A Study on Attitude, Awareness and Behaviour of College Students Regarding Coronavirus

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ABSTRACT

Background: Coronavirus is the most recent epidemic disease that has affected majority of countries in the world.

Aim: The aim of the research was to assess the level of awareness, attitude and the satisfaction level of participants regarding the pandemic disease.

Methodology: A cross sectional survey was conducted with the help of self constructed questionnaire in district Ludhiana (Punjab) among 350 students of college.

Results: Almost all the respondents were aware the epidemic. Washing hands (81%) and using face masks (78%) are common among them after the spread of Coronavirus. Their main source of getting the information was television (80%) and internet sites (89%). According to respondents, virus (79.7%) and Communicable disease (64.8%) are the main cause of Coronavirus with two leading symptoms as fever (94.8%) and cough (95%). Almost 96% of respondents were worried about this epidemic and 90% of them were of the opinion to isolate in case problem occurs. Majority of respondents (nearly 90%) agrees with the decision taken by local authorities.

Conclusion: Health seeking behaviour of respondents was good. They trust the steps taken by local authorities but also think that the community does not have sufficient resources to come out from this phase.

Key words: Coronavirus, Epidemic, Pandemic, Virus, Communicable Disease, Isolate.

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When the rival is imperceptible and swiftly proceeding, human responses have a tendency to trail set prototypes. About a century ago, Spanish flu, in 1918, shattered the Indian economy. Can we explore anything from that experiences? And now, we have Novel Corona Virus, commonly known as COVID-19.

1. INTRODUCTION

A Disease, as the name itself is horrible, smithereens the family. But, what happen when it becomes pandemic? A matter of worry for nation, for world, when a pandemic disease spreads and traumatized everything.

In year 1918, popularly known as a year of the most **devastating epidemic**[31], clearly shows that what turns out when an ill equipped nation comes in the way of a virulent pandemic[32]. But presently, in 21st century, the situation changes. Now, our country, India, is a democratic country and is no more controlled by the royal officials. Also we are equipped with advanced medical facilities as compared to the centuries ago.

But, again for the third time in as many decades we are confronted with the pandemic Corona-Virus, a virus that affect human species. The virus is provisionally known as Novel Corona-Virus or COVID 2019 (nCoV 2019), which was initially recognized in Wuhan, China[15], in a person exposed to a sea food[17] in December 2019. The virus was pandemic that not only affect the cities of China, but the entire globe[8].

On 11th January 2020[27], first patient was died due to Coronavirus in China and on 14th January 2020[28], Ministry of Public Health, Thailand reported its first imported case in Thailand followed another imported case from Wuhan in Japan on 15th January[29] declared by Ministry of Health, Labour and Welfare Japan.

On 30th January 2020, World Health Organization demanded cooperation from governments, health workers, and public of different countries to avert its spread[26]. Then WHO declared Coronavirus as global health emergency[30].

The virus affected persons start dissemination in different countries and soon it enters the boundaries of India also when on 30th January 2020, the first case of Coronavirus was confirmed[19]. A student from Wuhan, China came back to Kerala, his home town, during her vacations was affected by COVID -19, followed by two more cases in

same state[12] till 14th February 2020. And then it spread its wings in different states of India. Cases from Delhi, Hyderabad, Jaipur, NOIDA came in to limelight. Delhi government on 12th March 2020[33] declare Coronavirus as an epidemic and declared that malls, universities, schools, colleges etc. places of public gathering shall remain shut till 31st march 2020. The movement was followed by other states also. On 22nd March 2020 Prime Minister Mr. Narendra Modi request the citizens of country to follow **Janta Curfew** from 7:00am to 9:00 pm.

Whether our country be able to come out from the clutches of this pandemic disease or not? It all depends upon the level of awareness and the attitude of the people towards the deadly virus. So, in order to know about the awareness level and the knowledge about the problem a survey, which includes college going students, was conducted.

2. OBJECTIVE OF THE STUDY

The study was conducted with the motive:

- to assess the level of awareness of college going students about the Coronavirus.
- to analyze the attitude of students regarding the prevention of Coronavirus.
- to assess the satisfaction level of participants regarding the steps taken by the local authorities.

3. REVIEW OF LITERATURE

- **Almutairi K. et. al. (2015)[4]** undertook a research to identify the attitude, awareness and practices related to MERS-CoV among the public in Saudi Arabia. A sample of 1147 adults were taken from the shopping malls of Riyadh. Questionnaire method was used to collect the information. The respondents showed high level of concern about the problem and were in to the practice of using precautionary measures. And it was concluded that precautionary measures adopted by the crowd helps in avoiding the contamination of virus.
- **Mohaissen M. (2017)[3]** conducted a study with a motive to measure the level of awareness of MERS Coronavirus among Faculty, Staff and Students in University of Saudi Arabia. A questionnaire was used to analyze the results. Sample of 1541 participants were taken. The result revealed that maximum respondents were familiar with the symptoms of MERS-CoV but all of them were aware about the preventive hygiene practices. The sample was not aware about the disease epidemiology also, the

treatment was not appropriate. The knowledge of care workers and students regarding the precautions to be taken while dealing with patients was also inadequate. It was recommended by researcher that for providing better knowledge to the staff and students, sufficient educational programmes should be conducted by the educational institutions.

- **Lupia T. et al. (2020)[16]** conducted a research with the motive to recapitulate the clinical aspects of the COVID -19 disease. The researcher undertook the research with the motive to diagnose the problems associated with Coronavirus. And they concluded that the epidemic, in most of the cases, is interrelated with respiratory disease and few extra signs related to lungs. However, the existing problem of respiratory has less relationship with this virus.
- **Shah K.M. (2020)[22]** in her paper wrote that the present situation has restated the fact after the crises of Coronavirus, the healthcare and life sciences is the major prospect for a country like India. She stated that this pandemic is a lesson for the Governments of the various nations to not ignore the research in the field of medicine, in case if they want to survive and fight against the epidemic diseases like Coronavirus. Government needs to grab the opportunity to readdress its focus on bio-technology, health industry and life sciences and put some effort to involve private sector in making India not only the 'Pharmacy of the World' but also the 'Laboratory of the World'[34].
- **Acharjee S. (2020)[1]** in her article explained that the situation today i.e. due to Coronavirus, is just like the situation of the past when other infectious diseases took place, especially the Spanish Flu in 1918. She further stated as no vaccine of COVID 19 was there and also the virus is spreading very fast, it is the alarming time for the general public to come forward and help the system. Collective ownership of the responsibility is the magical formula to defeat the disease.

4. MATERIAL AND METHODS

A cross sectional study was conducted in the Khalsa College Ludhiana, Punjab. The population comprises of approximately 4000 students doing Graduation and Post Graduation. A sample of 350 students was selected on the basis of random sampling. The sample was selected as per Morgan's table[13] for sample size with confidence level of 95% and margin of error was 5%. All the students completed the survey.

4.1 Study Tool

Tool for Data collection comprised of two main parts:

1. **Demographic Information:** It includes the information about age, gender, education qualification etc. of students.
2. **Questionnaire:** A self designed questionnaire was used to assess the level of awareness and attitude of students about the pandemic disease. The questionnaire was categorised into four sub sections in which an attempt was made to gather knowledge from the respondents about :
    - Awareness about the disease- It comprises of 13 items.
    - Attitude and practices adopted by the participants regarding the prevention of disease - It comprises of 14 items
    - Behavioural change in relation to disease - It comprises of 6 items.
    - Information to check the satisfaction level of participants regarding the steps taken by local authorities - It comprises of 5 items..

Complete clarification was given to the students about the purpose of the study and detail information was given to them regarding the statements in the questionnaire. The confidentiality of students was duly ensured.

4.2 Analysis

For the purpose of analysis of questions, Likert scale was used. The quantitative data was collected with the help of Google Forms on the basis of which the result was collected in Microsoft Excel and analysis was done using SPSS software. Descriptive statistical data in the form of average, frequency and percentages was used to portray the results.

4.3 Reliability

Cronbach alpha is used to assess the reliability of responses. Alpha is a way to check the internal consistency of the items. **Schmitt (1996)[21]** defines reliability as "a function of the interdependence of the various items used in questionnaire for conducting the research." The value of alpha for scores for attitude and practices adopted by the participants regarding the prevention of disease is 0.72, for behavioural change in relation to change is 0.73 and for information to check the satisfaction level of participants regarding the steps taken by local authorities is 0.788. The values of alpha were considered good as per the rule of thumb given by **George and Mallery (2003)[9]** as:

= > 0.9	Excellent
= > 0.8 and < 0.9	Good

= > 0.7 and < 0.8	Acceptable
= > 0.6 and < 0.7	Questionable
= > 0.5 and < 0.6	Poor
= < 0.5	Unacceptable

Table 1: Table showing rule of thumb for alpha values

5. Results and Discussion

5.1. Awareness about the Disease (Corona virus)

Among the respondents everybody is aware about this deadly virus. An option was given to the respondents to choose more than one option in giving response about the source of the information. The analysis of responses of the same is shown below:

Source of information	Cases (n=350) (%)
Television	281 (80.3%)
Internet/ Social networking Sites	312 (89.1%)
Newspaper	175 (50%)
Friends and Family	182 (52%)
College/Place where you work	182 (52%)
Health care Campaigns	40 (11.4%)

Table 2: Source of information regarding Coronavirus*

***Multiple responses**

The information extracted from the table states that Internet/Social networking sites (89.1%) and television (80.3%) was the biggest source of getting information about Coronavirus.

Nearly 78% people purchase face mask after the spread of Coronavirus out of which 38% purchase one, 16.3% purchase two and 18.8% purchase more than 2 face masks. 81% respondents purchase liquid soap out of which 25% purchase a bottle of 250 ml, 29.8% go for 500 ml, 13.9% buy a bottle of 1 litre and 12.3% go for more than 1 litre of soap. 83.7 % respondents also purchase hand sanitizers and most of them go for 250 ml of quantity (46%).

Cause of Coronavirus	Cases (n=350) (%)
Virus	279 (79.7%)
Inherited disease	35 (10%)
Communicable disease	227 (64.8%)
Malnutrition	10 (2.8%)
Immunodeficiency	11 (3%)

Table 3: Awareness of respondents regarding cause of Coronavirus*

***Multiple responses**

Maximum respondents believe that disease is caused by virus (79.7%) and is a communicable disease (64.8%). Respondents giving response for immune deficiency, inherited disease and malnutrition showing that they lack basic information.

Symptoms of Coronavirus	Cases (n=350) (%)
Respiratory Symptoms	216 (61.7%)
Pneumonia	83 (23.7%)
Shortness of Breath	277 (79.1%)
Fever	332 (94.8%)
Cough	333 (95%)

Table 4: Awareness of respondents regarding symptoms of Coronavirus*

***Multiple responses**

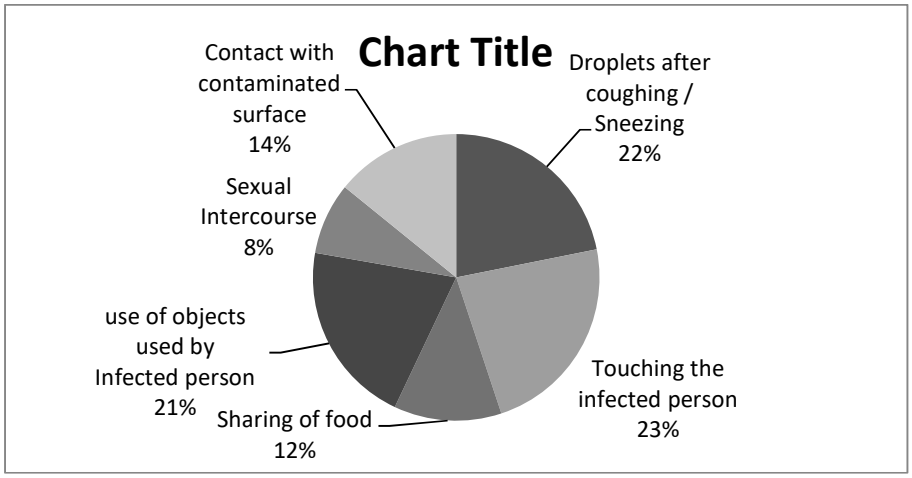

Figure 1: Transmission of Coronavirus

Figure1 shows that 23% of people were of view that Coronavirus is transmitted through touching the infected persons, 22% by droplets of coughing and sneezing, 21% by use of objects used by infected persons, 14% by contacting the contaminated surface, 12% by sharing of food of affected person and 8% believe that it can also be transmitted sexually.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government Hospitals	169	48.3	48.3	48.4
	Private Hospitals	140	40	40	88.5
	Family Physician	34	9.7	9.7	98.4
	Homeopathic Clinic	7	2.0	2.0	2.0
	Total	350	100.0	100.0	

Table 5: Table showing visiting medical places during Coronavirus

Table 6 given below shows that out of the total respondents 48.3% wants to visit Government hospitals in case they were infected with Coronavirus, 40% wants to visit

Private hospitals, 9.7% wants to visit their family physician for their health check up and only 2% of respondents were ready to visit homeopathic doctors.

Maximum respondents fear from Coronavirus because they thinks it is spreading very fast and any one can be affected by the this virus. Also no vaccine was there in the market to protect the patients. So, this will cause a matter of worry for respondents.

5.2. Attitude and practices adopted by the participants regarding the prevention of disease

Out of total respondents, only 28% always use the face mark while 45% i.e. majority of sample use the face mask most of the time. Majority of respondents i.e. nearly 71% were of opinion that they will not visit the crowded place during this critical period but there are few respondents (6% approx) who showed their interest in going out for some reasons that may be unavoidable, also 80.3% of respondents have problem while using the public transport. Nearly 82% or respondents always wash their hand with soap and water and out of which only 65% of respondents wash for at least 20 seconds. Apart from using soap and water, 54% of sample also use alkaline based sanitizers to keep their hands clean. Majority of people in the study (78.3%) were of the view that they will welcome the guests at their place with folded hands instead of hand shaking and also 57% wants to isolate themselves and don't want to meet any outsider or their relatives till there is such problem in the society. In order to keep themselves updated nearly 76% of respondents check the information about the spread through the television and internet sites.

5.3. Behavioural change in relation to disease

Almost 96% of respondents were worried about this epidemic and 90% of them were of the opinion that will isolate themselves if problem was detected among them. They don't have any issue in disclosing the information to their relatives or neighbour, so that the precautions can be taken. The sample (92%) has more trust on the information/ text messages send by on local bodies/ government authorities for the prevention of disease than provided by their friends and relatives (64%). As most of them are aware and were using the preventive techniques and following the guidelines of government, so they (78%) have trust that they can protect themselves and their family from this disease.

5.4. Information to check the satisfaction level of participants regarding the steps taken by local authorities

Majority of respondents (nearly 90%) agrees with the decision taken by local authorities regarding lockout, isolation of affected persons, quarantine etc.. no doubt, the local bodies and government were doing lots of efforts but still respondents believe that the community does not have sufficient resources to solve the problems of the society at large. Also only 55% (approximately) of respondents believe that community will able to provide emergency services. The reason for this may be difference of opinion, cultural background etc.

6. Limitations

The study is restricted to particular district only, this is one of the main limitation. Also the study is limited to one section of people of society. Extending the research to other district may results in knowing the different reactions of the people.

7. Conclusion

It was reported in the study that the results of questionnaire were reliable. This is one of the important aspect from researcher's point of view as the results were meaningless unless until the items were not reliable. This study investigated the levels of attitude, awareness an and practices adopted by the respondents regarding Coronavirus epidemic. It was analyzed that most of the participants had fair awareness about this epidemic. Majority of respondents were using masks, indulge in the activity of frequent hand wash, following the rules of social distancing and isolation etc. This shows that their health seeking behaviour was good. Based on the findings of this study, it was concluded that, no doubt, the respondents trust the local authorities and steps taken by them during this phase of epidemic but they also think that the community will not have sufficient resources to come out from this phase. Efforts should be made to increase the process of communication between general public and physicians through the involvement of media to dispel myths about the disease and also providing help in spreading the accurate information.

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