledge of the country was limited to objects of nature such as trees, water, darkness, light, the sun, and the moon. Due to the influence of Buddhism, these beliefs were transformed into simpler but more philosophical thoughts. In later times, indigenous knowledge became nothing more than Buddhist thought, such as simplicity, kindness, and tolerance. Thus, 'Indigenous' was changing chronologically, and today 'Indigenous' means something completely different than it did two thousand years ago.

Researchers studying indigenous Cultures today are often tempted to look at things that are not influenced by modern science as "indigenous". Looking at the evolution of indigenous knowledge throughout early history, it appears that there were a series of changes. The history of this country was shaped by its nature. The changes that have taken place in Sri Lanka appear to have been somewhat more serious than those that have taken place in the neighbouring Indian Peninsula (Medawewa, 1998).

According to archaeological evidence as well as chronicles, Sri Lanka was inhabited long before the arrival of the Aryans. It is said that at the time of Prince Vijaya's arrival in Sri Lanka, there were three tribal communities in the country, namely the *Yaksha*, *Naga*, and *Deva*. These aborigines certainly had their own system of knowledge. It is possible that the *Aryans* who came to Sri Lanka at that time brought to Sri Lanka an accepted knowledge and practice of the areas where they were in India. As they became the leading political force in the country, there is evidence that Indigenous Peoples migrated to remote areas of the island.

It can be admitted that the knowledge brought to this country by the Aryans was mixed with some parts of the indigenous knowledge produced by the native people. It seems that the Aryans later imported a wealth of postulate knowledge from India into Sri Lanka. Religions, arts, etc. can be cited as examples. In this way, the accepted knowledge imported from India and some of the indigenous knowledge mixed with it came together to form a recognised knowledge system of the ancient Sri Lankan civilisation. However, the existing knowledge related to water management does not appear to have been imported from India or mixed with it. It is the knowledge created by the original people of Sri Lanka (Ranasinghe, 2006).

The emergence of a recognised knowledge system will not halt the growth of indigenous knowledge systems. The *Veddas* still use their traditional knowledge for various activities in their daily lives (Serasinghe, 1996). Apart

from tribal groups, the rurally ignorant people also created another indigenous knowledge subsystem based on their own experiences. In this regard, the indigenous knowledge of Sri Lanka can be described as a mixture of knowledge generated by the ancient tribal as well as rural communities.

It should be noted here that the scholars who activated the accepted knowledge have adopted certain parts of the indigenous knowledge and have constantly absorbed it into their own knowledge system. At the same time, the production of knowledge by informal sections of society was also an obvious process. There is little mention of indigenous knowledge in the island's expert literature stream, and knowledge produced by the general population does not appear to have been valued by the experts. In general, that knowledge was considered "vulgar." The Sanskrit word for "vulgar" means unrefined, rural, and uneducated. As a result, vulgar knowledge is the knowledge of the ignorant and rustic (Ranasinghe, 2006).

Indigenous knowledge in Sri Lanka is the knowledge of the human system. The basic techniques in Sri Lanka that impart indigenous knowledge are:

- Agriculture
- Arts and crafts
- Housing
- Irrigation
- Medical science
- Folk art
- Forests, etc.

There are also several different subject areas under these scopes. They are as follows:

- **Agriculture:** Paddy cultivation, home gardening, rainwater and irrigation agriculture, chena cultivation, animal husbandry, fisheries and harvesting.
- **Art and crafts:** Iron and steel production, agricultural implements and household utensils, weaponry, pottery, textile weaving, carpentry, painting and sculpture.
- **Food and nutrition:** Post-harvest method, food preservation, eating habits and cooking.
- **Housing:** People's homes and places of worship.
- **Irrigation:** Rainwater harvesting methodology, tank design, canals and waterways, water management, drinking water, and domestic water management.

- **Medical science:** Medicine for humans, medicine for animals, medicines, pharmaceutical manufacturing, diagnoses and astrology.
- **Folk art:** Folk songs, folk tales, historical events, beliefs, faith and customs.
- **Forests:** Forest conservation, management, and other uses of natural resources (Ranasinghe, 2008).

The Sinhala word "*godaya*" is usually used to mean an uneducated villager. Even today, the terms "*Goda Veda*" and "*Goda Wedakama*" seem to be used to denigrate indigenous medicine. All this shows that even in the indigenous cultural context, indigenous knowledge has not been given its due place. However, the so-called rural ignorant people have made very successful use of the indigenous knowledge they have produced in agriculture, animal husbandry, medicine, and various other arts and crafts (Ranasinghe, 2006).

Indigenous knowledge is also embedded in the various faiths of Sri Lanka. Beliefs can play a key role in maintaining people's livelihoods, their health, and their environment. Forests are protected for religious reasons. Religious festivals were a way of catering to people in need of food. Based on such facts, it is possible to identify the use of indigenous knowledge in ancient Sri Lanka. Indigenous knowledge of Sri Lanka can be expressed in several ways.

- Information: What are the trees and plants that grow well? What are indicator plants? (Plants that exhibit soil salinity or bear fruit at the start of the rainy season).
- Practices and Techniques: Seed Processing and Storage Techniques, Bone Reconstruction Techniques, and Treatment for Fractures.
- Tools: Equipment used in planting, harvesting, and cooking.
- Material: Material used in the construction of houses, baskets, packaging, and other handicrafts.
- Experiments: Introduction of new tree species by farmers in addition to existing cultivation methods and testing of new herbal medicines by traditional doctors.
- Biological Resources: Breeding Fauna; Introduction to Indigenous Crops and Trees.
- Human Resources: Indigenousised organisations such as physicians and blacksmiths, relatives, elders' associations, or labour exchanges (such as the *Kaiya* System, or co-operative work band).
- Education: Traditional counselling methods, apprenticeships, and observational learning.

- Communication: Stories and messages that were written in palm-leaf manuscripts and descended from folk (or folklore) media (Madushani, 2016).

Current Status of Indigenous Knowledge in Sri Lanka

The precious traditional knowledge discovered by our ancestors is now obsolete. Instead, there is a fast-paced, efficient, modern industrial product market. In all respects, modern industrial technology has been able to attract the attention of modern man. Therefore, man is rapidly replacing the traditional technology used till now with modern technology to fulfil all his needs. The modern technology that has pervaded the entire universe today has become a challenge to the future of the universe and man. The main reason for this is not giving priority to indigenous knowledge and not collecting and developing it.

Due to certain misconceptions that have spread over the past five centuries, the development and use of indigenous knowledge in this country have been severely damaged. The following are some of the common misconceptions:

Indigenous knowledge is not scientific.

- It's a mystery.
- It is old and has no current value.
- It belongs to the rural, ignorant people.
- Experts do not use it.
- It is weak and powerless.
- It is not modern. Therefore, it is not suitable for modern society.
- It lacks quality. It is now dying.

All indigenous knowledge and practices cannot be denied on the basis that they have not been proven by laboratory tests. The villagers know from experience that they can use indigenous knowledge practices successfully in various activities of their daily lives. Modern scientific methods may not be sufficient to understand the principles underlying indigenous knowledge practices (Ranasinghe, 2006). Indigenous knowledge is not a mystery. But it has a mystical nature due to certain rituals associated with it. Being regarded as a secret, the sacred object in the practice of indigenous knowledge is a feature of all cultures. This situation can truly be described as a kind of patent in the present sense, a strategy used to protect that knowledge for future generations and to prevent its misuse.

Indigenous knowledge has become powerless because it is in the hands of ignorant, poor villagers. An organised program can change this. It requires the intervention of scholars to strengthen indigenous knowledge. That

needs to be researched. The results of the research should be published, and successful indigenous knowledge practices should be applied. Then indigenous knowledge will become as powerful as reciprocal knowledge. It is not fair to say that indigenous knowledge is not modern and does not fit into today's world. Today, the value of indigenous knowledge is being recognised worldwide. The World Development Organisation has now acknowledged that the best way to stem the tide of development, especially in today's world, is to use indigenous knowledge. Therefore, it is no longer considered a dying, low-quality knowledge system (Ranasinghe, 2006).

Due to the oral, rural, and powerless nature of indigenous knowledge, it was largely invisible to the larger community and modern science. It was discarded as an informal knowledge system that failed to meet the productivity requirements of the modern world. Therefore, despite the obvious risk of extinction, it was not properly grasped and stored. But fortunately, this situation has now changed. Since the last decade of the 20th century, the number of publications on the relevance of indigenous knowledge in various policies, disciplines, and academic disciplines has greatly increased.

Indigenous Medicine in Sri Lanka

Sri Lankan indigenous medicine has a long history. During the Anuradhapura period, for the first time in the world, a system of *Veda* hospitals dedicated to patients was built on the top of the Mihintale hill. It focused on this traditional indigenous medicine, which was based on recipes passed down from generation to generation for approximately three thousand years. Sources also show that in the past, rulers were interested in indigenous medicine. It is said that King Buddhadasa treated patients and animals, built hospitals in every village, and employed doctors (Sumangala & Batuwanthuda, 1996). Inscriptional sources also state that the kings of the time worked to improve health. Tenth-century inscriptions show the public institutions and "Vedahal" (hospitals) that practised indigenous medicine, as well as the offerings that were made to those places.

Words like "*Vedhal"* (hospitals) as well as *"Mahavedna*" (chief practitioner) indicate that indigenous medicine was very advanced in the past. There is evidence of North and South Indian influences on indigenous medicine in Sri Lanka. Indigenous medicine, which has been around for thousands of years, has been nurtured by various cultural values and doctrines. It is sometimes referred to as "land medicine". The word *"godaya"* (akin to the term "rural buffoon") in Sinhala also means an uneducated villager. Even today, the terms

"Goda Veda" (rural physician) and *"Goda Wedakama"* (rural medicine) seem to be used interchangeably to refer to indigenous medicine. Also known as "home remedies", they are called "hand remedies". Hand remedies are medicines that can be easily prepared without any professional advice but have been proven by experience. Indigenous medicine descended from this method and was later recorded in palm-leaf manuscripts.

The Kotte era is known as the "golden age" of palm-leaf manuscripts. During this period, a new set of palm-leaf manuscripts was written and a large number of these manuscripts were copied. Among them were manuscripts on religion, language, literature, medicine, veterinary medicine, astrology, yantra-mantra, fiction, customs and ceremonies, law, border (Kadima), story (Withthi), history, taxes and income, agriculture, state governance, Buddhist education, world detail, and a large number of palm-leaf manuscripts on various other subjects such as music and art (Lagamuwa, 2006). These palm-leaf manuscripts also contain indigenous knowledge of various subjects.

Therefore, Sri Lanka's indigenous medicine system has been practised for centuries and is based entirely on local knowledge. Indigenous knowledge can be considered practical general knowledge based on technology and experience that has been passed down from generation to generation.

Literature Review

According to Blondin and Redvers (2020), although Indigenous populations across North America have confirmed continuous usage of traditional healing modalities and practitioners, it is assumed that most Western-trained health professionals and systems lack extensive understanding of these practices. This is true even though Western medical systems primarily treat the 7.5 million Indigenous Peoples who currently live in Canada and the United States (US).

As per Kunwar et al. (2015), as the southwest of Nepal is least suitable for primary cereal crops, locals have always relied heavily on locally available wild plants. The widespread use of medicinal plants in eastern Nepal shows that plant use is an integral part of culture. Indigenous plants are highly susceptible to overharvesting, and their population and distribution have been affected by the introduction of non-indigenous species. A lack of distribution of indigenous species and easy access to non-indigenous species and their habitats has resulted in an increase in the use of non-indigenous species, which has been exacerbated by the need to find alternatives to declining species and treat new diseases. Many pharmaceutical and conventional medications are directly derived from nature and traditional cures found all over the world,

according to Pan et al. (2014). Over 53,000 species have been used in herbal therapy up to this point, and overexploitation is putting many of these species in danger of becoming extinct.

The continued dissemination of Indigenous traditional medicine knowledge in Northern Canada and the collective survival of Northern peoples, according to Redvers et al. (2019), is evidence of the usefulness of traditional medicines in a self-determined wellness system.

Researchers engaged in research on indigenous knowledge in Sri Lanka have come up with various ideas on indigenous knowledge and its conservation. This knowledge has evolved in Sri Lanka since prehistoric times, along with a wealth of traditional knowledge (*santhi karma*) to cure diseases (Kankanamge, 2006). According to Wadasinghe (2008), the collection of indigenous knowledge is a very important task, and the far-reaching task of conserving it is being carried out by the National Library.

There have been experimental commentaries on the preservation of Sinhala culture as well as the use of Sinhala medicines, reliable remedies, etc. in the past (Wickramasinghe, 2016), analysing the contents of palm-leaf manuscripts on the essence of Sinhala medicine. Folk music, folk tales, and folklore elements are present in their industries, as well as folk literature about people's lives in the past. Among them, Weerasinghe (1986) mentioned the use of divination, *pena keema* (doing light reading), *Thovilpavil* (exorcism), astrology, beliefs, salutations, healing rituals, religious rites, and the practice of witchcraft in the past. Kahandagamage (2002) stated that in the past, people used indigenous medicine as well as ophthalmology, joint treatment, snake medicine, treatment of boils, *sarvanga* (all-body) medicine, veterinary medicine, and *ath beheth* (popular medicine).

Indigenous medicine is also known as traditional medicine, and the ancient people used indigenous medicines and traditional *Kem* (secret treatment) methods to cure human diseases (Ratnapala, 1991). This knowledge, which has been passed down from time immemorial to ancient peoples, is said to have been created from prose, verse, or both and passed down from generation to generation. Ratnapala (1995) stated that folk medicine is based on the three elements of religion, witchcraft, and medicine, as well as the rituals performed and how they are performed. Wickramasinghe (1994) stated that due to the destruction of the traditional knowledge of the aborigines, such as traditional medicine, farming, animal husbandry, *yatu karma* (exorcism), etc., the society has lost those values as the knowledge they possessed was not passed on to their children and grandchildren or the next generation.

Furthermore, the traditional indigenous medicine of Sri Lanka is a collection of many streams, and traditional medicine has been introduced as a combination of indigenous medicine, and ophthalmology (Tilakaratne et al., 2016). The value of indigenous medicine has been presented by revealing detailed information on the remedies to be taken in case of snake bites and prescription drugs described in the contents of the palm-leaf manuscripts on snake medicine as well as in the form of verses, deposited in the National Museum Library (Deraniyagala, 1956). In addition, Deraniyagala (1953) elaborated on the contents of the palm-leaf manuscripts on ophthalmology, detailing all eye diseases and other ailments that contributed to the development of eye diseases, as well as treatments, prescriptions, and medicines for eye diseases.

A literature review has shown that research on indigenous medicine has been carried out by various scholars. However, the subject matter of the National Museum Library's collection of palm-leaf manuscripts was not identified, and research on unclassified palm-leaf manuscripts was not revealed.

3. Objective of the Study

The main objectives of this research can be categorised as follows:

- To study the nature of the concept of ancient indigenous knowledge and the ancient indigenous knowledge contained in palm-leaf manuscripts on medicine.
- To identify the diseases that have been treated, the nature of the treatments that have been done, and the herbal remedies that have been used to cure the diseases by studying the contents of the palm-leaf manuscripts related to medicine.

4. Methodology

The study used a qualitative methodology based on secondary sources (palm-leaf manuscripts). The collection of palm-leaf manuscripts in the National Museum Library was selected as a study sample. Content analysis was used in the context of qualitative data analysis.

The Library of the National Museum has become the owner of the largest palm-leaf manuscript on the island. Consequently, the Library of the National Museum has become the owner of a valuable heritage with deposits of almost 4000 palm-leaf manuscripts (Bulathsinghala, 2012). The collection of palm-leaf manuscripts belonging to the National Museum was developed through purchases, donations, and copies. Overall, the collection consists of

manuscripts from Sinhala, Pali, Sanskrit, Burmese, Cambodian, Tamil, and Telugu and includes manuscripts on the following topics:

- Theravada Buddhist Literature (*Tripitaka* containing *Vinaya, Sutras, Abhidharma*)
- History and Traditions
- Grammar and Linguistics
- Old prose and verse
- Fine art
- Indigenous medicine
- Astrology
- *Yanta Mantra* and Demonology

In addition, there is a collection of palm manuscripts that have not been identified and classified in the National Museum. Given the collection of palm-leaf manuscripts in the library of the National Museum, it is clear that the shelves in the wooden closets are not formally classified but are neatly organised. Although the palm-leaf manuscripts in the National Museum represent a variety of subjects, the sample has been selected to include medicine, as this research focuses on indigenous knowledge. On this basis, the subject of medicine was identified, and a collection of palm-leaf manuscripts was used for this research.

Sample of Research

In this study, 68 unclassified palm-leaf manuscripts representing indigenous medicine were selected from a specific sample of palm-leaf manuscripts in the National Museum.

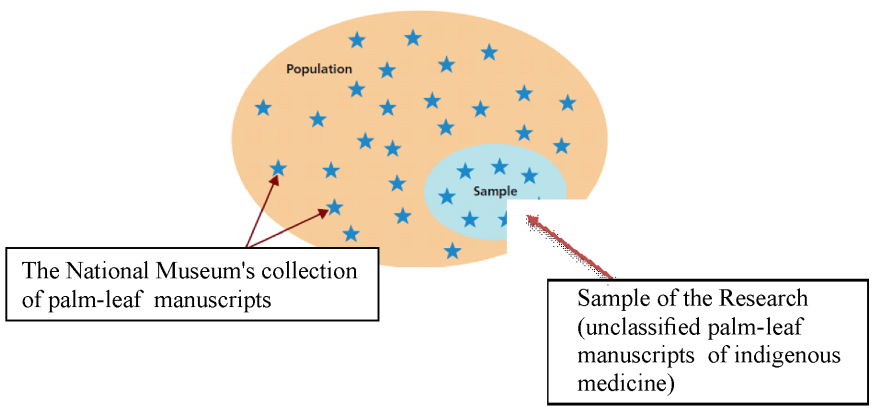

Figure 1: A collection of palm-leaf manuscripts selected for research from the palm-leaf manuscripts included in the National Museum.

Results and Discussion

The qualitative data analysis was used for this research. Content analysis under qualitative data analysis was used for this research. The analysis of the contents of the palm-leaf manuscripts used for the research was mainly done by classifying the manuscripts according to their subjects. In addition, I have read the contents of the palm-leaf manuscripts and studied separately the diseases that have been cured in the past, the treatments for the diseases, and the indigenous medicines used for them.

Diseases Treated in The Past as Mentioned in Palm-Leaf Manuscripts.

Analysing the data obtained by studying the contents of palm-leaf manuscripts containing medicine, it was possible to identify diseases that had been treated in the past. That is,

- Diseases associated with numbness, panting pain, *Vata* (rheumatic), *Pitta* (bile), *Sema* (mucus)
- Muscle cramps of the legs
- For pain in the arms and legs of the body
- Tetanus
- All cold sanni (coma) diseases
- Eye-related diseases (Blinding- visual impairment, Red-eye, Cataracts, swelling of the eye, burning of the eyes, bringing tears to the eyes, ophthalmia, when boils occur in the eyes, when there were thorns in the eyes, itching- ringworm of the eyes)
- Gastric and gastrointestinal diseases (diseases of the large intestine)
- Headaches (diseases associated with the head)
- Sexually transmitted diseases
- Constipation
- Tuberculosis
- All boils (running boils, armpit boils, red boils, cancer boils, ear-throat boils, boils that form in the uterus, boils in the body of infants, stomach boils)
- Cancer
- Diseases related to the bladder
- Abdominal diseases (diseases such as indigestion)

- Diseases of the lungs
- Diseases related to the throat
- Ear diseases (diseases related to the ear)
- Skin diseases (all skin diseases) as well as sweat rash
- Catarrh
- Oral diseases (diseases related to the mouth)
- Hernia, anorectal fistula
- Swelling of various parts of the body
- Pregnancy diseases (infertility, fetal pain, Pang of the body of pregnant women, inflammation, postpartum diseases, tremors, and fever)
- Diseases of the stomach in women
- Eighteen sanni (coma) diseases
- Hot air diseases (diseases caused by inflammation)
- Heart disease (cardiac disease)
- To mania (crazy)
- Snake venom remedies (venom neutralisation for snake species, snake bite treatment for each species)
- Pediatric diseases (Rathagaya, caused by vitiated blood; worms; epilepsy; pediatric gastritis; all types of infant comas; fetal umbilical pang, infantile worm vomiting; pediatric thrush; Rickets as well as Rickets tumescence; blood diarrhea, etc.)
- Jaundice
- All body diseases

Analysis of the data revealed that most treatments were for the main three errors [air (vatha), bile (pith), and phlegm (sem)] in the body, eye diseases, childhood infections, and maternal diseases. Analytical data has shown that treatments are available for diseases that affect every part of the human body. However, the data showed that in the past, people were being treated for all sorts of diseases, including cancer, which does not have a definite cure.

Treatments for Diseases

Data analysis identified several ways in which diseases have been treated in the past. It was revealed that the application of types of Oils, *Kasaya* (decoctions), *Churna* (powders), *Basna* (calcining), *Kalka* (paste), *Vireka* (purgative), *Nasna* (nasal inhalation treatment), etc. was used to cure diseases.

Here, the oils used to cure diseases are known by different names. *Namely Maha Saraswati* oil, *Arsas* oil, Oil for all boils and *Paththu*, Swelling oil, *Sarva Visadi* oil, Convulsive oil, *Kandamale* oil, *Mandapana* oil, *Kusaraja* oil, *Weera Manikkan* oil, *Neela* oil, *Ketaki* oil, *Auraja* oil, *Shriya Devi* oil, *Manda Kanthi* oil, *Bala Kumara* oil, *Sanniyata* oil, *Viharaja* oil, Sunni *Nayaka* oil, *Periya* Vilagan oil, *Vaiyata* oil, *Shehaka* oil, Oil for insane, *Keshpa* oil, etc. These palm-leaf manuscripts also contain a prescription for the preparation of these oils.

Among the types of *guli* (pills), *Maha Jeevananda Guliya, Kumara Guliya, Kola Kumara Guliya* and *Sivayang Guliya* were identified. Prescriptions for these pills are also included in these palm-leaf manuscripts. All the medicines for the decoction (*Kasaya)* are mixed and infused at a certain dose. The decoction prepared in this way is known by various names, namely, *Henaraja* decoction, *swelling* decoction, decoction for all worm diseases, *Rathata* decoction, etc. It was also revealed that *Kalka* (paste), *Churna* (powders), etc. have been used to treat various ailments. *Churna* is also known by various names, namely *Navaratne Churnaya*, *Megharaja Churnaya, Saraswathi Churnaya*, etc. It was also revealed that the drops have been used to cure diseases such as *Ullogan* (Thrush) and *Mandama* (Rickets) in young children. Under the *basna (*calcining), the *Ullogan basnaya* and the *Mandan basnaya* are mentioned. It was also discovered that laxatives could be used to treat stomach ailments (such as indigestion). Prescriptions for it are also included. It was revealed that most of the head ailments (head-related ailments) have been cured by *Nasna* (nasal inhalation treatment).

Indigenous Medicines Used for Treatment

Analysis of the data revealed that in the past indigenous medicines were used to cure diseases. Mostly native herbal plants, as well as herbal plant parts (leaves, bark, tender leaves, stems, roots, flowers, fruits, and yams), were used. Here we were able to identify a large number of indigenous medicines used to prepare each type of medicine. Namely Jasmine flower fruits, *Vara* (Calotropis procer) roots, *Ranawara* (Cassia auriculata) roots, *Savandara* (Vetiveria zizanioides) roots, *Vil Nelum* (Nelumbo nucifera), *Manel* (Nymphaea nouchali), *Induru* (Common Susum Bakong Rimba), *Benduru* (Variegated Oak Leaf Fern) yams, *Kalanduru* (Cyperus rotundus) yams, *Rasakinda* (Tinospora cordifolia) stem, *Iriweriya* (Plectranthus zatarhendi) roots, *Binthamburu* (Ipomoea asarifolia) roots, *Ela Rath Nithul* (Plumbago indica) roots, *Wetakeya* (Pandanus kaida) roots, *Aralu* (Terminalia chebula), *Bulu* (Terminalia bellirica), *Nelli* (Phyllanthus emblica), *Mukunuwenna* (Alternanthera sessilis) roots, *Rasakinda*

roots, *Thippili* (Piper longum), Ginger, Chili, *Kothamburu, Vel mee* (Liquorice), Orris, *Aran Kaha* (White Turmeric), Red onion, *Ingini* (Strychnos potatorum) nuts, *Ambul Dodam* (Citrus aurantium) juice, Lemaon acid (juice), *Thumba* (Leucas zeylanica), Turmeric, *Nika* (Vitex negundo) leaves, *Walanga* rice, *Thana* rice, *Vilanda* (roasted rice), Garlic, Mustard, *Deva Duru* (kind of cummin), Tamarind leaves, Sugarcane, Raw turmeric, *Labu* (Lagenaria siceraria) pea, *Udupiyaliya* (Aeschynomene triflora), *Adatoda* (Justicia adhatoda) roots, *Babila* (Sida rhombifolia) roots, *Kumburu* (Guilandina bonduc) nut, *Attana* (Datura metel) roots, *Nika* (Vitex negundo), *Kuppameniya* (Acalypha indica), Orange roots, *Kohomba* (Azadirachta indica), *Karawila* (bitter gourd - momordica charantia), *Thumba* (Momordica dioica ex Roxb.Willd), Chili roots, Karanda (Pongamia pinnata), *Maduru-thala* (Ocimum tenuiflorum), Lime roots, *Badulu* Nuts, *Bo* nuts (Ficus religiosa), *Keekirindiya* (Eclipta prostrata), *Akka Patta* (Bryophyllum pinnatum), Cinnamon bark, Coriander, *Penela* nuts and roots (Cardiospermum halicacabum), etc. In addition, lime sour, orange sour, ginger juice, etc., had also been used. In addition to native plants, a small amount of animal eggs (red ant eggs) and honey, breast milk, gingelly oil, ghee, *palmanikkam* (sulphate of copper), *seenakkaran* (potassium aluminium sulfate), *sivanguru* (kaolinumbolerubja), *savindalunu* (rock salt), opium, *perumkayam* (Compounded Asafoetida) and jaggery were also found to have been used.

6. Conclusion and Recommendations

Needless to say, our ancestors were healthy and long-lived because of the indigenous knowledge that they discovered and used locally. Because of this, a large portion of the population in today's society is accustomed to an efficient way of life and does not recognise the significance of the depth of local knowledge. This indigenous expertise that we currently possess must be preserved.

Preserving the traditional indigenous knowledge of the past for the future is a task that must be done systematically and responsibly. In working to preserve indigenous knowledge, it must be conserved in a way that does not harm it.

Over the centuries, our ancient ancestors have worked to preserve and transmit indigenous knowledge from generation to generation. Accordingly, they have taken steps to record in the palm-leaf manuscripts the cures performed in the past for the treatment of ailments encountered in the course of their work, as well as the troubles they had to face with certain invisible phenomena. They have also taken precautions to preserve the palm-leaf manuscripts on which they were written, just as they would their own lives.

A study of the concept of indigenous knowledge in the past has shown that indigenous knowledge is not harmful to human society or the environment. It can also be seen that the knowledge is practical and humane. The study identified that the traditional knowledge of the ancient ancestors, such as traditional medicine, farming, animal husbandry, exorcism, etc., was lost, and the society lost its knowledge by not passing it on to the next generation. Also, indifference towards local knowledge has led to alienation from the use of local knowledge. As a result, for Sri Lankans with a rich heritage, studying palm-leaf manuscripts rich in indigenous knowledge can provide insight into indigenous knowledge to society.

The sample in this research was a collection of uncategorised palm-leaf manuscripts from the National Museum's possession. This collection of palm-leaf manuscripts is an isolated collection that went unnoticed by researchers, and it is also not included in the bibliographies that have been published regarding the palm-leaf manuscripts in the possession of the National Museum. The main purpose of this research was to identify the subjects of the selected palm-leaf book sample separately. Here, I read books and identified palm-leaf manuscripts on medicine related to indigenous knowledge.

An analysis of the contents of the palm-leaf manuscripts selected for research concluded that in the past, various ailments of the whole body affecting everyone from small children to the young and old were cured. The analysis of the data concluded that the diseases in every part of the human body had been treated. The most common treatments were for imbalances of *Vatta, Pitta* and *Kapha* (collectively known as the *doshas*), eye diseases, diseases of small children, and diseases of pregnant mothers. However, it has been found that treatments have been given for all kinds of diseases that had afflicted humans in the past, as well as for cancer, for which no specific treatment had been found till recent years.

In the treatment of diseases, measures were taken to ensure that parts of the human body were not harmed. There is a mention of different types of oils to apply. *Kasaya* (decoctions), *Churna* (powders), *Basna* (calcining), *Kalka* (paste), *Vireka* (purgative), *Nasna* (nasal inhalation treatment), etc. have been used to cure ailments, and indigenous medicines have been used for this purpose. Native plants that were not harmful to health, as well as plant parts (leaves, bark, leaves, stems, roots, flowers, fruits, yams) and non-plant parts (honey, gingelly oil, ghee, breast milk), were frequently used for treatment purposes. This research concludes that in the past, the written knowledge of Sri Lanka was largely contained in palm-leaf manuscripts, although palm-leaf manuscripts are not of much importance today.

Overall, considering the physical condition of the palm-leaf manuscripts used for this research, it was concluded that although the letters in most medical books were recognisable, some of them were indistinguishable. The collection included well-finished palm-leaf manuscripts, as well as palm-leaf manuscripts with fewer folios and incomplete, mixed folios. In the case of the covers of these palm-leaf manuscripts, the threads of these hundreds of years-old texts are often frayed. There are very few manuscripts with editorials in this collection. There is no mention of the author in the Puskola manuscripts. Sinhala alphabet letters are used in sheet numbering, and no continuous numbering can be seen from the beginning sheet to the last sheet. Except for a few manuscripts, most of the manuscripts are often numbered from the inside. Despite the above shortcomings, as a whole, it was concluded that this collection of palm-leaf manuscripts, which includes local knowledge, is one of the most valuable collections of palm-leaf manuscripts in Sri Lanka.

As indigenous knowledge changes constantly and is passed down from generation to generation, the need to care for and preserve indigenous knowledge has arisen as some aspects of it have become increasingly isolated. It is proposed to physically care for and preserve these indigenous knowledge-possessed palm-leaf manuscripts, and it may be advisable to identify the subjects and include them in the subject-separated manuscripts in the main collection of palm-leaf manuscripts.

At the university level, researchers should be encouraged and supported to engage in research on palm-leaf manuscripts containing indigenous knowledge. It is also suggested to universities and research institutes that this research should be publicised and that knowledge should be disseminated systematically. It is proposed to obtain state-level sponsorship for the collection and preservation of palm-leaf manuscripts containing indigenous knowledge, and policies should be formulated at the state level for the same.

It is proposed to apply the past indigenous knowledge to the present development activities of the country and to use indigenous medicines used in the past instead of modern medicines for the treatment of human diseases today. In this regard, steps should be taken to inform the public that indigenous medicine has the potential to completely cure human diseases through the use of indigenous remedies. This research has identified a large number of herbs used in indigenous medicine, and action should be taken to preserve those herbs. Herbal gardens should be established and people should be made aware of the value of those herbs.

Many people today are proposing the Digital Conservation System for the preservation of historical documents. It is suggested that all these palm-leaf

manuscripts be digitally conserved and that a database (Dspase) be created for them. However, this information should not be leaked on the Internet and should be made available to researchers studying indigenous knowledge at the institute. For this, all the bibliographic information contained in a palm-leaf book should be included, and the palm-leaf book should be scanned and a digital copy should also be included. It is also proposed to provide this digital copy to researchers who come for palm-leaf book research so that the damage caused by the use of the original palm-leaf manuscripts can be minimised.

It is suggested to organise research workshops to educate researchers about this indigenous knowledge, as it is being lost in today's society. It is also very important to keep palm-leaf manuscripts in audio files for people who are reluctant to read manuscripts. Here, it is suggested to read and record the palm-leaf manuscripts from beginning to end by providing a recording device to the researchers who come to read them. It can also be used as one of the preservation methods to preserve the contents of palm-leaf manuscripts. Due to the reluctance of people living in today's society to spend time reading these manuscripts, it is very important to maintain the format of audio files because it can minimise the damage caused by constant use and can also be maintained for a long time.

We must try to preserve the indigenous knowledge contained in the palm-leaf manuscripts and we cannot move forward as a country without a strong foundation that is unique to us. It is an important principle educationally as well as culturally to emphasise that our ancient ancestors had highly developed local knowledge and it is our responsibility to preserve it. In this research, various suggestions have been made for the preservation of local knowledge, theoretically as well as practically, and it is proposed to plan and implement a comprehensive program at the national level for the preservation and protection of these manuscripts.

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