Ayurvedic Concoction: A Shield Against Covid -19

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Abstract - The COVID-19 pandemic in India ispart of the worldwidepandemic of coronavirus disease 2019 (COVID-19) caused by severe acuterespiratory syndrome coronavirus 2 (SARS-CoV-2). Corona virus brings world to a standstill.Government of India is taking all necessary steps to ensure that we are prepared well to face the challenge and threat posed by the growing Pandemic of corona virus. Healthcare systems overstretched due to Covid-19.Building immunity becomes no.1 focus in fight against Covid-19..We all know that prevention is better than cure, while there is no medicine for covid-19as of now, so it will be good to take preventive measures which boost our immunity in these times. Social distancing is also considered as the effective to keep Corona virus at bay. This pandemic has turned the attention of whole world to immune system against virus.. Ayurveda being the science of life, propagates the gifts of naturein maintaining healthyand happy life. As we know that Ayurveda is referred to as the "mother of all healing". According to Patanjali CEO Acharya Balkrishna clinical case study on many positive patients was conducted and they have got 100% favourable results." After taking Ayurvedic medicine, COVID patients recovered in 5-14 days and then tested negative. So, cure for COVID is possible through Ayurveda. The sample taken from three different areas for the present study consists of people attacked by Covid-19 who have consumed and have not consumed Ayurvedic concoction and the data of those who are not attacked by Covid-19 but have consumed and not consumed the concoction The purposive random technique sampling used to select the sample from selected area.

Keywords: Covid-19; Ayurvedic concoction; Hypothesis testing; Chi square test.

I. INTRODUCTION

The COVID-19 pandemic is a world challenge as the cases are increasing every day. At present there is no specific medication and vaccine is available to counter the corona virus. More than 3000 years ago ayurveda, a traditional system of medicine was originated. Traditional Indian medicine has a lot to offer in the management of COVID-19 and it is, therefore, an opportune time for modern medicine and AYUSH(the ministry of Ayurveda, Yoga, Naturopath, Unani, siddha and Homeopathy) to come together and develop an integrated approach for the management of COVID-19. Modern medicine contributes to the curative aspect of COVID-19 while Ayurveda and Yoga can contribute to protection of vulnerable organs involved in viral entry. The approach of Ayurveda is effective, safer, accessible, and affordable to fight against of COVID-19. Honourable Indian prime minister Mr.Narender Modi has also appealed to the citizens to adopt Ayurvedic practices like taking Ayurvedic concoction (herbal tea which contains clove, blackpepper, tulsi, ginger, haldi, dalchinisauf etc.) to boost their immunity system and to follow the guidelines by AYUSH ministry. In such a situation this concoction (herbal tea) can prove to be panacea in the matter of protection from corona

In the past 20 years corona viruses have causedseveral outbreaks in humans and were responsible for Severe Acute Respiratory Syndrome (SARS) in 2002. In 2012 another outbreak Middle East Respiratory Syndrome related corona virus (MERS) spread rapidly through China and around the world. According to Timothy Sheahan, a coronavirus expert, who is an assistant professor at the University of North Carolina Gillings School of Global Public Health, "coronavirus is something that will continue to happen in future".

After the outbreak of severe acute respiratory syndrome (SARS), which occurred in 2002-03, World Health Organization investigated for the efficacy of herbal medicine. Various factories in Hubei started manufacturing herbal drinks in huge quantities and at a very fast rate for the quarantined citizens. Chinese university of Hong Kong conducted a research study that involved local patients suggested that for the prevention from Severe Acute Respiratory Syndrome(SARS), herbal treatment is safer and effective.

Other than modern medicinal treatment China has used traditional Chinese medicine (TCM) to deal with epidemic of Covid-19.

The group of researchers and scientists from all over world are trying to find an antidote to fight the corona virus that has infected over four million people globally. Treatments of all the forms ,from experimental medicines to alternate therapies have been studied and the traditional medicine system ayurveda found to be most effective in curing disease like corona virus. The concept of ayurveda appeared between 2500 and 500 BC in India. In India, about 70 percent of rural population depends on the traditional ayurvedic system of medicine. Ayurveda is the world's oldest medical system that can cure any disease without any side effects. The largest producer of medicinal plants is India, and there are about 250,000 registered medical practitioners of the Ayurvedic system as compared to about 700,000 of the modern medicine.

Practitioners of the traditional systems of medicine prepare concoctions by their own recipes and dispense to the patients., Approximately 40 per cent of the people of westerancountries are using the herbal medicine for the treatment of various diseases. This interest in traditional medicines is rapidly increasing.

The Indian Prime Minister's repeated push to the guidelines that suggests home remedies to boost immunity, many states have started distributing Ayurvedic medicines or concoctions. Many states are also administering the recommended concoctions and medicines to the patients in government quarantine facilities with mild symptoms and those who are recovering from corona and also to their asymptomatic contact.

II. METHODOLOGY

Aim and objective: The aim and objective of the study is that the Ayurvedic concoction (kada) be regarded as preventive measure of covid-19

Sample Design: The sample taken from three different areas for the present study consists of 448 patients out of which 38 were attacked by corona virus and 410 patients who are not attacked by virus have all been consumed ayurvedic concoction (kada) and 1041 patients out of which 335 have been attacked by virus and have been given the kada treatment and 706 patients who are not attacked has not been given the kada treatment which is shown in (table .1). Similarly, the data's of (table .2) and (table .3) also signify the same. The purposive random technique sampling used to select the sample from the selected area. Online survey method was adopted to collect information for the target population.

Data Analysis: For the analysis of data, chi-square test is adopted, Chi-square test and logic of hypothesis testing was developed by Karl Pearson and is applied when we have two categorical variables from a single population . This test utilizes a contingency table to analyze the data, and is used to determine whether there is a significant association between the two variables.

III. DATA ANALYSIS

The following table gives the number of patients who are attacked by corona virus and consumed Ayurvedic concoction (kada) and those who are not attacked by virus and not consumed concoction (kada)

Table 1:

Kada treatment Covid-19	Consumed kada	Not consumed	Total
Attacked	38	335	373
Not Attacked	410	706	1116
Total	448	1041	1489

Table2:

Kada treatment Covid-19	Consumed kada	Not consumed	Total
Attacked	22	300	322
Not Attacked	210	402	612
Total	232	702	934

3:

Kada treatment Covid-19	Consumed kada	Not consumed	Total
Attacked	27	280	307
Not Attacked	202 Table	806	1008
Total	229	1086	1315

IV. CALCULATION

For the given contingency table 1, let the two attributes be Ayurvedic concoction and patients attacked by covid-19.Each attributes is divided into two classes

Null hypothesis H_0 . The two attributes are independent i.econcoction (kada) treatment cannot be regarded as a preventive measure of covid-19

Chi-square static is calculated as

$$\chi^{2} = \sum_{i=1}^{n} \left[\frac{(O_{i} - E_{i})^{2}}{E_{i}} \right]$$

$$\sum_{i=1}^{n} O_{i} = \sum_{i=1}^{n} E_{i} = N(\text{total frequency})$$

Where O_i (i=1,2,3,...,n) is a set of experimental frequencies and E_i (i=1,2,3,...,n) is the corresponding set of expected or hypothetical frequencies. The degree of freedom is denoted by ν which is equal to $\nu=(p-1)(q-1)$ for the $p\times q$ contingency table (p columns and q rows)

Degree of freedom:
$$v = (p-1)(q-1)=(2-1)(2-1)=1$$

The tabulated value of χ^2 at 5% level of significance for 1 degree is 3.841 of freedom.

Under H_0 , calculated value of χ^2 =93.6893> tabulated value,therefore H_0 is rejected for Table 1.

Similarly, for Table 2: the value of $\chi^2 = 85.3458$ the tabulated value at 5% level of significance.

and for Table 3:the value of $\chi^2 = 20.692$ which is also greater than the tabulated value at 5% level of significance. Therefore, null hypothesis in all the cases is rejected.

V. CONCLUSION

The above results shows that the two attributes are not independent i.e the Ayurvedic concoction (kada) can be regarded as preventive measure of covid-19.Besides taking basic precautionary steps like social distancing, wearing mask, washing hands with sanitizers ,Ayurvedic concoction is also recommended. It has been advised to incorporate these everyday practices to your daily routine for the general upkeep of your health.

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Ayurveda Integr Med. 2020 Apr 23

doi: 10.1016/j.jaim.2020.04.002 [Epub ahead of

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