

1

AWARENESS OF INDIGENOUS MEDICINE AND THE ROLE OF SOCIAL WORKER IN THE PRACTICE OF INDIGENOUS MEDICINAL KNOWLEDGE TO PREVENT PANDEMICS (WITH SPECIAL REFERENCE TO COVID-19) IN SRI LANKA**Prof. Wasantha Subasinghe***Senior Lecturer in Sociology, Department of Sociology, University of Kelaniya, Sri Lanka***K.G.C. Dissanayake***Senior Lecturer, Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya, Sri Lanka*

Abstract: This current study is about the indigenous medicinal knowledge and its utilization. Many countries around the world are researching a suitable vaccine to defeat the chronic virus. Indigenous medicinal knowledge is being used as a quarantine strategy to prevent the coronavirus in Sri Lanka. The government encourages to use indigenous medicines. Indigenous medicine can be administered to both infected and non-infected cases. The research problem was to identify the practice of indigenous medicinal knowledge related to personal health care. Findings can be summarized as; people have an indigenous medicinal knowledge related to hygiene, Sri Lankans have a healthy life pattern, there is a trend of increasing communicable and non-communicable diseases, and there is a gap between knowledge and practice related to indigenous knowledge. The study suggests that the

ultimate goal of the social work is to uplift the human capacity to solve their problem by themselves. Make their intervention in micro and macro levels. Under micro level, he directly works with the individuals and families. In macro level social workers working towards the group and communities and make intervene for the problems in national and international level through the social policy and social work research. The government and non-Government agencies have good opportunity to uplift this relationship between Indigenous knowledge and the contribution of the Social Work Practitioner.

Key words: COVID-19, Indigenous Medicinal knowledge, Practice gap, Raising Awareness, Social Worker

INTRODUCTION

The current outbreak of Coronavirus Infectious Disease 2019 (COVID-19) which is caused by severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has inflated a pandemic situation worldwide (WHO, 2020). Influenza viruses are important viral pathogens attacking infants, young children and elderly often causing morbidity, mortality and significant economic and social impact on communities (WHO, 2020). Referring to the World Health Organization (WHO), COVID-19 and influenza viruses are having similar disease presentations likely respiratory origination and consists of a wide range of illnesses from asymptomatic or mild through to severe disease and death. The mode of transmission in both of COVID-19 and influenza are revealed as contagious form likely respiratory droplets and fomites. Therefore, in both the conditions same community health measures such as hand hygiene and accepted respiratory etiquette are much advantageous. The WHO estimates that approximately one billion people are infected and up to 500,000 people die from influenza each year in the world (WHO, 2020). Influenza is considered to be the greatest killer of the human population. Despite the effective treatment available against influenza, it still contributes to significant morbidity and mortality. Similarly, in absence of effective remedy for COVID-19 in modern medical sciences, the time has come to search through indigenous medical knowledge systems to find out an efficient management/treatment protocol. The current article discusses the COVID-19 pandemic situation and the prevention methods related with indigenous medicine habits in Sri Lanka.

Sri Lanka has a written history of more than 2500 hundred years including history of invasions such as Indian, Portuguese, Dutch and English colonies and resulted in a combination between eastern and western thought in the cultural system likely social, political, economic and cultural development. It is understandable that in recent history including over the past two decades, Western knowledge has surpassed indigenous knowledge in every field. The knowledge gained from the indigenous practices needed by the individual to lead a healthy daily life which was taken away from the people. It will help to reduce the spread of infectious, communicable diseases and non-communicable diseases that are spreading across the country. Similarly, these treatments are based on scientific knowledge of pathophysiology. Acharya Charaka, a great scholar of Ayurveda describes in case of newly oriented disease, the physician should rationally construct the etiopathogenesis or the pathologic physiology of an abnormal clinical picture based on the basic principles, etiology, symptomatology, and method of investigation for the proper management (Sharma, 2005). Thus reveals the importance of review on newly introduced diseases through Ayurveda perspective to find out a proper management protocol to address challenging health needs using the aforementioned methodology of Acharya Charaka.

Corona virus is commonly found as a pathogen of microscopic visibility which discussion on Ayurveda Krimi roga is much advantageous at COVID-19. Krimi in traditional medicine in a broad sense is all worms and microbes. It is also found that the Infectious diseases are also mentioned in Samhita Granthas as Sankramaka, and Upsargaja roga. Krimi which resides on different sites and invades the human body causes various diseases and results in Janapadodhwamsa (mass destruction of the community/territory) and Upasargika Roga (communicable diseases) (Sharma, 2005). Ayurveda perspective on contagious diseases is widely discussed in the Janapadodhwamsa chapter of Charaka Samhita Vimanasthana. The Janapadodhwamsa means pandemic conditions which cause

destruction of human colonies (Sharma, 2005). The Susruta Samhita (SS) highlights, fever (Jvara), skin diseases (Kushta), tuberculosis (Shosha) and conjunctivitis (Netrabhishyanda) could be vulnerable for pandemics (Murthy, 2017).

Indigenous medical systems along with the social norms of Sri Lanka discuss routine practices of health-related regimens to gain wellness. In COVID-19, pandemic period, according to the forefathers of indigenous practices of medicine in Sri Lanka, it is recommended to practice proper hygienic measures such as awakening early in the morning, brushing teeth, scraping tongue, gargling, cleansing face and oral cavity, steam inhalation, do exercises, yoga and meditation practices, bathing daily, consumption of wholesome diet, maintaining pleasant behaviours to soothe oneself as well as associates, passing natural urges in a proper way, maintaining a respiratory hygiene especially while sneezing, coughing etc, anointing oil, having a sufficient sleep, maintain the environment hygienically, etc (Murthy, 2005).

To Drink;

1. Kalanduru ala, Sudu Handun, Viyali Inguru, Iriverya, Pathpadagam, Sevandara Mul
2. Heen Aratta Ala, Viyali Inguru, Kottamalli, maduruthala Mul, Pawatta mul (Department of Ayurveda, 1985)

To Gargle

1. Heen Maduruthala Kola, Gammiris ata
2. Kurundu pothu, Karabu nati thamba
3. Kurundu pothu, Karabu nati, Athdemata pothu
4. Magul Karanda pothu, Pilamul, Gammiris ata (Department of Ayurveda, 1985)

Steam inhalation

1. Steam with lemon leaves - Dehi/ Dodam/ Naran
2. Kottamalli, Pawatta, Beli kola, Madurutala kola, Elabatu, Katuwalbatu, Pethitora for steam inhalation (Dissanayake, Fernando & Perera, 2020) (Department of Ayurveda, 1985)

Diet and behavior

Wholesome diet (Pathya Ahara)

Light diet, properly cooked food, *Kithul* Jaggery, suitable fruit juices (*Delum* etc), boiled water, mung bean. gruel (*Yavagu: Panchakola Yavagu*), boiled rice (*odana*) and popped or perched paddy (*Laja*), infusions (*peya*) prepared with *Laja/Yava* added with ginger, *Pippalimula*, Indian gooseberry, dried grapes, vegetables like ribbed gourds, snake gourds etc (Dissanayake, Liyanage, and Weliwita, 2020) has mentioned Sri Lankan Traditional Spices, such as pepper, mustard, ginger, garlic, etc. are beneficial in immunomodulation. Porridge with Green Leaves (*Kola Kenda*): *Gotukola*, *Maduruthala*, *Yakinaran*, *Polpala*, *Elabatu Patra*, curry leaves, Aloe Vera and Mung Beans with *Kithul* Jaggery (one or more) (Liyanage, R.P. and Karunarathne, H.K.B.M.S., and Karunathilake, E.M., 2015)

Unwholesome diet (Apathya Ahara) and unwholesome regimen (Apathya Vihara)

Heavy food, cold foods and drinks, curd, green peas, black eyed beans, lentils, yellow gram, black gram, raw vegetables and salads, refined foods such as white flour (*Maida*), contaminated water or food, sprouts, cold food and beverages, junk foods, fried food, bakery items, fried food, and curd.

Physical and mental exertion like excessive physical exercises, over and repeated eating, exposure to cold, breeze, suppression of natural urges, taking bath with cold water, frequent change of warm and cold climate etc (Sharma, 2005).

Treatment Guideline;

- For this stage regaining of digestive fire is instructed (*Ama Pachana, Deepana and Langana*) therapeutic measures are recommended. It helps to increase appetite, digestion and absorption.
- Pacifying of body humors, specially *Kapha*, Maintaining cardiorespiratory circulation of body satisfactorily (*Vata Anulomana chikitsa*) should be provided
- Protection of physique, digestive power and mindset (*Deha bala, Agni bala and Manasa bala*)
- Enhance the immunity (*Ojo bala: Vyadhi Kshamathwa*)

The role of Social worker

In the initial stage social work started as the volunteer service and gradually it expand as a profession with including academic discipline. Social workers work for children, family, patients, elders and marginalized groups. He gives assistance, helps people to solve and cope with problems, diagnose and treat mental, behavioral, and emotional issues. According to the International Federation of Social workers “Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life challenges and enhance wellbeing. The above definition may be amplified at national and/or regional levels” (IFSW 2014). Social worker plays his role as a case manager, educator, facilitator, organizer, and advocator etc.

The role of the social worker becomes very important during this epidemic period to build up a high standard of living for the community. Therefore a safe working environment is essential for social workers and the clients they serve. In this case, the role of the social worker can serve in two ways;

1. Assisting those who are infected
2. Assisting in the quarantine of non-infected people.

Along with the professional skills of the social worker, communication skills and the use of modern technology should be used to rescue people from the epidemic and improve public health and safety. The role of the social worker in controlling disease should be short-term, medium-term and long-term. The social worker can be involved in the quarantine process in two ways.

1. Teaching fact-based hygiene habits
2. Practice local safety guidelines

Research Problem: What is the practice of indigenous medicinal knowledge related to personal health care?

Research questions;

What is the health knowledge required for daily life?

What role can a social worker play in transmitting indigenous knowledge to prevent pandemics?

Research Scope and Objectives

- The main purpose of the current research was to find out if the general public in the society has indigenous knowledge about health and to what extent people use that knowledge for the betterment of their daily lives.
- Identifying the role of social worker that bring indigenous knowledge back to Sri Lankans.
- Introducing ways in which indigenous knowledge can be used to live a healthy and satisfied life.

Literature Review:

Banks, S. *et al* (2020): 'Ethical challenges for social workers during Covid-19: A global perspective', This report summarizes the findings of an international study of the ethical challenges faced by social workers during the Covid-19 pandemic, 607 responses from 54 countries were received via an online survey, additional interviews and local surveys. Six key themes relating to social workers' ethical challenges and responses were identified.

Kathleen J. Farkas & J. Richard Romaniuk (2020); 'Social Work, Ethics And Vulnerable Groups In The Time Of Coronavirus And Covid-19' The paper presents challenges and innovations using examples of two community agencies providing services to people who are homeless and addicted. Social workers have responded to increased need through networks and collaborations with health care, social services and government/private organizations.

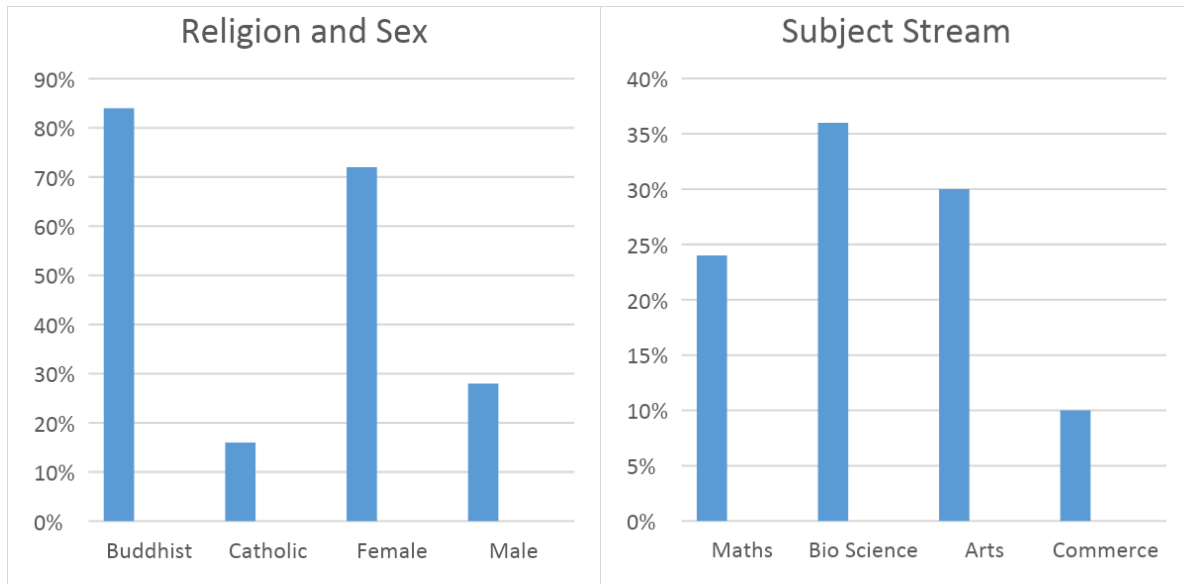
Solomon Amadasun (2020): 'Social Work and COVID-19 Pandemic: An Action Call' the pandemic has undermined the profession's historical value commitment to social justice and human rights while overturning our insistence on the importance of human relationships. The purpose of this essay is to explicate the nexus between social work and COVID-19 pandemic. While noting the deafening silence of the profession in the global discourse of the pandemic, it advocates for the urgency of social workers' response is to attain significant public value amid the current loss of lives and threats to human rights.

Methodology:

This is basic research. Ontological approach is objectivism and epistemology is positivism. Data were collected using a survey design and online questionnaire form was used. The sample was selected according to the random sampling method of probability sampling. The sample size was fifty with Advanced Level students with different subject streams. Time duration was October 2020.

Findings and Discussion

Awareness of communicable diseases and using indigenous health practice and to explore the contribution of the social worker to improve the use of that indigenous knowledge and guide to sustain it. Advance Level students were used as the sample. The randomly selected sample consisted of fifty people. The table below describes its nationality, religion, gender, and representation of the mainstream in which they study.



Source: Field data, 2020

The research was focused on only the knowledge related to the influenza situation, the major viral condition associated with the *corona* epidemic that is currently facing the world. Based on the information obtained, it will be possible to open a way to disseminate the knowledge required to live a healthy life on a daily basis. Therefore, in this initial research; knowledge was tested only on influenza symptoms. The first question was encountered to raise awareness about infectious diseases. All the participants have depicted that it can be passed from one organism to another and from one infected person to a healthy person. More than 80% elaborated that communicable diseases can be transmitted by viruses, bacteria and fungi, as well as by microorganisms, animals and food. In addition to aforementioned factors, the disease has been linked with unwholesome food consumption, unwholesome lifestyle, environmental pollution as air and water pollution, low immunity, less water consumption, improper personal relationships and even by shaking hands. There is a clear difference between these two types of answers. One group sees the cause of disease scientifically and the other group thinks it is caused by social factors.

People are having different levels of knowledge about diseases. They presented a list of viral diseases. Some of them are Dengue, HIV AIDS, Chickenpox, Influenza, Hepatitis B, Filaria, Herpes, Ebola, Sexually transmitted Diseases, Measles, SARS, Corona, and Rubella etc. Among these, many threatening communicable diseases in Sri Lankan society are considered as chicken pox, measles and mumps. Indigenous knowledge suggests that these diseases are caused by imbalance of body humors which are *vaa pith and sema*. Sri Lankans are aware of the remedies, and medicines that can be administered while epidemics or an infection of a communicable disease. Utilization of such

indigenous knowledge beneficial in their healing process. Those treatments are obtained through indigenous knowledge and the basis of some therapies from Ayurveda.

Research findings reveal that about 50% of people are taking any type of indigenous treatment to prevent from the *corona* epidemic. Although they are familiar with using them in everyday life, they use specialized home remedies especially during this epidemic period. In the meantime, they consume hot black tea with ginger at least thrice a day. As well, consumption of hot infusion of ginger and coriander is much popular. Externally, inhale hot water vapors with or without infusing leaves of citrus plants. These practices have also been accepted by the Government Infectious Diseases Control Unit collaboratively with the State Ministry of Indigenous Medicine of Sri Lanka.

There is a general awareness in society on how the viral diseases are transmitted. As a result, practicing closed contacts like touching, kissing, sneezing, consummation, associating with patients, sleeping together, exchanging clothes, using single containers, and using public transportation, and so on. People believe that the viruses can be transmitted through insects, pets, air and water. When people experience symptoms such as runny nose, fever, shortness of breath, headache, difficulty in swallowing, loss of appetite and body aches, they seek out an indigenous prescription or Western medical treatment. Over the past two decades, the trend has been directed to seek allopathy medical treatment in such cases. Despite the knowledge of the indigenous medicines, they are aware of which herb should be taken for this purpose, many people refrain from using them. There are various reasons for this.

One of the key findings of the research was to determine whether the above mentioned drugs and habits are used to prevent from COVID-19. 60% of participants are aware of aforementioned drugs, even though only 40% of them intake those. In addition to those prescribed medications, people have an idea of the other effective indigenous medical formulas such as beverages, infusions and decoctions that can be taken to prevent and control viral diseases. *Dasapanguwa* or *paspanguwa*; seeds of coriander,; *aralu*, *bulu* and *nelli*; mixture of rhizome of ginger and seeds of coriander; as hot infusions/decoctions and drinks with fruits of citrus family; rice gruel, porridge prepared using green leaves are much popular among afore surveyed general public.

In the second stage, the knowledge on special foods and beverages that should be in taken to prevent from viral diseases were observed. As a result, 40% of participants expressed that they consume such foods to enhance their immunity. As well, 20% of the study group conveyed that intake of nutritious foods is essential to maintain their immunity over the lifetime. Majority respond that as a habit, fresh vegetables and fruits should be consumed. The study revealed that most participants acquired a kind of inherited knowledge through their family practice from generation to generation on wholesome habits and foods to prevent influenza-related viral illnesses. Therefore, the study clarifies the social attitudes on malpractice of food habits such as regular consumption of junk and genetically modified foods are unwholesome and those consumers are needful to recall their indigenous knowledge against such malpractice.

Indigenous foods included vegetables, fruits, and especially spices. Customary, Sri Lankans prepare food with spices with the attitudes on the taste as well as to promote wellness through regulating immunity by detoxifying effects. As commonly used spices black pepper, cinnamon, cardamom, cloves, nutmeg, *wasawasi*, coriander, turmeric, garlic, fenugreek, and ginger are popularized. Indigenous medicine suggests that ginger and garlic should be mixed together in various dishes of

culinary practice. 57% of the participants highlighted that they consume a considerable amount of ginger and garlic during this *Corona* pandemic season. As well, intake of hot water to prevent from COVID-19 and consumption of a balanced diet as much as possible were revealed by the participants. Along with rice, cereals such as cowpea and peas, potatoes and traditional yams, vegetables such as drumsticks, (tender jack fruits) *polos* and pumpkins, as well as herbs such as spinach, milk thistle and *gotu kola* are added to their routines.

Consumption of indigenous medical formulations as hot infusions are much popularized while the pandemic period such as infusion prepared with coriander and ginger is widely used by 45% of participants. Unless, 70% of people revealed they knew the aforementioned formulation is beneficial in pandemic situations, but not consumed in regular practices.

According to indigenous customs and values Sri Lankans have practiced different behavioral patterns to achieve hygiene. Personal hygiene is one of the special cultural characteristics of Sri Lankans. Sri Lankans in the modern era used to shake hands or hug each other when they meet someone special, despite the traditional practice of welcome, likely folding their own palms together and greeting each other by saying “Ayubowan”. The current research study examined whether there is any indigenous knowledge system to promote and maintain personal hygiene. 90% of the survey group had mentioned more than two specific statements. Among them, 30% habitually practice to utilize their own towels, bedsheets, blankets, combs, dishes, cups, sandals and shoes individually, unfortunately, rest of 70% knew the importance of individual consumption of aforementioned personal needs, though adding those hygienic policies into their general routine has not considered. All of the study group are aware of the importance of washing hands with soaps before eating, frequent hand soaping, spraying turmeric/disinfectant water on homes and surrounding areas, emission of medicated smokes (*dum gasima*), chanting *pirith*, use of safe toilets, and regular cleaning pillows and mattresses.

Considering all of the above-mentioned hygienic measures and good practices, 35% of participants are practicing those. 55% mentioned that such kind of hygienic measures to clean living surroundings are done four or five times a year. However, during the current pandemic period, 60% of the surveyed population focused on personal hygiene, likely washing hands frequently with soap, wearing face masks and maintaining social distance. The study identifies the need of a program to encourage people to use their indigenous knowledge to rid themselves from the vulnerability to get infected COVID-19. Application of indigenous sanitizers in general practices such as margosa leaves and turmeric liquid sprinklings are effective in controlling the spread of such infectious disease for generations, which could be easily reintegrated into society for health protection.

The study was narrated to identify the knowledge and attitudes on herbs which are grown or found in their own homeland. As a result, 75% of respondents highlighted that they have at least three medicinal plants in their garden. Among those herbs, most plants can be used for edible needs and medicinal purposes such as curry leaves, clove, cinnamon, pepper, lime, mace, nutmeg, tamarind, ginger and turmeric. In many residences, even a little amount of; wing beans, spinach, *gotukola*, passion fruit, *kiri aguna*, *welpenela*, *haathawaariya*, *monarakudumbiya*, *polpala*, *aloe vera*, ginger, turmeric, pandan leaves, yams are grown. Many Scientific studies revealed that these herbs consist of anti-inflammatory properties and could be added to the diet for daily nutrition as well as to

prevent various diseases such as gastritis, diarrhea, joint pain, diabetes, oral infections, stomachache, bladder infections, constipation, influenza and cough.

The study group mentioned that they have specially used lemon juice, tea, tea with cinnamon, tea with ginger, coriander with ginger, gruels from leaves of *katuwelbatu*, *gotu kola* salad, *polos* curry to prevent from corona virus according to their indigenous medicinal knowledge during this Quarantine period. Though, in general practices, it is common that there is a trend to widespread communicable and non-communicable diseases in Sri Lanka because of unhealthy food practices and regimens.

As per the current study, most of the general public rarely practice indigenous medicinal knowledge to maintain healthy life in routine consciously.

Main findings of the research can be concluded as follows.

- People have acquired indigenous medicinal knowledge related to hygiene by family practice.
- Sri Lankans had a healthy life pattern.
- There is a trend of increasing communicable and non-communicable diseases.
- There is a gap between indigenous knowledge and practicing.

Suggestions:

There are many services and professions dedicated to serving the people of Sri Lanka. But they are intertwined with different perspectives. Development interpretation has often been done by Western thought. Sri Lankan hierarchies are created to achieve those development goals. At the Ministry and Divisional level, various professionals are employed to serve the society. They operate at the governmental and non-governmental levels. Among those professions, Sri Lankan Ayurveda Community Medical Service extends a great contribution in public health needs.

‘Social worker’ is a comparatively new profession in the Sri Lankan service sector. This position is effectively utilized only in a very limited number of institutions, including the Institute of Mental Health. Social security is a special and typical subject unit among the universal roles of the social worker including helping with cultural conservation, care for children and work with elderly people and engaging in cross-cultural interchange programs.

Therefore; the social worker that can be used to impart the indigenous knowledge needed for people including vulnerable groups to achieve a sustainable high standard of living in a more practical way and to monitor its implementation. A collaborative programme with Ayurveda Community Medical Service and Social Workers will extend an immense contribution to promote public health and prevent the general public from both communicable and non-communicable diseases. Re-socialization of indigenous knowledge in promotion of the physical, psychological and spiritual health of society will be an achievable task by such kind of collaboration. Hence, Expenditure to import medicines, foods, beverages and other associated needs will be reduced and indigenous knowledge will serve the country to generate local income and enhance the per capita income through satisfactory service for satisfactory life.

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