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Knowledge and Practices on Prevention of COVID-19 among Traditional Medical Practitioners in Sri Lanka

A. B. Dharmarathna [a*†] and W. M. S. S. K. Kulathunga [b‡]

[a] Post Graduate Institute of Indigenous Medicine, University of Colombo, Sri Lanka.
[b] Institute of Indigenous Medicine, University of Colombo, Sri Lanka.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Introduction: An outbreak of pneumonia of unknown reason was named as COVID-19 by WHO and declared as pandemic. It was observed as most people infected with the COVID-19 virus is mild to moderate respiratory illness and recover without getting treatment. Older people with chronic diseases are more likely to develop serious illness. There is no effective modern medicine available so far for the treatment of COVID-19.
Objectives: To assess the Knowledge on prevention of COVID-19 Epidemic among the Traditional Doctors.
Methodology: Descriptive study was conducted among the 20 Traditional Practitionerson Knowledge and prevention of Corona Epidemic by purposively selected, open ended questionnaire that used a 5-point Likert scale for the response option. Recoding in to different variable and Analysis each question. According to that frequency distribution as 1-3 responses in to1 - Inadequate knowledge 4-5 responses in to 2- Adequate knowledge. The questionnaire included

[†] M D Scholar;
[‡] Senior Lecturer;
**Corresponding author: E-mail: drbuddhika.ad@gmail.com;*

socio demographic characteristics, questions regarding the Knowledge and prevention of Corona Epidemic (Q1 toQ10). SPSS Software (16 version) used for Statistical analyzing. Descriptive statistics such as frequencies, mean mode, Slandered deviation and percentage were used to describe variables.

Results: According to the present study mean age was 49.6±1.2737(SD). Considering all the questions Q1 to Q10 Adequate knowledge vary in 50 -80% and Inadequate knowledge vary in 15-50%. In our study 80% of them were mentioned that corona infection was mainly affected to the respiratory tract, most common symptoms were sore throat in 70%, transmission of the Corona infection through air 50%, reduce social distance less than one meter 80% was the main cause for the infection transmission through the society, the precautions for prevent the corona infection through the society that Keeping social distance more than one meter in 85%, The advises given by them in the management lived separately from others until cure the diseases in 45%,The treatment protocol followed them in the treatment Administration of immunity enhancement drugs 30%, wholesome foods and behaviors suitable for corona infection were reducing Kaphadosha (one of the body humor) 35%.

Conclusion: In the present study Considering all the questions Q1 to Q10 most of them have adequate knowledge. Although they were not expressed much details of the treatment protocol in the management. It is recommended that further large scale studies are needed to confirm the knowledge and Prevention of Corona epidemic.

Keywords: Corona infection; epidemic; knowledge; traditional medicine.

1. INTRODUCTION

An outbreak of pneumonia of unknown reason was first reported on 31st December 2019 from Wuhan City in Hubei Province of China. Illness was diagnosed as “Novel Corona Virus” in 2020 january 7th. On 30/012021and declared as a Public Health Emergency of International Concern (PHEIC) on 11/02/2020 by the World Health Organization(WHO).As well it was renamed as COVID-19 and on 11/03/2020 declared as pandemic [1].

The Chinese Center for Disease Control and Prevention (CDC) was introduced corona virus as severe acute respiratory syndrome coronavirus (SARS-CoV-1) and Middle East respiratory syndrome coronavirus (MERS-CoV) as possible causes for the respiratory syndrome, but eventually declared it as a novel coronavirus, later on COVID-19. Though the actual route of transmission is uncertain at this point, it is speculated to be a zoonotic disease transmitted to humans; however, the prevalence of human-to-human transmission has led to the pandemicity.

After that new cases began presented in Thailand, Japan, South Korea, France, and the United States of America (USA)due to travelling among the countries by mid-January. By the end of January, the novel coronavirus had spread through the Western Pacific, South-East Asia, USA, Canada, Europe, and Eastern Mediterranean countries. This spread constituted a Public Health Emergency of International Concern (PHEIC). As of June 9, 2020, there were 7 039 918 confirmed cases with 404 396 deaths and 3 596 972 that recovered, globally. The confirmed cases and deaths peak in countries with COVID-19 increasing on lack of population education and awareness, preventative measures, and interventions taking place [2]. In globally Covid -19 infection are still rising in 47 countries up to now [3].

In Sri Lanka, the first case of COVID-19 was reported late January 2020 which was a Chinese national and the first local case was identified in the second week of March. Since then, the government of Sri Lanka introduced various preventive measures to improve social distancing such as closure of schools and education institutes, introducing work from home model to reduce the public gathering, introducing travel bans to international arrivals, and island wide curfew expecting to minimize the spreading of the disease in the country [4]. In Sri Lanka up 25th 0f march 2021 total Number Confirmed cases 91018, total Number of deaths 554.Among the deaths male were 342 and female were 212 [5].

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring

special treatment. Older people, and those with medical problems like communicable diseases (cardiovascular disease, diabetes, chronic respiratory disease, and cancer) are more forcus to develop serious illness.

The best way to prevent and slow down transmission is to be well educated the community about the COVID-19 virus, the disease it's spreading. Protect self and others from infection by washing hands or using an alcohol based rub frequently and not touching face.

The COVID-19 virus spreads primarily through droplets from mouth or nose when an infected person coughing or sneezing, so it's important also practice preventive measures of respiratory diseases (for example, by coughing into a flexed elbow) [6].

Indigenous communities who make up a large portion of the traditional medicine community to play their role in the fight against COVID-19.Scientists are working around the clock, waging war against COVID-19 to find a cure, a vaccine.or something that addresses the pandemic caused by the coronavirus. The COVID-19 war is noexception with national and international governments faced with planning COVID-19 strategies. Scientists around the globe are working to find a vaccine, healthcare workers are on the frontline treating thousands of sick people, and they are concerned that they maycontract the virus and spread it to their loved ones. The economies of the world are plummeting Many people began resorting to herbal remedies,.natural roots and foods from plants such as garlic, ginger, turmeric, onion, cucumber, broccoli and other naturals. The idea was that these natural products are good at boosting theimmune system and would enable the body fight off the virus [7].

The quarantine and self-isolation practices recommended by the WHO are familiar to communities in Sri Lanka.Villagers would know why neem (*AzadirachtaIndica*) branches are hanging from a neighbor's gate, a practical signal to communicate that members of the household are infected with a contagious decease, It was a silent message that calls for maintaining healthy distance. Another traditional practice during a time of infection.is to place a bowl of water with cut pieces of lime (*Citrus aurantifolia*), turmeric (*Curcuma longa*), charcoal and lots of crushed neem (*Azadirachtaindica*) leaves at the entrance and the back door of a house for wash the hand,foot and facebefore entering the house and when leaving. The water is changed daily and the bowl kept in place for several more days after the disease is over.The medicinal properties, especially the antiseptic qualities of neem, turmeric and lime, are acknowledged by the Ayurveda system and proved byscientific studies. When someone contracts a disease like chickenpox or measles, there's a home remedy: a bed of neem leaves to sooth the skin, especially if there are blisters, These customs are mainly practiced to contain the spread of infectious diseases that locals refer to as "diseases of the gods." Like COVID-19, most are viral diseases: chickenpox, measles, mumps and smallpox. These traditional rituals, called *Shanthi Karma*, are a combination of dance, chanting and the strumming of drums to invoke blessings of deities to eliminate evil spirits because they believed that cause of the diseases are there.The Veddas(Joungle people)community in Sri Lanka, have their own methods of dealing with illness. Veddhas believe the spirit of their dead haunt them and cause diseases, and they perform a special dance known as the *Kirikoraha* to seek relief. They add neem (*Azadirachtaindica*) leaves to a boiling pot of milk and dance around the pot, while getting the milk sprayed on their bodies using tiny neembranches.These rituals have any measureable impact on community health. Indigenous food habits that help strengthen the immune system. Before tea was introduced to Sri Lanka, the natives consumed a variety of herbal drinks and porridges. It was normal for every home garden to have a few herbs and to regularly consume them.

Among the most popular ingredients in herbal drinks and home cures are coriander (*Coriandrumsativum*), *ranawara* (*Sennaauriculata*), *polpala* (*Aervalanata*), and *venivel* or yellow vine (*Cosciniumfenestratum*) [8].

1.1 Objectives

To evaluate the Knowledge on prevention of Corona Epidemic among the Traditional Medical Practitioners.

1.2 Specific Objectives

1) To assess the Knowledge onCovid 19 Epidemic ~~in~~ among the Traditional Medical Practitioners.

2) To assess the knowledge on preventive measuresofCovid-19 among the Traditional Medical Practitioners.

2. METHODOLOGY

Descriptive study was conducted among the Traditional Doctors in the training programme at National Institute of Traditional medicine. Total number of 20 Traditional Doctors were responded at the training centerfor the Knowledge and prevention of Corona Epidemic by open ended questionnaire that used a 5-point Likert scale for the response option(1-very unsatisfactory,2-unsatisfactory,3-neutral,4-satisfactory,5-verysatisfactory) [9]. Recoding in to different variable and Analysis each question. According to that frequency distribution as 1-3 responsesin to1 - Inadequate knowledge 4-5 responses in to 2- Adequate knowledge.The questionnaire included socio demographic characteristics, questions regarding the Knowledge and prevention of Corona Epidemic. SPSS Softwere(16 version) used for Statistical analyzing. Descriptive statistics such as frequencies,mean mode, Slandereddeviation and percentage were used to describe variables.

3. RESULTS

Table 1. Frequency distribution of socio-demographic characteristics of study group

Socio-demographic characteristics		Frequency	Percentage
Age group	30-40 years	3	15%
	41-50 years	5	25%
	51-60 years	10	50%
	61-70 years	1	1%
	71-80 years	1	1%
Living Area	Urban	14	70%
	Suburban	3	15%
	Rural	3	15%
Gender	Male	16	80%
	Female	4	20%
Civil status	Married	15	75%
	Unmarried	5	25%
Ethnicity	Sinhala	20	100%
Religion	Buddhist	20	100%

In our study mean age was 49.6±1.2737(SD) and Mode 59. Most of them were in 51-60 age group, lived in Urban area70%,gender in male 80%, Married 75% ,ethnicity 100% and religion 100%.

Table 2. Frequency of responses to the questions

Question		Responses				
		Very Unsatisfactory	Unsatisfactory	Neutral	Satisfactory	Very satisfactory
Q1 What is the main system of the body affected by Corona infection?	Frequency Percentage	3 15%	1 5%		16 80%	
Q2What are the symptoms of corona infection according to the Traditional medicine?	Frequency Percentage	1 5%	2 10%		17 85%	
Q3What is the environmental factor for the transmission of the Corona infection?	Frequency Percentage	2 10%	4 20%		14 70%	
Q4How corona infection transmission through the society?	Frequency Percentage	2 10%	1 5%		17 85%	

Question		Responses				
		Very Unsatisfactory	Unsatisfactory	Neutral	Satisfactory	Very satisfactory
Q5What are the precautions for prevent the corona infection through the society?	Frequency Percentage	2 10%	1 5%		17 85%	
Q6 What are the advises given by you in the management ofcorona infected patient?	Frequency Percentage	3 15%	1 5%		17 80%	
Q7What is the treatment protocol do you follow in the treatment	Frequency Percentage	7 35%	3 15%		10 50%	
Q8What are the herbal Plants using in the management of corona infected patient?	Frequency Percentage	4 20%	1 5%		15 75%	
Q9 What are the herbal readymade medicine using in the management of corona infected patient?	Frequency Percentage	2 10%	6 30%		12 60%	
Q10 What are the wholesome foods behaviors suitable for corona infection?	Frequency Percentage	5 25%	2 10%	2 10%	11 55%	

Recoding in to different variable and Analysis each question. According to that frequency distribution as follows

1-3 responsesin to1 - Inadequate knowledge
4-5 responses in to 2- Adequate knowledge

1)Q1- What is the main system of the body affected by Corona infection?

According to Q1 Adequate knowledge in 80% andInadequate knowledge 20%

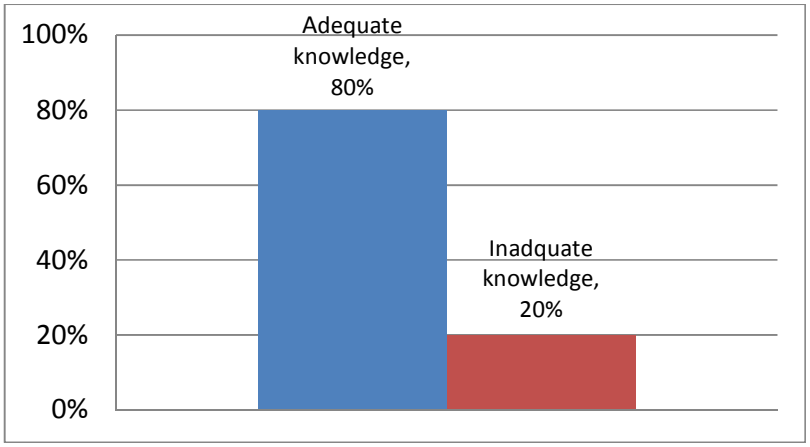

Fig. 1. Percentage in knowledge 01

Table 3. Frequency of responses to Q1

Response	Percentage
Respiratory system	80%
Other	20%

2)Q2- What are the symptoms of corona infection according to the Traditional medicine?

According to Q2 Adequate knowledge in 85% and 15% in inadequate knowledge.

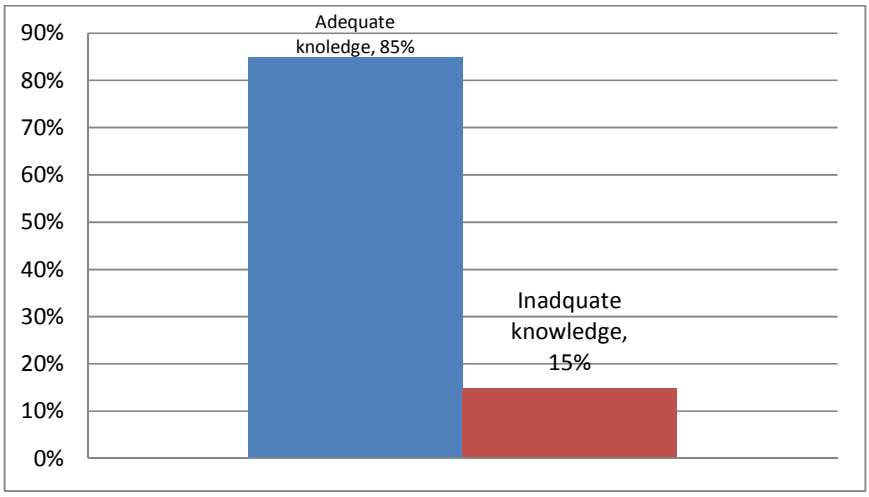

Fig. 2. Percentage in knowledge 02

Table 4. Frequency of responses to Q2

Symptoms in Stages	symptoms	Response in Percentage
Most common symptoms	Fever	60%
	Dry cough	50%
	Tiredness	30%
Less common symptoms	aches and pains.	50%
	sore throat.	70%
	diarrhea.	0%
	a rash on skin, or discoloration of fingers or toes	0%
	conjunctivitis./Red Eye	0%
	headache	5%
	loss of taste or smell.	5%
	Nausea or vomiting,	0%
Serious symptoms	Difficulty in breathing or shortness of breath.	60%
	loss of speech or movement	0%
	chest pain or pressure.	0%

According to the traditional doctors response regarding symptoms,most common symptoms were sore throat in 70%,fever and Difficulty in breathing or shortness of breath in 60%,Dry cough,aches and pain in 50% and tiredness in 30%.

3)Q3-What is the environmental factor for the transmission of the Corona infection?

According to Q3 70% in Adequate knowledge and 30% in Inadequate knowledge.

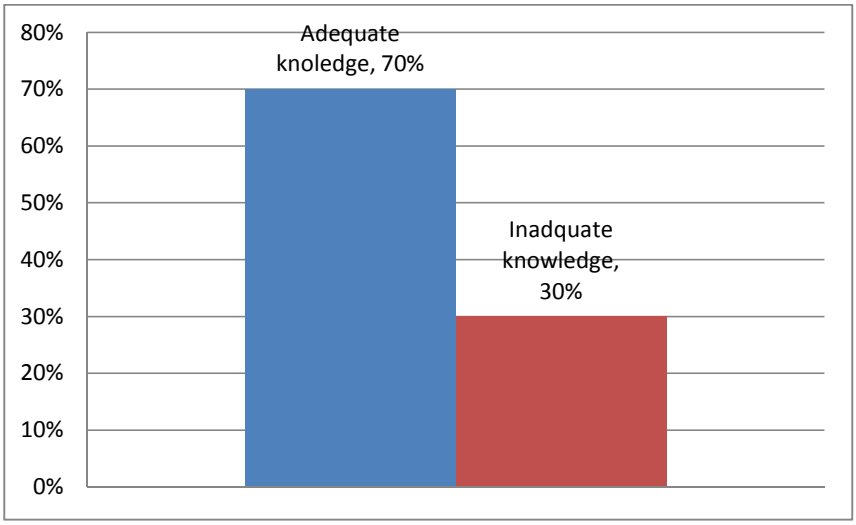

Fig. 3. Percentage in knowledge 03

Table 5. Frequency of responses to Q3

Response	Percentage
By Air	50%
By food	10%
By Secretions of the body	15%
By touching surfaces	15%
By Water	5%

According to the environmental factor for the transmission of the Corona infection,most of them were mention that Air 50%,secreations of the body and touching surfaces 15%,by food 10% and 5% in water.

4)Q4- How corona infection transmission through the society?

According to the Q4 Adequate knowledge in 85% Inadequate knowledge in 15%.

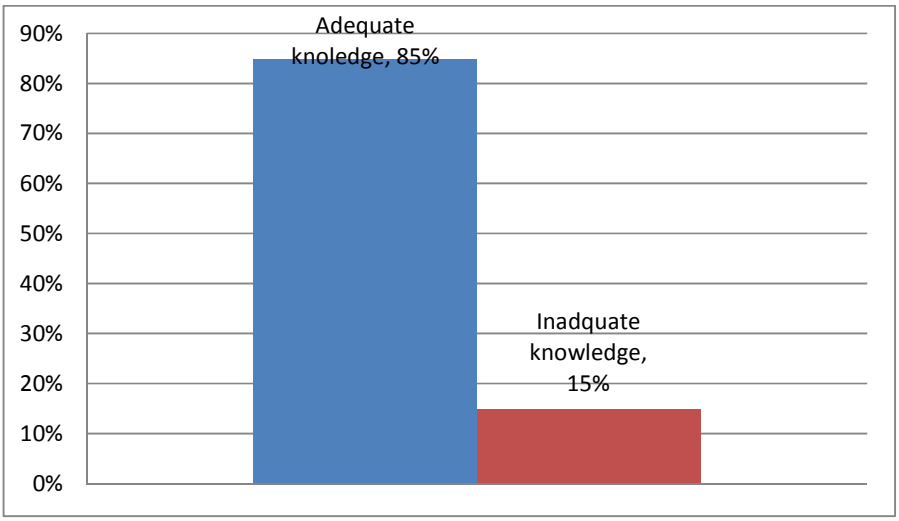

Fig. 4. Percentage in knowledge 04

Table 6. Frequency of responses to Q4

Response	Percentage
Reduce social distance less than one meter	80%
Not doing hand washing in properly	30%
Not wearing face mask, face shield	15%
Handling of Animals	5%

Reduce social distance less than one meter 80% was the main cause for the infection transmission through the society. As well as not doing hand washing in properly 30% and not wearing face mask, face15% shield are other reason.

5)Q5- What are the precautions for prevent the corona infection through the society?

According to the Q5 Adequate knowledge in 85% Inadequate knowledge in 15%.

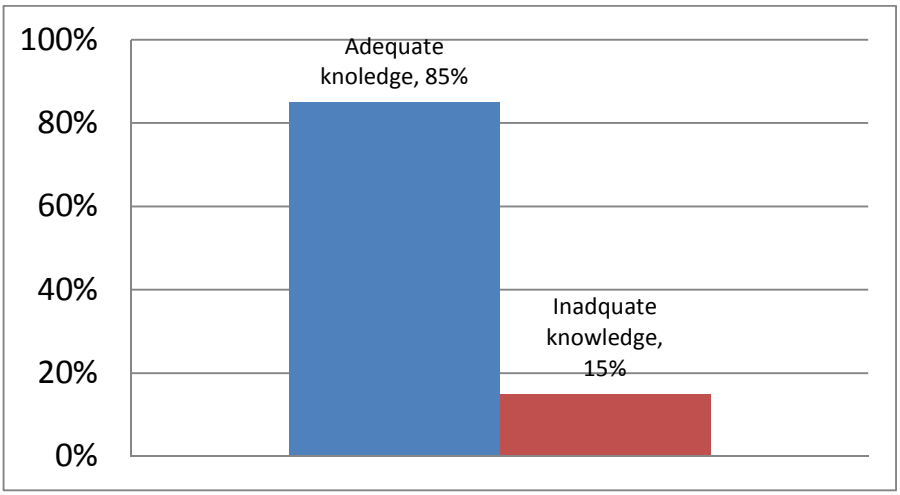

Fig. 5. Percentage in knowledge 05

Table 7. Frequency of responses to Q5

Response	Percentage
Keeping social distance more than one meter	85%
Doing hand washing in properly	60%
Wearing face mask, face shield	30%
Environmental sanitation	10%
Taking hot food and drink	5%
Proper waste management	5%
Coughing and sneezing with cover by bend elbow	5%

According to the precautions for prevent the corona infection through the society ,most of them were mentioned that Keeping social distance more than one meter in 85%, Doing hand washing in properly 60% , Wearing face mask, face shield in 30% and Environmental sanitation10%.

6)Q6- What are the advises given by you in the management corona infected?

According to the Q6 Adequate knowledge in 80% Inadequate knowledge in 20%

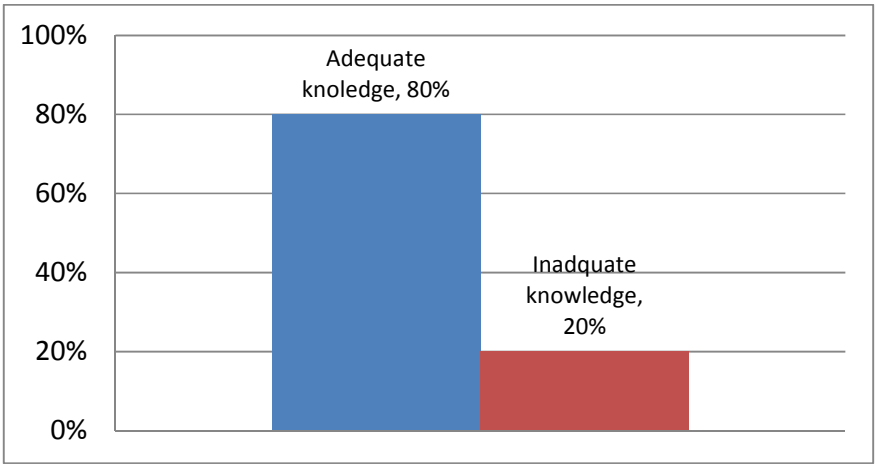

Fig. 6. Percentage in knowledge 06

Table 8. Frequency of responses to Q6

Response	Percentage
Lived separately from others until cure	45%
Advising the taking food which are enhancing the immunity	15%
Steam inhalation	10%
Explaining the symptoms of corona infection	10%
Doing hand washing in properly	5%
Wearing face mask, face shield	10%
Taking hot water	5%
Bed rest	5%

The advises given by them in the management corona infectedcases,Lived separately from others until cure the diseases in 45%, Advising the taking food which are enhancing the immunity 15%, Steam inhalation10%,Explaining the symptoms of corona infection10%,Wearing face mask, face shield 10%.

7)Q7- What is the treatment protocol do you follow in the treatment?

According to the Q7 Adequate knowledge in 50% Inadequate knowledge in 50%.

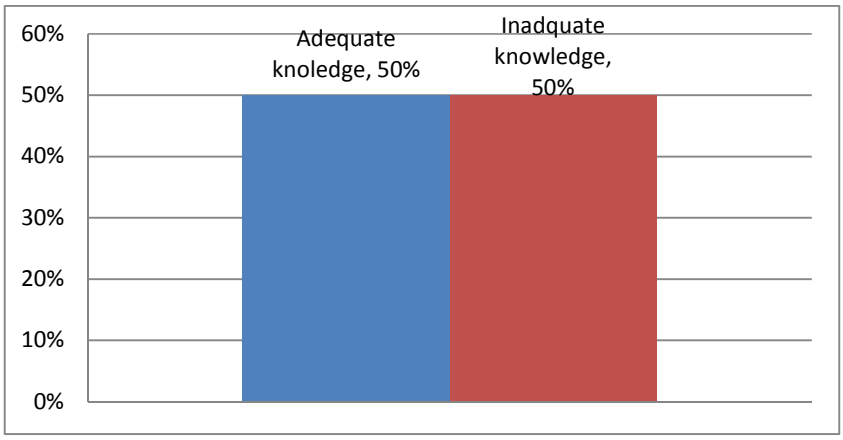

Fig. 7. Percentage in knowledge 07

Table 9. Frequency of responses to Q7

Response	Percentage
Administration of immunity enhancement drugs	30%
Treatment plan accordance to the complication	5%
Keep patient separate from others	25%
Give attention to the patientthoroughlyin always	10%
Giving hot foods and drinks	5%
Environmental sanitation by Doomayanaya	10%
Keep the patient bed with herbal leaves(on the bed)	5%
Keep the oil lamp with mee(*MadhukaIndica)* oil near the patient	5%
Advising on personal hygiene	5%
Take Safety precautions by doctor	5%

The treatment protocol followed them in the treatment,most of them were mentioned that Administration of immunity enhancement drugs 30%,Keep patient separate from others 25%,Enviourmental sanitation by Doomayanaya10% and give attention to the patient thoroughly in always 10%.

8)Q8- What are the herbal Plants using in the management of corona infected patient?

According to the Q8 Adequate knowledge in 75% Inadequate knowledge in 25%.

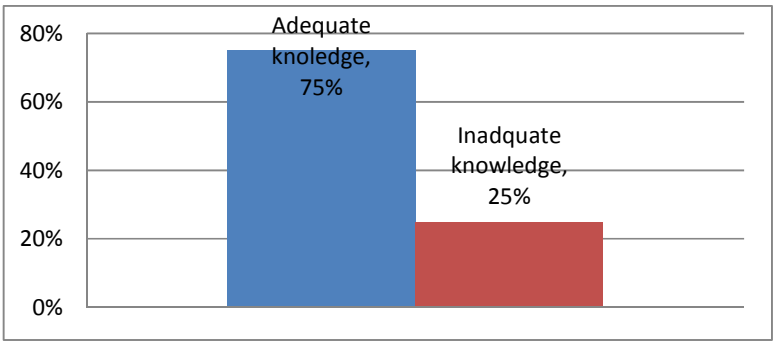

Fig. 8. Percentage in knowledge 08

Table 10. Frequency of responses to Q8

Response		Scientific name	Family	Percentage
1.	Tulasi	*Ocimum Sanctum*	Labiate	5%
2.	Kohomba	*AzadirachtaIndica*	**Meliaceae**	25%
3.	Bin kohomba	*MunroniaPumila*	**Meliaceae**	25%
4.	Ykinaran	*AtalantiaZeylanica*	**Rutaceae**	45%
5.	Ambuldodan	*Citrus Limon*	**Rutaceae**	5%
6.	Beli	*AegleMarmelos*	**Rutaceae**	5%
7.	Arathta	*AlpiniaGalanga*	Scitaminaceae	25%
8.	ElaBatu	*SolanumMelengena*	**Solanaceae**	5%
9.	Inguru	*Zingibarofficnale*	**Zingiberaccae**	40%
10.	Kottamalli	*CoriandrumSativum*	Umbelliferae	30%
11.	Pavatta	*Adathodavasica*	Acanthaceae	20%
12.	Siritekku	ClerodendrumSerratum	**Verbenaceae**	10%
13.	Katuwalbatu	*SolanumXanthocarpum*	**Solanaceae**	5%
14.	Tippili	*Piper Longum*	**Piperaceae**	10%
15.	Gammiris	*PiperNigrum*	**Piperaceae**	5%
16.	Venivalgeta	*Cosciniumfenestratum*	Menispermaceae	30%
17.	Kurudu	*CinnamomumZelanicum*	Lauraceae	5%
18.	Sudulunu	*Allium Sativum*	Liliaceae	5%
19.	Dehi	*Citrus Medica*	**Rutaceae**	15%

Response		Scientific name	Family	Percentage
20.	Kaha	*Curcuma Longa*	Scitaminaceae	20%
21.	Nika	*ViteNigundo*	**Verbenaceae**	5%
22.	Devadara	*CedrusDeodare*	Coniferae	10%
23.	Rasakinda	*TinosporaCordifolia*	Menispermacae	5%
24.	Totilla	*OroxylumIndicum*	Bignoniaceae	5%
25.	Ingurupiyali	*KaemferiaGalanga*	**Zingiberaccae**	10%
26.	Vasavasi	*MyristicaFragrans*	Myristicaceae	5%
27.	Mahaduru	*FoeniculumValgare*	Umbelliferae	5%
28.	Kaluduru	*Nigella Sativa*	Ranunculaseae	5%

According to their response the herbal Plants using in the management of corona infected patient most of them were mentioned that Rutaceae family including *Atalantia Zeylanica,Citrus Limon,Aegle Marmelos,Citrus Medica,* Meliaceae family including *Azadirachta Indica,Munronia Pumila*Zingiberaccae family including *Zingibar officnale,Kaemferia Galanga,*Solanaceae family including *Solanum Melengena,Solanum Xanthocarpum,*Piperaceae family including *Piper Longum,PiperNigrum.*Verbenaceae family including *Vite Nigundo,Clerodendrum Serratum*.

9)Q9- What are the herbal readymade medicine using in the management of corona infected patient?

According to the Q9 Adequate knowledge in 60% Inadequate knowledge in 40%.

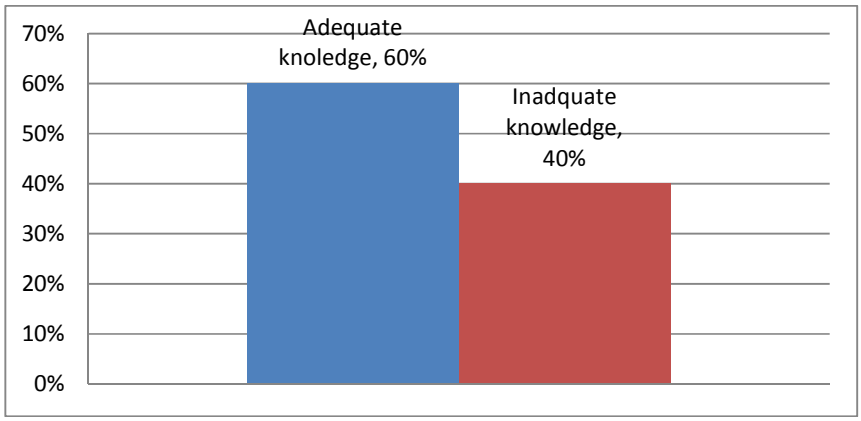

Fig. 9. Percentage in knowledge 09

Table 11.Frequency of Responses to Q9

Response	Percentage
Kapparavalliyapaniya	5%
Suwadharani	20%
Panchkarma-Nasna	5%
Ingurukottamallipantaya	5%
Buddharajakalka	10%
Shwasakuthara rasa	5%
Sudarshanachoorna/Vatee	15%
Nvarathnakalka	5%
Nagaradeepanchakayapantaya	5%
Dhanyapanchakaya	%
Decoction(venivalgeta, yakinaran, gammiris in 5grams amuiguru, Kottamalli, Dehikola, Yakinaran kola in 10 gramns and boil 4in to 2 cups	5%
Panta(Kottamalli,katuvalbatu,iguru)	5%
Avaleha(Bee honey, Gee, Amukaha,rock salt)	5%
Decoction(Amukkara, pavattamul, Rasakinda, Inguru, Nerinchi)	5%

The herbal readymade medicine using in the management of corona infected patient were Suwadharani 20%,Sudarshana choorna/Vatee 15%, Buddharajakalka 10% and Kapparavalliyapaniya, Ingurukottamallipantaya, Shwasakuthara rasa, Nvarathnakalka, Nagaradeepanchakayapantaya, Decoction (venivalgeta, yakinaran, gammiris in 5 grams amuiguru, Kottamalli, Dehikola, Yakinaran kola in 10gramns and boil 4in to 2 cups, Avaleha (Bee honey, Gee, Amukaha, rock salt) and Decoction (Amukkara, pavattamul, Rasakinda, Inguru, Nerinchi).

10)Q10- What are the wholesome foods behaviors suitable for corona infection?

According to the Q10 Adequate knowledge in 65% Inadequate knowledge in 35%.

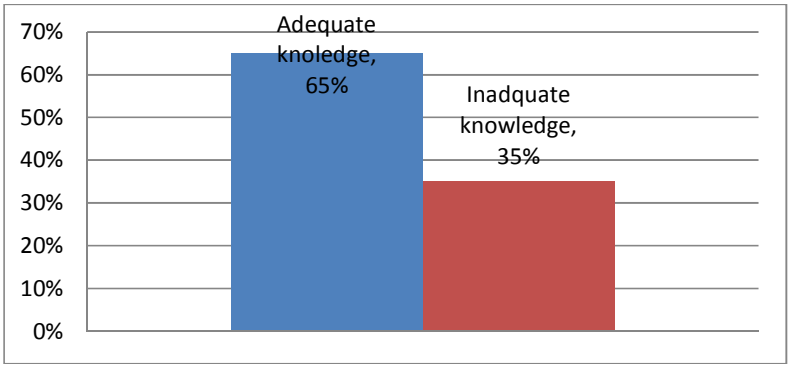

Fig. 10. Percentage in knowledge 10

Table 12. Frequency of responses to Q10

Responses	Percentage
Wholesome foods for Kaphadosha	35%
Drinking hot water	25%
Avoid cold water and food	25%
Taking sour tasty food	10%
Personal hygiene	5%
Avoid cold potency food	20%
Take hot potency food	20%
Light diet eg:Soup	5%

According the wholesome foods and behaviors suitable for corona infection,they were mentioned that Wholesome foods for Kaphadosha 35%,Drinking hot water 25%,Avoid cold potency food 20%,Take hot potency food 20% and Taking sour tasty food 10%.

4. DISCUSSION

According to the present study mean age was 49.6±1.2737(SD) and mode 59years. Most of them were in 51-60 age group, lived in Urban area70%, gender in male80%, Married 75%, ethnicity 100% and religion 100%. DipakKhadka et al. [10] mentioned that total of 774 respondents participated in the survey, of whom 407 (52.58%) were from the urban area and 367 (47.42%) were from the rural area. The age of the respondents varied from 16 to 76 years. Among them, 65.51% were below 30 years of age; all of the respondents were literate, and most of them (69.5%) had attended University. There were more male respondents (60.85%) than female [10].

According to the WHO the virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. These particles range from larger respiratory droplets to smaller aerosols. Current evidence suggests that the virus spreads mainly between people who are in close contact with each other, typically within 1 meter (short-range). A person can be infected when aerosols or droplets containing the virus are inhaled or come directly into contact with the eyes, nose, or mouth. The virus can also spread in poorly ventilated, crowded and air conditioned indoor settings, where people tend to spend longer periods of time. This is because aerosols remain

suspended in the air or travel farther than 1 meter (long-range). People may also become infected by touching surfaces (like door handles, glases, cheirs, food items etc..) those have been contaminated by the virus when touching their eyes, nose or mouth without cleaning their hands [11].

In our study 80% of them were mentioned that corona infection was affected to the respiratory tract. According to the traditional doctors response regarding symptoms, most common symptoms were sore throat in 70%, fever and Difficulty in breathing or shortness of breath in 60%,Dry cough, aches and pain in 50% and tiredness in 30%. According to the environmental factor for the transmission of the Corona infection, most of them were mention that Air 50%,secreations of the body and touching surfaces 15%, by food 10% and 5% in water. Reduce social distance less than one meter 80% was the main cause for the infection transmission through the society. As well as not doing hand washing in properly 30% and not wearing face mask, face shield15% are other reason. According to the precautions for prevent the corona infection through the society ,most of them were mentioned that Keeping social distance more than one meter in 85%, Doing hand washing in properly 60% , Wearing face mask, face shield in 30% and Environmental sanitation10%. The advises given by them in the management corona infected cases, Lived separately from others until cure the diseases in 45%, Advising the taking food which are enhancing the immunity 15%, Steam inhalation10%,Explaining the symptoms of corona infection10%,Wearing face mask, face shield 10%. The treatment protocol followed them in the treatment, most of them were mentioned that Administration of immunity enhancement drugs 30%,Keep patient separate from others 25%,Enviourmental sanitation by Doomayanaya10% and give attention to the patient thoroughly in always 10%. According the wholesome foods and behaviors suitable for corona infection,they were mentioned that Wholesome foods for Kaphadosha (one of the body humor) 35%, Drinking hot water 25%, Avoid cold potency food 20%,Take hot potency food 20% and Taking sour tasty food 10%.

There are disease transmitted by touching contaminated surfaces and then touching eyes, nose, or mouth.There were 69% of respondents had hospital seeking behavior while 60.8% took the necessary precautions like avoiding crowded areas, wore masks, washing hands regularly as stipulated by the WHO guidelines as well as 39.2% of people resorted to traditional concoctions and auto medications [12].

There is no effective medicine available so far for the treatment of COVID-19; medicinal plants are being used globally that might have increased the demand for medicinal plants. Some plants are useful to treat viral disease, but COVID-19 is a new disease, and the effectiveness of the medicinal plants to cure it has not been tested yet.A study in Morocco had recorded a total of 23 species which include some similar species viz. *Allium sativum*, *Allium cepa*, and *Zingiberofficinale* [13]. A study from India recorded 15 species [14]. A study from China have screened 26 medicinal plants for possible treatment of COVID-19 [15]; likewise, other studies from China have discussed about medicinal plants similar to our study [16]. A study from Bangladesh screened 149 plants from 71 families and found they have potential molecules for preparing a drug for the treatment of COVID-19 [17]. In our study mentioned that According to their response the herbal Plants using in the management of corona infected patient most of them were mentioned that Rutaceae family including *Atalantia Zeylanica, Citrus Limon, Aegle Marmelos, Citrus Medica,* Meliaceae family including *AzadirachtaIndica, MunroniaPumila*Zingiberaccae family including *Zingibarofficnale, Kaemferia Galanga,* Solanaceae family including *Solanum Melengena, Solanum Xanthocarpum,* Piperaceae family including *Piper Longum, Piper Nigrum.* Verbenaceae family including *Vite Nigundo, Clerodendrum Serratum*. Most of the species reported in this study are locally available, home garden species, and used for daily food at home.

The herbal readymade medicine using in the management of corona infected patient were Suwadharani 20%, Sudarshana choorna/Vatee 15%, Buddharajakalka 10% and Kapparavalliyapaniya, Ingurukottamallipantaya, Shwasakuthara rasa, Nvarathnakalka, Nagaradeepanchakayapantaya, Decoction (venivalgeta, yakinaran, gammiris in 5 grams amuiguru, Kottamalli, Dehikola, Yakinaran kola in 10gramns and boil 4in to 2 cups, Avaleha (Bee honey, Gee, Amukaha, rock salt) and Decoction (Amukkara, pavattamul, Rasakinda, Inguru, Nerinchi) were mentioned.

Currently SuwaDharaniAyurvedic Immunity Booster Drink and three other drugs including a steam inhaler; these have been approved by the expert committee at the Indigenous health

Ministry in Sri Lanka [18]. Department of Ayurveda and the Ayurvedic Drugs Corporation have jointly introduced an SadangaPanaya also as aImmunising Drink [19]. As well as that poly herbal preparation of *Sudarshana* suspension good forfebrile conditions [20].

5. CONCLUSION

In the present study Most of them have adequate knowledge in the main system of the body affected, symptoms,the environmental factor for the transmission, transmission through the society, the precautions for prevention, the advises given by them in the management, the herbal readymade medicine using in the management and the wholesome foods behaviors for corona infection A total of 28 medicinal plant species used to prevent COVID-19 were investigated and recorded. The validity and reliability of such medicinal plants should be tested further by phytochemical and pharmacological research. Considering all the responses they were not expressed much details of the treatment protocol in the management. It is recommended that further large scale studies are needed to enhance the knowledge and Prevention of Corona epidemic in among the Traditional doctors because of the increasing mortality rate of the corona infection day by day.

6. SUGGESTION

- Should conduct awareness programme in the prevention of corona infection via Physical or online.
- Should conduct programmes to collect Traditional knowledge on prevention and treatment protocol of corona infection with special reference to the communicable respiratory tract infection in large scale to strengthen the national health programme in corona endemic
- Should update their knowledge regarding current situation of corona infection.
- Should conduct the progamme related to the Traditional food preparation,home remedies, behavioral pattern regarding corona infection.
- Encourage to doing scientific researches in corona infection and strengthen the national health programme in corona endemic in Sri Lanka.

7. LIMITATION OF THE STUDY

There are moderate participants due to covid-19 pandemic situation.

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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