

A CASE STUDY ON THE UTILIZATION OF TEA AND BLACK PEPPER INFLUENCING THE HEALTH STATUS OF COVID AFFECTED PATIENTS OF DIMA HASAO DISTRICT

KASHYAP MP¹, NUNISA P² AND GOGOI J^{2*}

1: Statistics, Faculty of Science, Assam down town University, Panikhaiti, Guwahati -781026

2: Biochemistry, Faculty of Science, Assam down town University, Panikhaiti, Guwahati – 781026

*Corresponding Author: E Mail: Dr. Jyotchna Gogoi: gogoijyotchna@gmail.com

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ABSTRACT

Corona virus (COVID-19) is an infectious disease caused by SARS-CoV-2 virus which emerged in Wuhan, China at the end of 2019. Symptoms such as cough, fever are observed along with respiratory illness similar to Flu like diseases. The present study aimed to see the effect of Tea and Black pepper consumption in COVID affected individuals of Dima Hasao district. To accomplish the study, survey was performed and data were analysed by using SPSS IBM and Microsoft excel software. The result showed that both Tea and Black pepper was effective in boosting immunity of age group 18yrs and below.

Keywords: COVID 19, Wuhan, Tea, Black Pepper

INTRODUCTION

Corona virus (COVID-19) was first identified as a pneumonia of unknown origin. Later, it was detected as infectious disease caused by SARS-CoV-2 virus by end of year 2019 [1]. The virus was found to be a novel corona virus whose infection causing rate is very high even today many outbreaks have been observed with different variants of this virus. Several

governmental measures have been taken to counteract the risk of disease spreading which included initially travel restrictions, mandatory quarantines for travellers, social distancing, ban on public gatherings, school and universities closure, business closures, self-isolation, work from home systems etc but, now since vaccination drive mandatory screening in travel junction are observed

even recently international flights were restricted [2, 3].

The beginning of severe lung injury in SARS-CoV-2 infected patients is linked to the activation of the oxidative stress components that are coupled with hereditary immunity. So, boosting of immunity in COVID-19 was given prime importance. In this regard, India is country where herbal medicine and home remedies are frequently used [4, 5, 6]. Many such remedies are there so, in the present study this subject was chosen to see how effective the home remedies are and really it could boost immunity or not. Two herbs (Tea and Black pepper) were selected to do the survey study of Dima Hasao area.

MATERIALS AND METHODS

Preparation of the questionnaire:

A brief questionnaire includes type of vaccine along with number of doses, other factors were also be taken into consideration such as age, gender, whether covid infected or not infected, symptoms of the infected, whether home remedies taken during Covid infection, Tea or Black pepper consumed as home remedy. The university ethical committee has approved the study and questionnaire was deposited for getting permission to conduct the study.

Collection of samples:

A web based cross sectional study is carried out. Data is collected using a

structural questionnaire via Google forms, the link for this google forms will be circulated through various social media platforms such as WhatsApp, Facebook, Instagram and Telegram and through Email and SMS. Sample is to be collected from Dima Hasao district.

Analysing the sample data:

The statistical software SPSS IBM and Microsoft Excel is used to segregate and analyze the sample data to find out the relation among the data.

RESULTS

Samples were segregated based on the percentage of people consuming herbs specifically tea (**Figure 1**) and black pepper (**Figure 2**) during the first wave, second wave and third wave. From both the graphs it could be seen that there was a significant increase in consumption rate of Tea and Black Pepper during the third wave.

Comparing both herbs in different age groups, the inference which could be made is that Covid patients of age 18yrs and below showed significant decrease in Covid symptoms except Shortness of breath and sense of taste and smell (**Table 1**).

Black pepper consumption was found to be more effective in reducing fever in case of age group above 45yrs. Comparing overall study it could be said that black pepper was more effective drug than Tea.

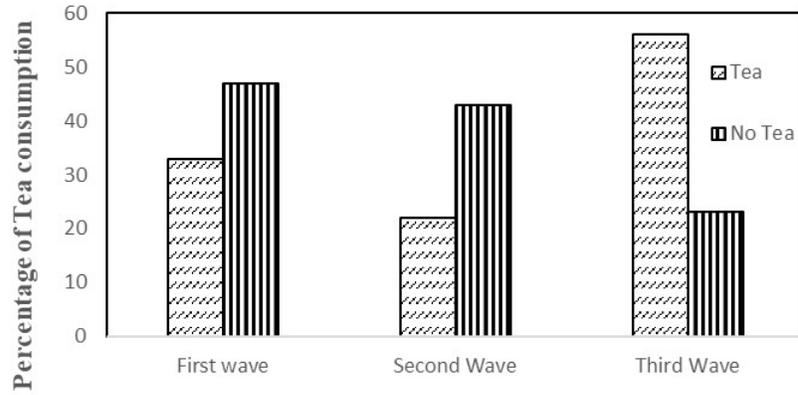


Figure 1: Bar-diagram of Tea consumption rate during the covid infection period

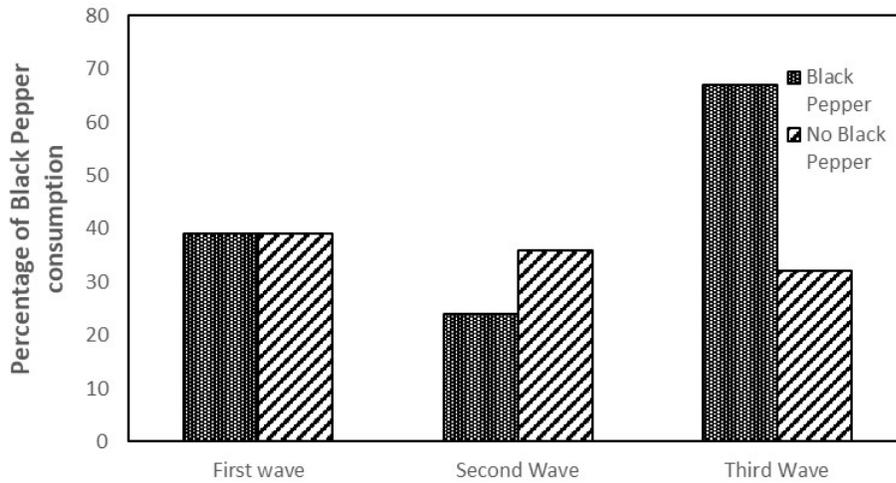


Figure 2: Bar-diagram of Black pepper consumption rate during the covid infection period

Table 1: Severity percentage of symptoms in different age groups of covid affected patient consuming Tea and Black pepper

Age and Herb Consumption	18 yrs and below				19 – 25yrs				26 – 35 yrs				36 – 45 yrs				45 yrs and above			
	TC	TNC	BPC	BPNC	TC	TNC	BPC	BPNC	TC	TNC	BPC	BPNC	TC	TNC	BPC	BPNC	TC	TNC	BPC	BPNC
Cold	0*	100	0*	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Fever	0*	100	0*	100	20*	75	43	67	58	80	45	72	50	83	44*	100	25	67	33*	100
Cough	0*	100	0*	100	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Headache	0*	100	0*	100	40*	100	71	83	88	100	82	94	70	100	78	86	50	67	50	100
Shortness of breadth	0	0	0	0	0	50	14*	50	21*	60	27	28	20*	100	44	57	50	67	50	100
Sore throat	0*	100	0*	100	60	100	100	100	96	100	91	100	80	100	78	100	75	100	83	100
Taste and smell	0	0	0	0	40*	100	57	67	67	100	73	100	70	83	78	71	50*	100	67	100

Note: TC – Tea consumption, TNC – No tea consumption, BPC – Black pepper consumption and BPNC – No black pepper consumption.
 *Shows significant difference between consumption of herbs by covid affected patient.

DISCUSSION

Corona virus has been found to attack all types of people, especially elderly patients having pre acquainted health problems like Diabetes Mellitus, Hypertension, Cerebral Infarction, Chronic Bronchitis, Parkinson's disease, Chronic Obstructive Pulmonary disease, cardiovascular disease, and Cancer.

Segregating the data based on the age group, it was found that people belonging to age group 26-45yrs were more prone to covid infection, this could be due to a multitude of reasons [7]. One of the reasons might be that they were the bread earners thus, most likely to be in contact with covid infected persons and were allowed to move as per lockdown guidelines [8].

From the survey study it was observed that consumption of both Tea and Black pepper had some health benefit during Covid infection but Black pepper was found to be more efficient as compared to Tea because Black pepper has been reported with many medicinal properties which provide protection during fever, cough and throat pain, throat infection also gastric problems [9]. Many reports have reported that Green Tea is more immune booster than Black Tea [10, 11]. But, combination of both might have showed more effective response in different age groups.

CONCLUSION

Government has taken many initiatives to combat Covid 19 and one of the major steps taken was to do Yoga and follow Ayurveda. Taking this point in consideration, the present study has shown that herbs like Tea and Black pepper which are readily available in our Indian kitchens have good potential to reduce Covid symptoms in patients of Dima Hasao.

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Conflict of Interest: There is no conflict of interest

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