

COVID 19 Pandemic: A study on Health Awareness among Secondary School Students

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Abstract

The spread of the COVID-19 pandemic has become a major cause of concern for the healthcare among each individual. The aim of this study is to assess the level of awareness in COVID-19 virus and related preventive interventions among secondary School students. The researcher conducted a descriptive survey method. The researcher selected 100 secondary school students randomly as samples. Data was collected by questionnaire prepared by the researcher with expert discussion and interpreted the results using descriptive statistical analysis. Analysis of the collected data showed that 50% of students have an average level of awareness in COVID 19 virus and awareness in Preventive interventions of COVID 19 virus. Most of the students have less awareness about COVID 19 virus such as characters, classification, genome structure, life cycle whereas they have more aware about the preventive intervention of COVID 19 virus.

Keywords: Health Awareness, COVID 19 pandemic, Secondary school students.

Introduction

Corona Virus Disease (COVID 19) is an infectious disease caused by a new strain of the Corona viridae family. COVID 19 spreads primarily by contacting the virus either from a COVID 19-infected individual through coughing or sneezing or from COVID-19-contaminated surfaces. On March 12, 2020, the World Health Organization (WHO) announced COVID-19 as a pandemic.

The virus named corona virus owing to its appearance of the spikes on its surface that resemble a crown (Wang, 2019). This disease causes severe acute respiratory syndrome (SARS CoV-2), which presents with symptoms like fever, cough, shortness of breath, muscle pain, sputum production, sore throat, diarrhea, abdominal pain, loss of smell, and in severe conditions leading to viral pneumonia and multi-organ failure. This virus affects the lungs majorly as it attacks the host cells via the enzyme ACE2, which is most abundant in type 2 alveolar cells of the lungs. This virus has a surface glycoprotein called a "SPIKE" which connects to ACE2 and enters the host cells. This virus abundantly also affects the gastrointestinal organs as ACE2 is also expressed in cells of gastric, duodenal and rectal epithelium and small intestine (Sugiyama, 2018). The standard test to be conducted for the

detection of the virus is reverse transcription polymerase chain reaction (rRT-PCR) from a nasopharyngeal swab (Ieki, 2005).

Because of the inflow of people from disease affected countries to Kerala cause strengthened the surveillance and control measures against the COVID 19 disease and have gone forward in identifying almost all possible contacts thereby preventing spread of disease and timely health interventions to affected people. State level, District level and Local Self Government Institution level structures have been set up in the state to ensure coordinated response to COVID 19 management. Interdepartmental coordination at district level to handle issues and spreading of information, education and communication related to COVID 19 is spearheaded by the District Administration.

An awareness campaign 'Break the Chain' was successful in promoting the importance of hand hygiene, physical distancing and cough etiquette. Hand washing stations were installed in strategic locations, The Kerala government introduced a mass hand washing campaign named *break the chain* on March 15 to educate people about the importance of public and personal hygiene due to the spread of the novel corona virus across the state. Health Minister of Kerala, Smt. K. K. Shailaja inaugurated the mass campaign. The government has appealed the public to promote *break the chain* campaign as a safety measure. During this campaign, the government has installed water taps with hand wash bottles at public spots of the railway stations and other public places. (Jeemon Jacob, 2020).

In Kerala people are taking precautions to protect themselves, their families and their communities from corona virus disease (COVID-19) it's also important that children can continue to learn, and those they can do so in an environment that is welcoming, respectful, inclusive, and supportive to all.

Similarly Schools and teachers play a vital role in sharing accurate information and science-based facts about COVID-19 will help diminish students' fears and anxieties around the disease and support their ability to cope with the situations.

Need and significance of the study

Secondary students are powerful agents of change and the next generation of caregivers, scientists, and doctors. Having awareness and facts about COVID-19 will help diminish their fears and anxieties around the COVID 19 disease and support their ability to cope with circumstances. Health awareness in COVID 19 can encourage students to become leaders for disease prevention and control at home, in school, and in their community by talking to others about how to prevent the spread of viruses. So there is a need of assessing the level of Awareness in COVID 19 pandemic among school students. Therefore the researcher selected the present study which entitled 'COVID 19 pandemic: A study on Health Awareness among Secondary School Students'

Objectives

- To find out the level of awareness in COVID 19 Virus
- To find out the level of awareness in preventive interventions of COVID 19

Methodology

In the present study the researcher selected a descriptive survey method by the help of social media to know the level of health awareness in COVID 19 Pandemic among secondary school students. The samples for the present study consisted of secondary school students. The researcher conducted a survey among 100 secondary school students selected through random sampling technique. Data was collected by administering questionnaire prepared by the researcher with expert discussion, which consists of three parts. The first part collected the personal details of the secondary school students such as name, age, gender, name of the school. The second part of the tool consisted of 10 yes/no type questions which gives focus on measuring the awareness in COVID 19 virus such as, characters, classification, genome structure, life cycle. The third part includes 10 items that measure the level of awareness in preventive interventions of COVID 19. Interpretations of the results were done by using descriptive statistical analysis.

Major findings of the study

After collecting the responses from secondary school students the researcher tabulated the data. The collected data were analyzed by using the statistical measures namely, mean, median, mode and standard deviation. The details are given in the Table 1

Table 1

Data and result of Statistical analysis of awareness in COVID 19 virus and preventive interventions of COVID-19 virus among secondary school students

| Sl.No | Statistics | Awareness in COVID 19 virus | Awareness in preventive intervention |
|-------|---------------|-----------------------------|--------------------------------------|
| 1 | Sample size | 100 | 100 |
| 2 | Maximum score | 10 | 10 |
| 3 | Minimum score | 0 | 0 |
| 4 | Highest score | 9 | 10 |
| 5 | Lowest score | 5 | 7 |
| 6 | Mean | 7.38 | 9.14 |

| | | | |
|---|--------------------|-------|-------|
| 7 | Median | 7 | 9 |
| 8 | Mode | 7 | 9 |
| 9 | Standard Deviation | 1.135 | 0.738 |

On the basis of the result obtained from the data analysis, the level of awareness in COVID 19 virus and preventive interventions of COVID 19 at secondary school students was interpreted. A percentage analysis was done for this M+S.D and M-S.D were calculated. The scores obtained above M+S.D were treated as high awareness in COVID 19 virus and preventive interventions scores, M-S.D as low awareness in COVID 19 and preventive interventions scores and in between values as average awareness in COVID 19 and preventive intervention scores. The result obtained were tabulated and given as Table 2

Table 2

Percentage analysis of level of awareness in COVID 19 virus and Preventive intervention of COVID- 19 virus among secondary school students

| Level | Percentage of awareness in COVID 19 Virus | Percentage of awareness in Preventive interventions of COVID 19 virus |
|---------|-------------------------------------------|-----------------------------------------------------------------------|
| High | 22 % | 33 % |
| Average | 50 % | 50 % |
| Low | 28 % | 17 % |

The above mentioned percentage analysis awareness in COVID 19 virus and Preventive interventions of COVID 19 virus among secondary school students are again depicted through a graphical representation and is given as Figure 1

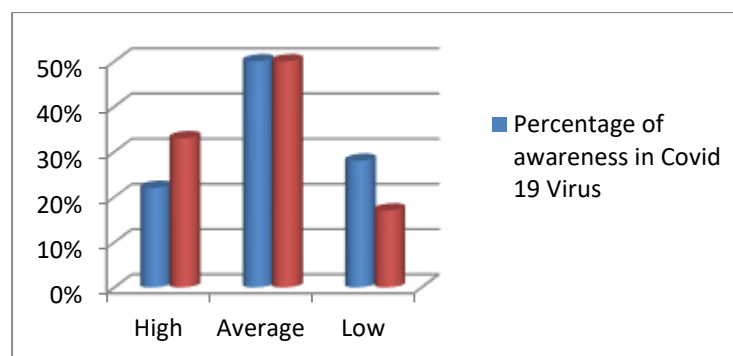


Figure 1: Graphical representation of awareness in COVID 19 virus and Preventive interventions of COVID 19 virus among secondary school students

From the above table and graph it is clear that the 50% of students have an average level of awareness in COVID 19 virus and awareness in Preventive interventions of COVID 19 virus. 28% of students have a low level of awareness in COVID 19 virus and only 22 % of students have a high level of awareness in COVID 19 virus.

Whereas the 33% of the students have a high level of awareness in preventive interventions and only 17% of the students have low level of awareness in preventive interventions of COVID 19 virus.

CONCLUSION

From the above discussion it is clear that the 50% of students have an average level of awareness in COVID 19 virus and awareness in Preventive interventions of COVID 19 virus. Most of the students have less awareness about COVID 19 virus such as characters, classification, genome structure, life cycle whereas they have more aware about the preventive intervention of COVID 19 virus. So the teachers should provide information about the nature of virus, disease situation, including prevention and control efforts at school. Reinforce the caregivers should alert the school and health care authorities if someone in their home has been diagnosed with COVID-19 and keep their child at home. Remind students that they can share healthy behaviors with their families. Awareness about disease causing pathogen helps us to control the diseased conditions.

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