



Consequences And Treatment Seeking Behaviour In Covid-19

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Abstract

Coronavirus disease (Covid-19) is an infectious disease caused by the SARS-CoV-2 virus. It can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS). In March 2020, The World Health Organization (WHO) declared the Covid-19 outbreak a pandemic. This viral strain directly impact on the lungs, reducing its capacity and also limiting intake of oxygen, leading to pneumonia, also respiratory complication, chronic kidney impairment. CDC recommends that home isolation is the most appropriate for patients who have mild infection, and should focus on preventing the virus transmission. Treatment seeking behaviour of patient's can change in different cultures and time periods. Our study was an observational prospective study conducted among 500 subjects from Eraviperoor Gramapanchayath for 6 months. Among 500 participants 72% had an exposure to Covid-19, and 28% had multiple exposure, based on intake of OTC medication among 500 participants 70% subjects had taken OTC medication and 30% subjects had not taken any OTC medication. The most reported after effect of Covid-19 was cough. Most of them had taken medications. Worry, depression, worry about the spread and sleep disturbance among the responded were commonly found. Most of them had Vitamin C, OTC Medications and other system of medication.

Keywords:

Introduction

Novel corona virus disease COVID-19 spreads all over the world. Now at present Covid-19 is spread from person to person. Crowded area and hospitals are main transmission source. Coronaviruses are named for the crown like spikes on surface. The best way to prevent and slow down transmission is to be well informed about the disease and how the virus spreads, stay at least 1 metre apart from others, wearing a properly fitted mask, washing hands using an alcohol based rub frequently. For critically ill patient potential benefit in oxygenation can be achieved. ^[1]

Older adults or people with existing medical conditions are at greater risk of becoming seriously ill with Covid-19. Symptoms after Covid-19 include fatigue, joint pain, cough, muscle pain, cough, headache, loss of taste/smell, difficulty of breathing, depression, sleep disturbance, cognitive impairment, hair fall. ^[4]

Medical conditions that may increase risk of illness from Covid-19 include:-

1. Cancer
2. Type I or Type II diabetes
3. Serious heart disease such as heart failure, coronary artery disease

4. Overweight
5. High blood pressure
6. Smoking
7. Sickle cell disease, Liver disease
8. Weakened immune system from solid organ transplants or bone marrow transplants
9. Weakened immune system from bone marrow transplant, HIV or some medications

Some of the symptomatic Covid-19 patient reported home remedies as first treatment seeking behaviour. Residents were more likely to have visit to private clinics. There is no specific treatment of Covid-19. People who get a mild case need come to ease their symptoms like rest, fluids and fever control. Take an OTC medication for fever, headache and sore throat. The national institute of health says that Non-Steroidal Anti-Inflammatory Drugs (NSAIDS) or acetaminophen as usual drugs given. People with severe symptoms are to be treated in the hospital itself. The antiviral medication called remdesivir is the first approved medication for treating Covid-19 patients who are hospitalized. The therapeutic options for management of adults with COVID-19 includes antiviral drugs like molnupiravir, paxlovid, remdesivir. [2] Effective therapeutic options are urgently required for most of the patients. The

primary mechanism for the clearance of virus is to prevent the entry of the virus into target cells by virus specific neutralizing antibodies. [3]

Methodology:

A community based observational prospective study was carried out to assess the knowledge of people and patient education about COVID-19. It was carried out for a duration of 6 months (January 2021 – June 2021). The estimated sample size was 500 and it was calculated using the formula $n = [Z^2 \times P (1 - P) / e^2] / [1 + Z^2 \times P \times (1 - P)] / e^2 N$. The study was on post covid participants from eraviperoor gramapanchayat. Data from 500 individuals were collected using a structured predesigned questionnaire. The participants who are willing to participate were asked to fill a prepared questionnaire to determine their knowledge regarding health condition. The questionnaire was filled through face-to-face interviews with patients and data were collected. Counselling was given. The data was entered in Microsoft excel 2010 version. Results were analysed as tabular form and percentages. The People who were not affected by corona virus and those who were not willing to participate was excluded from the study.

Results:

Table 1: Data on symptoms after covid-19

SL. No:	Symptoms	Frequency	Percentage
1	Fatigue	80	6
2	Joint Pain	63	5
3	Cough	350	25
4	Muscle Pain	52	4
5	Headache	296	21
6	Loss of taste/smell	222	16
7	Difficulty of breathing	105	8
8	Depression	34	2
9	Sleep Disturbance	99	7

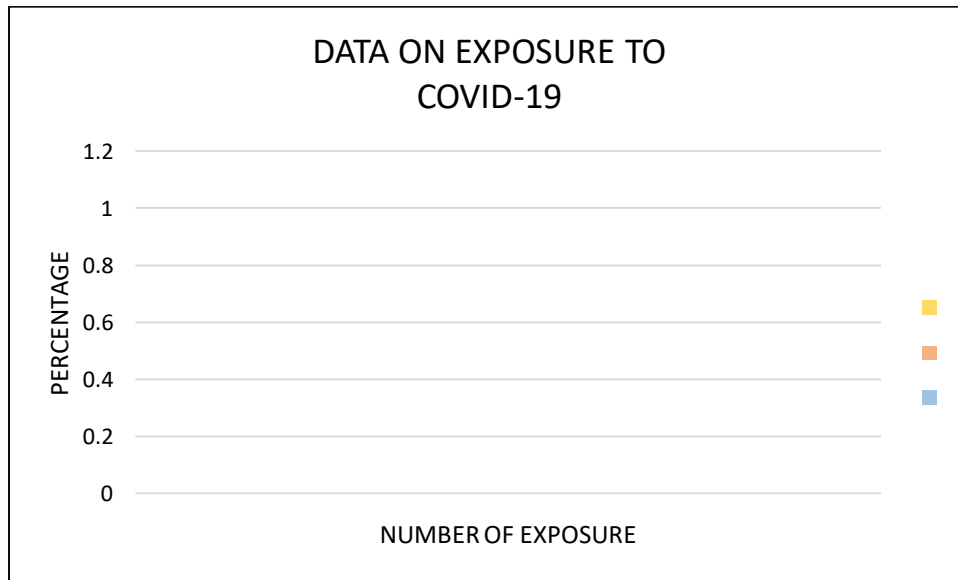
10	Cognitive Impairment	46	3
11	Hair Fall	22	2
12	Others	12	1
	Total	1381	100

The above table demonstrates symptoms after covid-19. The commonly found symptoms were fatigue, joint pain, cough, muscle pain, headache, loss of taste/smell, difficulty of breathing, sleep disturbance, cognitive impairment, hairfall and others respectively. Most of the infected people were suffering from cough that is 25%.

Table 2: Data on exposure to covid-19

SL. NO:	Status	Frequency	Percentage
1	1	359	72
2	2	110	22
3	More than 2	31	6
	Total	500	100

Figure 1: Data on exposure to covid-19



The above figure reveals that the total study population of 500 was divided into 3 groups based on exposure to COVID-19. Out of this 72% had an exposure, 22% had two exposure, and 6% had more than 2 exposures. Out of which the maximum respondents were from once exposed ones which is 72%.

Table 3: Data on current status

SL.NO:	Status	Frequency	Percentage
1	You recovered and are symptom free	183	37
2	You are feeling better but not completely recovered	225	45
3	You are not feeling better	92	18
	Total	500	100

This figure demonstrates current status. Out of 500 population, about 37% of them were recovered and were symptom free, 45% of them felt better but not completely recovered and 18% of them had not felt better.

Table 4: Data on current medication

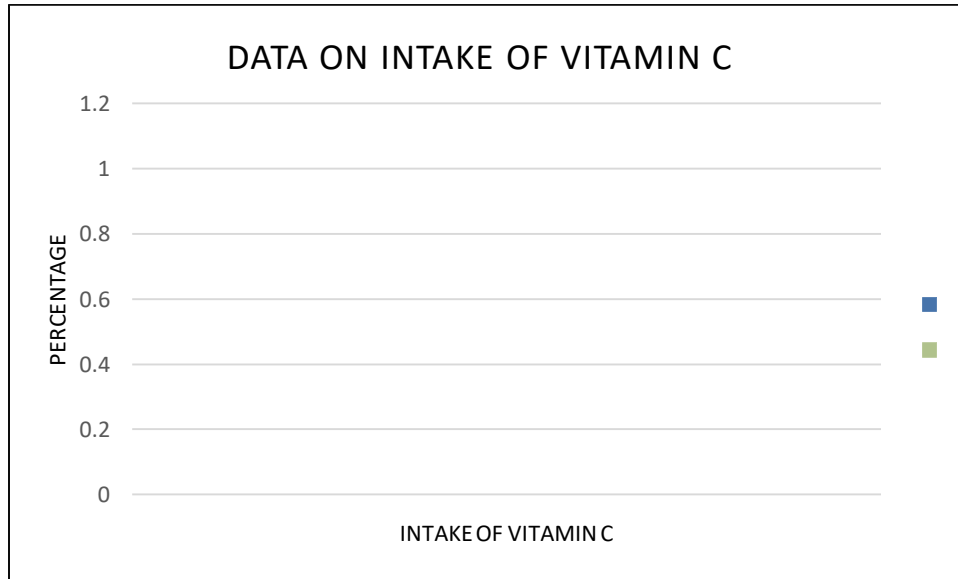
SL.NO:	Response	Frequency	Percentage
1.	Yes	334	67
2.	No	166	33
3.	Total	500	100

The above graph illustrates that the total population of 500 was divided into 2 groups based on current medication. About 67% of subjects were currently taking medications and 33% of subjects were not currently taking any medications. Maximum respondents were from subjects who were not taking current medication which was 67%. *Table 5: Data on intake of vitamin c*

Table 5: Data on intake of vitamin c

SL.NO:	Response	Frequency	Percentage
1	Yes	435	87
2	No	65	13
	Total	500	100

Figure 2: Data on intake of vitamin c



The above graph reveals that the total population of 500 was divided into 2 groups based on intake of vitamin C. Out of this 87% subjects took vitamin C supplement and 13% of them had not consumed any vitamin C supplements.

Table 6: Data on intake of otc medication

SL. NO:	Response	Frequency	Percentage
1	Yes	348	70
2	No	152	30
	Total	500	100

The above graph illustrates that the total population of 500 was divided into 2 groups based on intake of OTC medication. About 70% subjects had taken OTC medication (except vitamin c) and 30% subjects had not taken any OTC medications (except vitamin c). Most of the people had not taken OTC medications.

Table 7: Data on use of other system of medications

SL. NO:	Response	Frequency	Percentage
1	Yes	321	64
2	No	179	36
	Total	500	100

The above graph illustrates that the total population of 500 was divided into 2 groups based on usage of other system of medications, in which 64% had taken other system of medications and 36% had not taken any other system of medications.

Table 8: Data on physician consultation

SL. NO:	Response	Frequency	Percentage
1	Yes	375	75
2	No	125	25
	Total	500	100

The above figure reveals that the total study population of 500 was divided into 2 groups based on physical consultation. Out of which 75% subjects consulted physician during COVID-19 period and 25% subjects had not consulted any physician.

Table 9: Data on treatment

SL. NO:	Response	Frequency	Percentage
1	Government	274	55
2	Private	226	45
	Total	500	100

The above graph illustrates that the total population of 500 was divided into 2 groups based on treatment. About 55% study subjects received treatment from government hospitals and 45% from private hospitals.

Discussion:

In this study most of the patients that was 25% had a symptom of cough after the COVID period that was similar to the study conducted by **N Ani** on **post-acute covid-19 syndrome** which reveals that cough and fever was found to be most sticking symptom in the patients which is 70%. In this study majority of the study respondents got exposed to COVID-19 once which was 72.22%. 22% of the study population had exposed twice to covid and only 6% of the study population had exposure more than 2 times. This study reflects that majority of the post covid respondents felt better but were not completely recovered and 37% of the respondents had recovered completely and are symptom free. In this study 64% of the respondents took medications which was similar to a cross sectional study conducted by **A Iftekhar** on **Behavioural preventive measures and the use of medicines and herbal products among the public in response to COVID-19 in Bangladesh**, where 60% of them had taken other kind of medications. 84% of the respondents had a worry of spread of the disease to their family

members which was similar to the study conducted by **S K Schafer** on **Impact of covid-19 on public mental health and the buffering effect of a sense of coherence** reflects that majority of them experienced a worry of spread of disease. The study says that majority of the respondents had a mood change or worry during the covid period, which was similar to the study conducted by **G Veronica** on **Sleep quality, empathy, and mood during the isolation period of the COVID-19 pandemic in the Canadian population** where majority of the respondents had a stage of depression and sleep disturbances: Seniors and women suffered the most. The study reveals that 14.6% of disease spread was from nasal route, 0.45 in the people over ages of 60, children and people with chronic health issues, 30.4% through air, 22.4% through close contact, and 15% through droplets and by contact, 17.2% through virus present in body fluids of infected person. Most of the spread was through the air which was 30.4%. 87% of respondents had taken Vitamin C during and after the COVID-19 period which was similar to the study conducted by **Z Jing** on **Pilot trial of high dose**

vitamin C in critically ill COVID-19 patients. They represents that majority of the people used vitamin C (78%).70% of the respondents were taking OTC medications during the covid period which was similar to a cross sectional study conducted by **F Q Jean on Self-medication practices during the COVID-19 pandemic among the adult populations in Peru**, which reveals that 63.5% of the respondents had taken OTC medications. The study illustrates that the total population of 500 were divided into 2 groups based on usage of other system of medications in which 64% had taken other system of medications and 36% had not taken any other system of medications.

Limitation:

There are chances of interpretation as Google form was used for collecting information. The respondents may provide wrong information. As it was carried out during the pandemic follow up was difficult to perform.

Conclusion:

The most commonly noticed symptoms was loss of taste most of the respondents took about 2 weeks of recovery and the main exposure was being from crowded places. The most reported after effects of covid-19 was cough. People who were exposed once to the infection was 72% and most of them felt better

but not completely recovered most of them had taken medication. Worry, depression, worry about the spread and sleep disturbances among the respondent were commonly found. Most of them had taken vitamin C, OTC medications and other system of medications.

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