Awareness of COVID-19 among students of Ferozepur in relation to their gender and age-group

Birkamal Kaur and Navpreet Kaur

Abstract
This study investigates Awareness of COVID-19 among male and female students of District Ferozepur, Punjab with different age-groups. For this study, a sample of 100 students from senior secondary school and college was selected. The data was collected using Awareness of COVID-19 survey-based Questionnaire validated by Krishna Undela (2020) [5]. Mean, Median, Mode, standard Deviation and Kurtosis was used to find out Awareness of COVID-19 among students. T-ratio was used to find significant differences existing among male and female students, and students in age-group (13-19) termed as adolescents and students of age-group (20-28) termed as adults. Results show that there exists no significant difference in Awareness of COVID-19 among male and female students and students with different age-groups. Also, the Awareness of COVID-19 among them is average.

Keywords: Awareness of COVID-19, senior secondary school students, college students, age-groups

1. Introduction
Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome MERS and Severe Acute Respiratory Syndrome SARS. A novel COVID-19 was identified in 2019 in Wuhan, China. This is a new coronavirus that has not been previously identified in Human (WHO, 2020) [1]. COVID-19 spreads, primarily, through contact, coughing and sneezing from a COVID-19 infected individual. On March 12, 2020; the World Health Organization (WHO) announced COVID-19 as a pandemic. Government of India (GOI) has taken all necessary steps to ensure that we are well-prepared to face threat caused by this pandemic growing all over the world. But this is feasible only with active support of people of India (Development Commission Ministry of Micro, small and medium enterprises). Participation and taking action to avoid spread of COVID-19 infection among us is possible only if we are well aware about it. Various sources such as social media, friends, family, government campaigns were active to provide knowledge about spread of awareness of COVID-19 and no doubt, these sources have provided enough valuable information about it but there are certain false beliefs persisting in our society which hamper the spread of true knowledge and awareness. Certain strategies during start of lockdown since mid-March and then, unlock periods have been planned by our Government but still rate of transmission among Indians are second highest after US (Worldometer).

Thus, it is increasingly crucial on part of people to have awareness and knowledge about coronavirus and how it spreads and the reason behind measures taken by GOI such as social distancing (Jayant Sriram, 17 April 2020). Only then, people will follow these measures and strategies. In this article, awareness among students with different age-groups and gender in Punjab is assessed by measuring their knowledge and beliefs related to COVID-19.

2. Objectives of the study
• To compare awareness of COVID-19 among male and female students of Punjab.
• To compare awareness of COVID-19 students of Punjab who are adolescents (13-19) and adults (20-28) according to their respective age-group.
3. Hypotheses
- There exists no significant difference between awareness of male and female students of Punjab.
- There exists no significant difference between awareness of students of Punjab who are adolescents (13-19) and adults (20-28) according to their respective age-group.

4. Method
Descriptive Survey Method was used to do this study. Convenient method of sampling was used to collect data online from the sample selected randomly among students of Punjab who are either adolescents or adults according to their respective age-groups.

5. Sample
Population of the present study include all adolescent and adult students of Punjab studying in higher secondary school or college/University. To collect data, sample of 100 students with age group 13-19 years (adolescents) and 20-28 years (adults) was taken randomly on the basis of availability. Convenient method of sampling was used to collect data. The data was collected using Awareness of COVID-19 survey based Questionnaire. It was distributed in the form of Google forms via mail and Whatsapp among the selected sample as personal visits to school or college was not possible due to lockdown of COVID-19.

6. Procedure
Students of Punjab with different age groups were selected randomly according to convenience and their availability due to lockdown period of COVID-19. Awareness of COVID-19 questionnaire was made using Google forms and through E-mail or Whatsapp. Instructions were mentioned on this survey based questionnaire clearly.

7. Tool
Data was selected by administering Survey based Questionnaire named 'Awareness of COVID-19' validated by Krishna Undela (2020) [5]. There are three sections in this questionnaire.
- In the first section, demographic details of respective sample was collected.
- In the second section, knowledge persisting among students of District Ferozepur, Punjab about COVID-19 is measured. All multiple choice questions in this section are fact based with four options but only one correct answer.
- In the third section, beliefs related to COVID-19 among students was assessed. This section consists of 11 items with options Yes or No or Do not Know.

This questionnaire has two dimensions that are, knowledge of COVID-19 and Beliefs related to COVID-19 among students of Ferozepur District, Punjab. Scoring of this questionnaire is based on total number of correct responses from Section - 2 & 3. There is no negative marking.

8. Results and Discussions
Before considering any data analysis it is very important to check the normal distribution of data to be computed. Table 1 presents the value of mean, median, mode, skewness and kurtosis of total sample for the variable, awareness of COVID-19 among students. From the above table it can be seen that value of mean, median and mode for awareness are approximately same. The value of skewness is found to be -0.093 which means distribution is slightly skewed positively which can be considered equal to zero. The value of kurtosis came out to be -0.153 which is less than .263. Hence the distribution curve is platytkurtic that can be taken approximately 0.263. The values of mean, mode and median of secondary school students for this variable is approximately same as shown in Table 1 so it shows distribution is normal. From the above table we can also infer that the awareness of COVID-19 among students is average and can be enhanced with the help of certain measures.

Table 1: Mean, median, mode, standard deviation, skewness, kurtosis for the awareness of COVID-19 among students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>SK</th>
<th>KU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of COVID-19</td>
<td>22.35</td>
<td>22</td>
<td>22</td>
<td>4.323</td>
<td>-0.093</td>
<td>-0.153</td>
</tr>
</tbody>
</table>

The second objective of the study was to find out significant difference in the awareness of COVID-19 among male and female students. Table 2 shows there exists no significant difference with p value 0.981 at 0.05 level as the p-value is lesser than the table value. Thus, the first null hypothesis stating no difference exists between male and female students for awareness of COVID-19 is accepted. Also, from the mean scores it is quite evident that male students (M = 24.19) have approximately equal awareness of COVID-19 with the female students (M = 24.22) of Ferozepur. So, the null hypothesis stating no difference in awareness of COVID-19 among male and female students of Ferozepur is accepted, thus we may infer that gender plays no significant role in awareness of COVID-19. The maximum score which can be obtained is 34 and the mean value obtained for both male and female students is average that means measures are required to increase the awareness among students. So, it can be concluded that both male and female have average awareness of COVID-19.

Table 2: Mean, SD and t-value showing difference in awareness of COVID-19 of male and female students of Ferozepur

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>24.19</td>
<td>5.45</td>
<td>0.981*</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>24.22</td>
<td>3.57</td>
<td></td>
</tr>
</tbody>
</table>

*not significant at 0.05 level and 0.01 level

The third objective of this study was to compare the awareness of COVID-19 among adolescents (13-19 years) and adults (20-28 years) of Ferozepur. Table 3 shows that p value is 2.9371 which is higher than the table value of 1.671 so the null hypothesis stating there exists no significant difference in awareness of COVID-19 among adolescents and adults (students) of Ferozepur is rejected. As mentioned earlier the maximum score that can be obtained in awareness of COVID-19 is 34 and mean value for adolescents (M = 24.74) is greater than adult (20-28 years) students. So, it can be concluded that awareness of COVID-19 in adolescents is higher comparative to adults which could be due to their active participation in online classes conducted by most of the schools and similarly education programmes should be taken into consideration to develop better awareness among adults.
Table 3: Mean, SD and t-value showing difference in awareness of COVID-19 between adolescents and adults of Ferozepur

<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents</td>
<td>27</td>
<td>24.74</td>
<td>3.809</td>
<td>2.9371*</td>
</tr>
<tr>
<td>Adults</td>
<td>31</td>
<td>20.26</td>
<td>3.642</td>
<td></td>
</tr>
</tbody>
</table>

*significant at 0.05 level

9. Conclusion

Findings of the present study revealed that awareness of COVID-19 among students of Ferozepur city is average and requires special measures to increase the awareness among students in order to consider precautionary measures and prevention in transmission of COVID-19 further. Students play important role in upliftment of our society, so we need to develop sense of maturity, responsible behavior in order to combat the further spread of COVID-19 pandemic. This finding implies that efforts need to be done on the part of teachers and educationists for increasing awareness of COVID-19 among students via campaigns, online lectures, seminars or events.

10. References

3. Development commissioner ministry of micro, small & medium enterprises. (N.D.). India Fights Corona. dcmsme.gov.in