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Study the Effect of the Ayurvedic Preventive Measures on Covid-19 among the First Contacts

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Abstract
The novel coronavirus (COVID-19) carries a high risk for the society and especially healthcare providers due to it can be transmitted when the disease progresses asymptomatically in patients. The virus is transmitted through droplets and close contacts. It is believed that the infectivity starts before the symptoms and it significantly decreases in 7 days after the onset of symptoms. The object of this is study the effect of the Ayurvedic preventive measures on Covid-19 first contact. Descriptive simple random sample was selected to the study and it included that the Covid-19 first contact name list which was collected sent by the Maharagama Gramasewa Division. By using the questionnaire, it has filled through the telephone conversation by the principal investigator. Data has collected before and after two weeks of the drug distribution. Data analysis was carried out using the SPSS (version16) software. Rating scale was used according to the validated scale (11). Frequencies mean, standard deviation was calculated. Relationship between different variables has done by using chi-square. 100% of the respondents were Buddhist a the most of them were Male presenting 60% of the sample and the female were 20%. Mean age is37.66 and the standard deviation is 37.66 $\pm$ 18.43. Among the most of the were age range between 41 to 50years old which is 40% of the sample. Findings of the study also indicate that more than two third of the respondents were used all the above mentioned Ayurvedic preventive measures for the prevention of the Covid infection. Among them more than half of the respondents have used Herbal steaming, Ayurveda drug used, Herbal gargling Herbal Dumayanaya presenting 82%, 76%, 68% and 64% respectively. Findings of the study shows that the most of the respondents were used Adathoda, Lime and Yakinaran leaves for steaming in the prevention of the covid-19 infection. And also here we have identified that the Corriandrum boiled water has used for steaming. There is a significant relationship of the first contacts after two weeks of health status of them by doing herbal steaming following the $X^2(1, N=50) = 0.006$, P=0.005. It shows that there was a relationship between health status of the first contacts after following the herbal steaming during their quarantine period presenting the P value is less than 0.05.

Keywords: Ayurvedic Preventive Measures, Coronavirus, COVID-19, Drugs

Introduction

The novel coronavirus (COVID-19) carries a high risk for the society and especially healthcare providers due to it can be transmitted when the disease progresses asymptomatically in patients [1]. It has identified that the main source of infection are infected people. And also, virus is transmitted through droplets and close contact. This virus is the one of the most widespread outbreaks as become to a pandemic, which has continued to debilitate the entire global system [2]. Researchers have identified the main source of the infection are people. The virus is transmitted through droplets and close contacts. It is believed that the infectivity starts before the symptoms and it significantly decreases in 7 days after the onset of symptoms [3].

The virus that causes COVID-19 is thought to spread mainly from to person to person, mainly through respiratory droplet produced when an infected person cough or sneezes. These droplets can land in the mouth or noses of people who nearby

or possibly be inhaled into the lungs [4]. It is reported that the infectivity period depends on the severity and the stage of the infection of the patient. The virus can survive on nonliving surfaces in 22-25°C and 40%-50% relative humidity for up to 5 days and this increases the risk of infection [5]. A study has been shown that the virus can remain alive in the aerosol for up to 3hours after aerosol generating procedures and could be detected [3\. According to the modern medicine, the most important strategy for the prevention from this virus is to frequently wash their hands and use the hand sanitizer and avoid contact with their face and mouth after interacting with a possibly contaminated environment [6]. According to the WHO guidelines, it has advice to individuals to wash hands diligently, practice respiratory hygiene, avoid crowds and close contacts with ill individuals and to use face marks to reduce the risk of transmission in the community [7]. Study reveals that the healthy immune system helps the host to control and prevent several pathogenic infections [8].

Studies have found out that the plants have been used for centuries in almost all cultures worldwide as traditional medicines to cure many chronic infections viral diseases [9]. Beyond the 3000 years with the history the authentic books have introduced the Ayurvedic preventive measures in the prevention of Janpadodvamsa diseases.

Objectives

To study the effect of the Ayurvedic preventive measures among Covid-19 first contact.

Specific Objectives

- To identified the preventive measures that the community used to prevent from the Covid-19
- To identified preventive measures helps to stop the spreading and Covid-19 infection,

Methodology

Sample and Measures

Descriptive simple random sample was selected to the study and it included that the Covid-19 first contact name list which was collected sent by the Maharagama AGA Division for Ayurvedic drug distribution and advising to avoid the transmission of the disease. By using the questionnaire, it has filled through the telephone conversation by the principal investigator. Data has collected before and after two weeks of the drug distribution. The data has collected from the covid-19 first contact families. First part of the questionnaire has included the demographic characteristics of the sample and the second part of it include the preventive measures that they have followed before get the contaminations and the third part of it has consist of the preventive measures that they have followed during the quarantine period at their premises. Study has carried out at the Maharagama Secretarial Division. The consents of the participants were also obtained through the telephone conversation.

Inclusion Criteria

Covid positive families

- Only the first contacts (RAT or PRC and reports were negative)
- Both male and female
- Age above 5 years

Exclusion Criteria

Covid-19 positive patients

Statistical Analysis

Data analysis was carried out using the SPSS (Version16) software. Rating scale was used according to the validated scale (11). Frequencies mean, standard deviation was calculated. Relationship between different variables has done by using chi-square.

Results

This study was carried out among the 30 families of Covid-19 contacts during their quarantine period. Total number of the first contacts of the Covid-19 were 50. Whether they were not infected was confirmed by their RAT and PCR reports, Respondents of the study sample were free from Covid infection at the time of data collection. And also data was collected two weeks after the treatment to find out the health status of the first contacts.

Table 1: Demographic characteristics of the First contacts of the study sample.

Demographic Characteristics		N (%)
Age group	<12	6 (12%)
	13-20	9 (18%)
	21-30	2(4%)
	31-40	7 (14%)
	41-50	20 (40%)
	>51	6(12%)
Gender	Male	30(60%)
	Female	20(40%)
Marital status	Married	29(58%)
	Unmarried	21(42%)
Religion	Buddhist	100%

100% of the respondents were Buddhist the most of them were Male presenting 60% of the sample and the female were 20%. Mean age is37.66 and the standard deviation is 37.66 ± 18.43. Among the most of the were age range between 41 to 50years old which is 40% of the sample. There were children with age less than 12 years it was 12% of the sample. More than half of the sample were married.

Table 2: Shows the Mode of the transmission of the Covid-19 of the first contacts

Mode of Transmission	
	N (%)
Work station	16 (32%)
By shopping	16 (32%)
By a party	5 (10%)
Neighborhood/friend	11(22%)
By public transport	2(4%)
Total	50 (100%)

Most of these respondents were get the contacts of Covid virus from the shopping and the work station. Less of them were get contaminated from the public transport.

Table 3: Shows that the type of preventive measures that they have followed before become first contacts

Preventive Measures		N (%)
Staying at home	Yes	40 (80%)
	No	10 (20%)
Wearing mask	Yes	40(80%)
	No	10(20%)
Washing hands	Yes	44(88%)
	No	6(12%)
Avoid gathering	Yes	39(78%)
	No	11(22%)
Using sanitizer	Yes	33(66%)
	No	17(34%)
Using face shield	Yes	10(20%)
	No	40(80%)
Touching nose and mouth with unwashed hands	Yes	10(20%)
	No	40(80%)
Avoid close contacts	Yes	41(82%)
	No	09(18%)
Covering your mouth when cough or sneezing	Yes	48 (96%)
	No	02(4%)
Using immunity boosts	Yes	8(16%)
	No	42 (84%)
Maintain Social distance	Yes	48(96%)
	No	02(4%)
Drinking Corriandrum daily	Yes	37(74%)
	No	13(26%)

Findings reveal that the smaller number of the respondents were used face shields and the immunity boosts before being the first contacts which is 20% and 16% of the of the sample.

Table 4: Shows the Type of preventive measures that the respondents have followed before the contact of Covid-19.

Type of Preventive Measures	
	Frequency
WHO recommended only	30 (60%)
Traditional methods only	9(18%)
Both WHO and Traditional	11(22%)
Total	50(100%)

This reveals that the near two third of the respondents have followed the WHO recommended health guide lines to prevent from the Covid-19. But very few of them were followed both WHO and Ayurvedic preventive methods to prevent from Covid infection presenting 22% of the respondents.

Table 5: Shows the respondent who used the Ayurvedic medicine after contamination.

Ayurveda Drug Used After Contamination	
	N (%)
Yes	38(76%)
No	12(24%)
Total	50(100%)

According to the results it has showed that the more than two third of the sample has used the Ayurvedic treatments after being the first contacts of the Covid-19.

Table 6: Shows the Types of Ayurvedic preventive measures used by the respondents

Type of Preventive Measures Used			N (%)
1.	Ayurveda drug use after contamination	Yes	38(76%)
		No	12(24%)
2.	Gargling with salt water/Herbal water	Yes	34(68%)
		No	16(32%)
3.	Leha karma	Yes	30(60%)
		No	20(40%)
4.	Herbal immunity enhance drugs use	Yes	26(52%)
		No	24(48%)
5.	Herbal Steaming	Yes	41 (82%)
		No	9 (18%)
6.	Herbal fumigation (Dhummayana) (Premises)	Yes	32(64%)
		No	17(34%)

Findings of the study also indicate that more than two third of the respondents were used all the above mentioned Ayurvedic preventive measures for the prevention of the covid infection. Among them more than half of the respondents have used Herbal steaming, Ayurveda drug used, Herbal gargling Herbal fumigation (Dumayanaya) presenting 82%, 76%, 68% and 64% respectively.

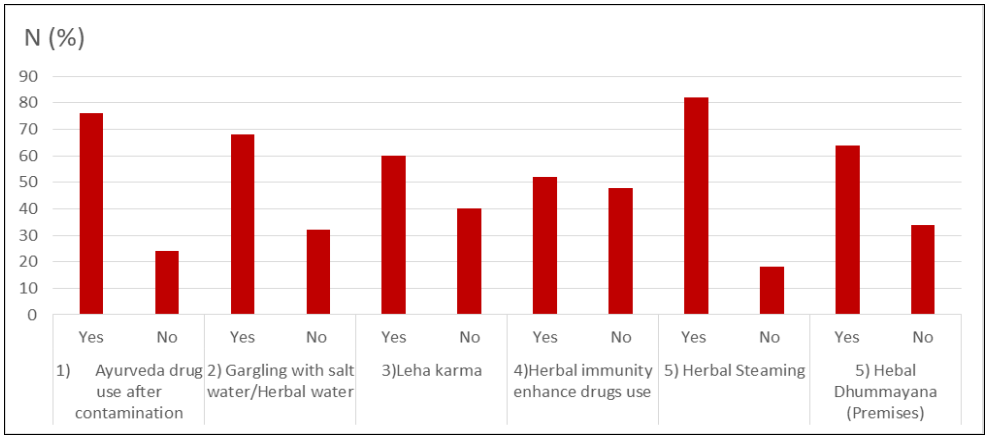

Fig 1: Ayurvedic preventive measures used by the covid-19 first contacts Most of the respondents have used herbal steaming during their quarantine period.

Table 7: Shows the Types of herbs which has used for the herbal steaming.

Types of Plants Use for Steaming		N (%)
Nika leaves (Vitex negundo)	Yes	17(34%)
	No	33(66%)
Adathoda leaves (Justicia adhatoda	Yes	34(68%)
	No	16(32%)
Lime leaves (Citrus orantifolio)	Yes	24(48%)
	No	26(52%)
Yakinaran leaves (Atlantia zeylanica	Yes	24(48%)
	No	26(52%)
Corriandrum (Coriandrum sativa)	No	36(72%)
	Yes	14(28%)

Findings of the study shows that the most of the respondents were used Adathoda, Lime and Yakinaran leaves for steaming in the prevention of the Covid-19 infection. And also here we have identified that the Corriandrum boiled water has used for steaming.

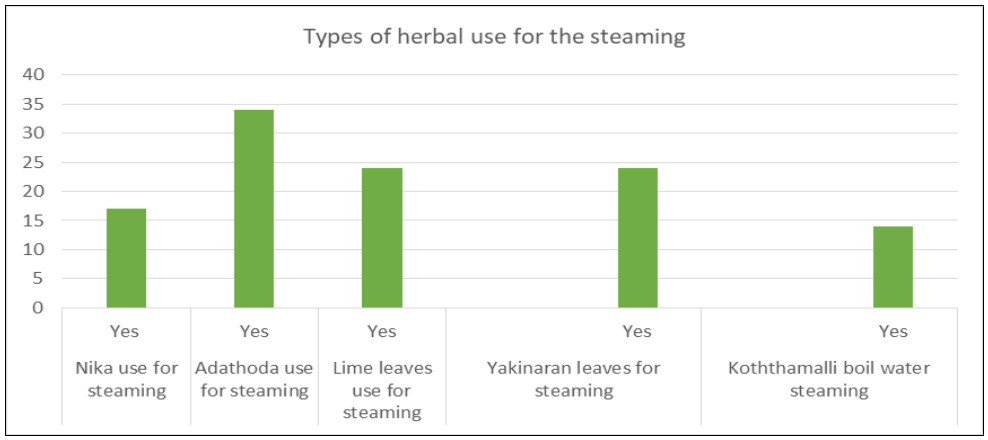

Fig 2: Types of herbs use for the steaming by the covid-19 first contacts.

Table 8: Health status of the respondent after one week use of herbal steaming.

		After 2 Week Health Status of the first Contacts		Total
		Not Infected	Infected	
Regular Herbal Steaming	No	14(28%)	10(20%)	24(48%)
	Yes	24(48%)	2(4%)	26(52%)
Total		38(76%)	12(24%)	50(100%)

Findings shows that there is a significant relationship of the first contacts after two weeks of health status of them by doing herbal steaming following the $X^2(1, N=50) = 0.006$, P=0.005. It shows that there was a relationship between health statuses of the first contacts after following the herbal steaming during their quarantine period presenting the P value is less than 0.05.

Discussion

Total participants of this study were 50 and all of them were first contacts of the Covid-19 and free from Covid infection according to the investigations. During their quarantine period more than two third of them were used Ayurvedic preventive measures to prevent from infections. Here we have identified

the Ayurvedic preventive measures that the community use at the grass root level and the effect of these Ayurveda preventive measures in the primary prevention from the Covid-19 by enhancing their immunity. Findings reveals that there is a there is a significant relationship of the first contacts after two weeks of health status of them by doing herbal steaming during their quarantine period. Similar to my study done by Zangebel *et al*, 2020 has found that the vast majority reported wearing face masks when going out.

Suggestions

- It is very need to promote Ayurvedic preventive measures in the prevention of covid-19 at the grass root level of the community widely.
- To promote the herbal steaming procedure according to Ayurvedic concepts as a preventive measure for Covid-19.
- Need to distribute Ayurvedic treatment pack for all the victims of the covid-19 at the government level with awareness of its effect.

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