Knowledge of COVID-19 and Death Toll Cases in Manipur

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Authors’ contributions

This work was carried out in collaboration among all authors. Author HSD designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors KSD and TKD managed the analyses of the study. Author ABM managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

**Background:** The disease Covid-19 has led to a great loss of million people worldwide and this disease is caused by a novel virus called SARS-CoV-2.

**Objective:** The objective of the present study aims at examining the knowledge of Coronavirus disease (COVID-19) among the participants and the death toll cases in Manipur.

**Setting:** The study was conducted in the campuses of Dhanamanjuri Colleges of Arts, Science and Commerce, Dhanamanjuri University, Imphal, Manipur.

**Subjects and Methods:** A total of 200 participants (boys=110 and girls =90) aged 20-30 years was considered for this present study. Data were collected using interview schedule containing Covid-19 related variables.

**Design:** The design of the present study is based on Cross-sectional method.

**Results:** Results indicated that maximum participants (83.5%) considered Covid-19 as virus, 1.0% thought as bacteria, but 15.5% knew that Covid-19 is a disease. A very high percentage of students (95.5%) knew the various symptoms of the disease. Amongst them, 92.5% of participants

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also knew the mode of transmission of the novel Virus. However, 4.5% and 8.5% of them had incomplete knowledge about of the mysterious novel coronavirus disease symptoms and its mode of transmission. While maintaining the preventive measures, 10.5% of participants used masks irregularly in the public places. As well as, only 34.0% of respondents kept masks inside the pocket or bag, and 5.5% of the subjects didn’t have the idea of washing hands or sanitisation. It was also found among the participants that some of them (30.0%) were aware of testing to know the status of Covid-19 and the number of confirmed cases was 8.0%. From the above results, it may be said that there was lack of proper knowledge among some section of the participants. The lack of proper knowledge of any novel fatal disease or virus and its related preventive measures are major risks to the whole public. However, immune responds can play role in defending the risk of the disease.

**Keywords:** Knowledge; COVID-19; death toll; Manipur.

1. **INTRODUCTION**

The novel SARS-CoV-2 is about 65 -125 nm (nanometre) containing single strains of RNA and provided with crown like spike on the outer surface [1]. The Covid-19 pandemic has led the human life an uncertain future, causing anxiety, fear, depression, psychological and physical illness and loss of million people. The SARS-CoV-2 was first identified in December in the Wuhan city, China. The virus, now named SARS-CoV-2, contains a single positive stranded RNA (ribonucleic acid) of 30 kilobases, which encodes for 10 genes [2]. Researchers have shown that the virus can enter cells by binding the angiotensin-converting enzyme 2 (ACE2), through its receptor binding domain in the spike protein [3].

In the Indian context, the first SARS CoV -2 positive case was reported in Kerela on January 30th, 2020. Over 98 million confirmed cases of Covid-19 have been reported all over the world and the global death toll due to Covid-19 stands at 2,107,388. The US has recorded 24,821,815 confirmed cases of Covid-19, with the highest death toll with 414,107 fatalities, while India is in second place with 10,639,684 cases, having with death cases of 153,184 [4]. Manipur is a state, which lies in the north eastern part of India. A total of 4, 90,599 samples were tested for Covid-19 with total confirmed cases of 28,693. Altogether 365 deceased cases have been recorded as on Jan 11th, 2021 [5]. The total population of Manipur according to 2011 Census Survey report was 28, 55,794, of which 14, 38,586 were males and 14, 17,290 were females [6].

The central and state governments have adopted several measures and protocols to prevent wide spread and infection of the disease. Several people with good nutrition didn't fall sick despite an infection and recovered quickly. Good nutrition with certain kinds of foods play important role in the immune mechanisms of human beings. However, the loss of food diversity and traditional food plants are diminishing day by day due to industrialisation. In many developed countries, genetically modified foods are consumed, as such, traditional foods have been neglected. Changes in our diet along with the external environments deteriorated our immunity [7].

This paper aims at studying the present knowledge of Covid-19 among the student participants and the death toll cases in Manipur.

2. **MATERIALS AND METHODS**

The present research work is based on the cross sectional method. Data of the present study consist of a total of 200 participants, out of which 110 are boys and 90 are girls. The ages of the subjects were from 20-30 years whose educational standards ranged from BSc first semester to MSc second semester. Participants were randomly chosen and interviewed using interview schedule containing name, gender, age, educational qualification, and SARS CoV-2 and its disease Covid-19 related variables in the month of November, 2020 during the pandemic.

3. **STATISTICAL METHODS**

For analysis of this present paper, no software such as SPSS and Excel were used. Only frequencies of individuals were sorted out manually for each variable.
4. ANALYSIS AND RESULTS

Table 1 highlights the knowledge of COVID-19 (Corona Virus Disease) among the study participants. As regards to the knowledge of COVID-19, maximum 83.5% of participants considered this disease as virus, 1.0% of them thought as bacteria, but 15.5% of respondents knew that COVID-19 is a disease. A high number of participants (95.5%) knew the various symptoms of the disease. Amongst them, 92.5% of participants also knew the mode of transmission of the novel Virus. Out of the total, a few of them, that is 4.5% and 8.5% of participants had incomplete knowledge about of the mysterious novel corona virus disease symptoms and its mode of transmission. Some of them didn’t know how SARS CoV-2 passes from one person to another through direct or indirect contact with infected persons through the secretion such as saliva respiratory droplets, which are expelled when an infected individual cough or sneezes or talk without mask. Among the study participants, 10.5% didn’t used masks regularly in the public places even though people are advised to use masks and to maintain physical distancing. Moreover, 21.0% of subjects kept the used masks inside the pocket, 7.5% of participants kept the masks hanging with other cloths and 5.5% threw away after using the masks. However, 66.0% responded that the masks were kept separately in the sunlight. Washing hands with soap or sanitised whenever necessary was not done by 5.5% of participants. A well as, COVID-19 test was also low among the participants. Only 30.0% was tested and the remaining 70.0% of participants were not willing to know their COVID-19 status. Among the tested individuals, 8.0% was confirmed of COVID-19.

5. DISCUSSION

The above foregoing results have indicated that majority of the participants (95.5%) had very good knowledge about the (Covid-19) symptoms and 92.5% subjects also had high knowledge about the mode of transmission.

| Sl. No | Description | f | p.c |
|-------|-------------|---|-----|
| 1. | Disease | 31 | 15.5 |
| | Bacteria | 02 | 1.0 |
| | Virus | 167 | 83.5 |
| | Total | 200 | 100 |
| 2. | Having knowledge of Covid -19 symptoms | 191 | 95.5 |
| | Incomplete knowledge of Covid -19 symptoms | 09 | 4.5 |
| | Total | 200 | 100 |
| 3. | Having knowledge of Covid-19 mode of transmission | 185 | 92.5 |
| | Incomplete knowledge | 17 | 8.5 |
| | Total | 200 | 100 |
| 4. | Regular used of mask | 179 | 89.5 |
| | Irregular used of mask | 21 | 10.5 |
| | Total | 200 | 100 |
| 5. | Separate placing of mask in the sun light | 132 | 66.0 |
| | Improper placing of mask inside the pocket or bag | 42 | 21.0 |
| | Hanging on the wall with other cloths | 15 | 7.5 |
| | Used and throw on the roadside | 11 | 5.5 |
| | Total | 200 | 100 |
| 6. | Washing hands or sanitised after removing mask | 189 | 94.5 |
| | Not washed | 11 | 5.5 |
| | Total | 200 | 100 |
| 7. | COVID -19 tested | 60 | 30.0 |
| | Not tested | 140 | 70 |
| | Total | 200 | 100 |
| 8. | Ever infected and suffered | 16 | 8.0 |
| | Not infected | 184 | 92.0 |
| | Total | 200 | 100 |
While maintaining the preventive measures of COVID-19, it was found that some participants were unaware to follow the guidelines. In many social occasions, physical distancing was not maintained and many invites, particularly the young ladies didn’t use masks. Public negligence or ignorance is a main problem to spread infectious disease, which can pass from one person to another. Therefore, there is suspicion and possibility of high transmission rate of COVID-19 in the state. In spite of having such negligence, the death toll was 369 as on 22nd Jan. 2021, and remains unchanged till 26th Jan., 2021. The possible reason behind total low death toll i.e., 369 would be due to better immune system of the people.

Manipur is a state where varieties of vegetables are grown and available throughout the state. In addition to this, many fermented foods are consumed by the people and mention may be made of daily consumption of fermented dry fish. Due to high probiotic content, fermented foods can give immune system a boost and reduce the chance of infections. Moreover, vast majority of the people didn’t depend on sedentary life. They engaged in physical work even during the lockdown. Exercise or physical work can change in antibodies and white blood cells and reduces stress. Fortunately, Serum Institute’s Covishield vaccination was launched on 16th Jan nationwide in India and health worker front liners have been given priority. However, Government advise to follow protocols for preventing COVID-19 even after vaccination also. It seems likely that a person's immune system will win that arms race, but scientists don’t have the data yet to say that with confidence. That's why people who have been vaccinated are still supposed to wear a mask and take other precautions – until that gets sorted out [8].

6. CONCLUSION

The present study has led to the conclusion that majority of the participants (95.5%) had very good knowledge about the (Covid-19) symptoms and 92.5% of subjects also had high knowledge about the mode of transmission. Although, while maintaining the preventive guidelines, regular use of masks in the public places were not aware by some of the respondents (10.5%), which is one of the important preventing measures to fight against COVID-19. In spite of all these, there were low death toll cases in the state. It may be said that better nutrition with physical activities might boost the immune system of the people in defending the risk of the disease.

7. RECOMMENDATION

Researchers would like to recommend that during the crisis of pandemic, public should be made aware about the severity of the new virus or bacteria, and also how to adopt the guidelines in a proper manner so as to prevent against the disease. Moreover, people should give more emphasis on better nutrition, regular exercise and enough sleep. These are important measures in the struggle for existence during the critical juncture of pandemic.

CONSENT

Authors have declared that “consents were obtained from the subjects under study for data collection and publication of this study”.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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