

Assesment Of Knowledge, Attitude And Perception Towards Covid-19 Among 1st Year Mbbs Students Of Regional Institute Of Medical Sciences, Imphal

Khwairakpam Aruna Devi,

Senior Resident, Department Of Physiology, Shija Academy Of Health Sciences, Langol, Imphal, Manipur

Thangjam Pricila Devi,

Assistant Professor, Department Of Physiology, Shija Academy Of Health Sciences, Langol, Imphal, Manipur

Shafiullah Muhamed,

Senior Resident, Department Of Physiology, Rims, Imphal

Rajima Sahani,

Senior Resident, Department Of Physiology, Rims, Imphal

Abstract:

Background: The best way to prevent and slow down Coronavirus disease (COVID-19) transmission is to be well informed about the disease and how the virus spreads. Medical students are the first people to have close contact with those infected with COVID-19, so their awareness of the disease is crucial for their safety and plays an important role in spreading supportive information in their communities.

Aim: To asses COVID 19 related knowledge, attitude, and perception among 1st year MBBS students of RIMS, Imphal.

Materials and Methods: This is a cross-sectional study conducted in February 2023, RIMS, Imphal. Questionnaires containing a total of 30 questions: 16 items for knowledge, 9 items for attitude, and 5 items for perception were distributed and collected after the practical classes.

Results: Of the total 118 participants, 60 were females and 58 were males. The study revealed that about 28% and 16% have partial knowledge about the origin and the cause of COVID-19, respectively. Majority have shown positive attitude and almost all of them have taken their vaccines, the students have also shown positive perception, however 32% of the students believed that covid 19 was initially designed as a biological weapon, 37% of the students believed that covid 19 pandemic can be eradicated without vaccination if everyone maintains and follows the preventive measures.

Conclusion: The 1st year MBBS students had an acceptable level of knowledge regarding covid 19 preventive measures, positive attitude and good perception.

Keywords: COVID-19, Knowledge, Attitude, Perception, MBBS students.

Date of Submission: 18-04-2025

Date of Acceptance: 28-04-2025

I. Introduction:

Coronavirus disease (COVID-19) is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which started in Wuhan, China in 2019, and is considered an agent responsible for the widespread epidemic outbreak till now throughout the world.¹ Adolescents and youth should not only be considered as affected populations but also as highly effective partners in COVID-19 prevention efforts. They can engage meaningfully to be educators and agents of change among their peers and in their communities.² Using and actively engaging with the vast networks of youth organizations not only promotes compassion and raises awareness of and protection against the virus but also encourages safe conduct in their communities and the sharing of accurate information.^{3,4} According to the Knowledge, Attitude and Practices (KAP) theory, the state of the society, behaviours, understanding, and habits have a significant impact on willingness to consider behavioural improvement and adherence to preventive strategies.⁵ Proper awareness about COVID-19 among medical students is crucial, so that they can play an important role in helping to stop the spread at the community

level. Hence, this study was conducted to assess the knowledge, attitude, and perception towards COVID-19 among 1st year MBBS students of RIMS, Imphal

Objective:

To asses COVID 19 related knowledge, attitude, and perception among 1st year MBBS students of RIMS, Imphal

II. Materials And Methods:

Study setting and design:

This cross-sectional study was conducted in the Department of Physiology, RIMS, Imphal, in February 2023.

Study population and sample size:

The study participants included 118 first-year MBBS students. They were informed about the details of the study objectives for filling up the questionnaire. Informed consent was obtained from each participant, and anonymity and confidentiality of the participants were ensured.

Study tool:

A Self-designed questionnaire was prepared. The questions were established based on some published literature^{6,7}.

The study questionnaire comprised four sections containing 33 items. Section 1 had three items that explored the demographic information of respondents, like gender, the state they belong and the year of passing the 12th standard. Section 2 comprised 16 questions and aimed to gather in-depth knowledge about COVID-19, including symptoms, mode of transmission, and preventive measures for COVID-19. Section 3 consisted of 9 questions aimed at evaluating students' attitudes about COVID-19. Section 4 consisted of 5 questions and aimed at evaluating students' perception of COVID-19. These questions were responded to on a Yes or No basis, with an additional 'Not sure' option, some questions require specific information.

Data collection:

The questionnaire was distributed after practical classes. Participation in this survey was voluntary and was not compensated. It has been disclosed to all the participants that their identity will be kept confidential and their results will be used only for research purposes.

Data analysis:

The collected data were tabulated and analysed using a Microsoft Excel worksheet. Categorical data were expressed as frequency and percentage.

III. Results:

Table 1: Results of Knowledge

Questions	YES	NO	NOT SURE
1. COVID-19 spreads via respiratory droplets of infected persons	118	0	0
2. COVID-19 is transmitted by direct contact with infected persons	99	10	8
3. People who have contact with someone infected should be immediately isolated in a proper place	115	3	0
4. The virus can live on surfaces for a long period of time	38	47	33
5. Fever, headache, cough, sore throat, loss of smell and taste are main symptoms of COVID-19 infection	117	1	0
6. The virus may be more dangerous for the elderly	115	3	0
7. Do you think vaccines produced in India are as efficient as the ones produced abroad?	77	17	24
8. Can wearing a surgical mask protect you from COVID-19	67	22	29
9. Is the cloth face mask as effective as a regular face mask	15	76	27
10. Proper hand hygiene can prevent COVID-19	117	1	0
11. Avoid touching your eyes and nose to prevent COVID-19	115	2	0
12. Covering the nose and mouth while coughing can prevent COVID-19	115	0	3

The results of the knowledge survey are presented in Table 1. The majority of the students had correct knowledge regarding the route of transmission. Only 83% of the participants were aware that COVID-19 can be transmitted by direct contact with infected persons. Most of the participants (99%) had correct knowledge about the main symptoms of COVID-19 infection. Regarding preventive measures, 97% of the participants knew that proper hand hygiene, avoiding touching the eyes and nose, covering the nose and mouth while coughing, can prevent the spread of COVID-19.

Fig 1: Response for attitude

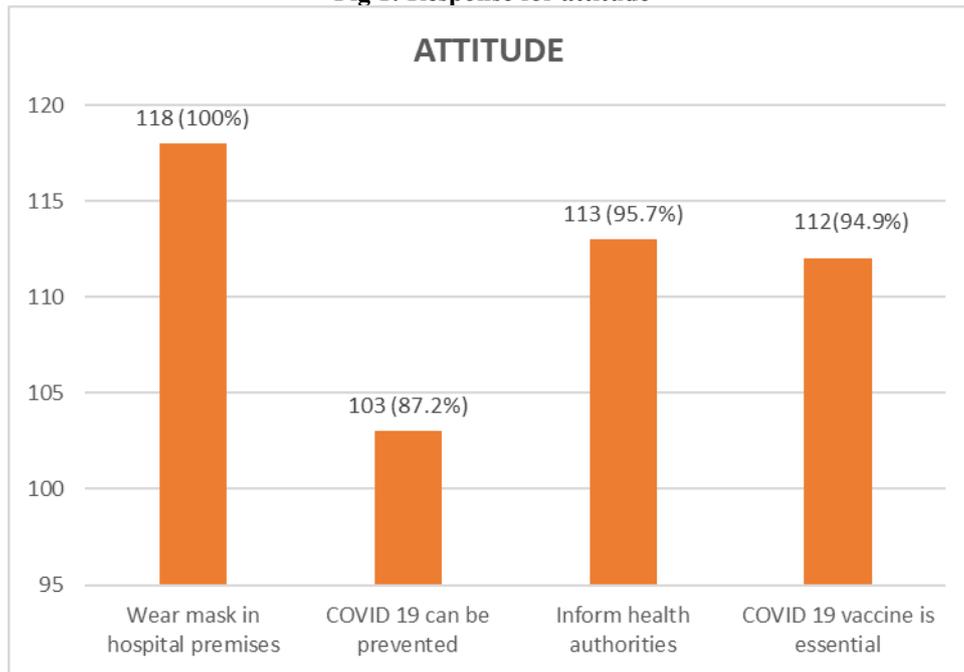


Figure 1 shows the response for the attitude survey, all the students wore masks in the hospital premises. 103 (87%) students believed that COVID-19 can be prevented, and 113 (95%) of the students are ready to inform the health authorities in case of the development of any symptoms associated with the disease. 113(94%) of students believed that COVID-19 is essential.

Fig 2: Response for perception

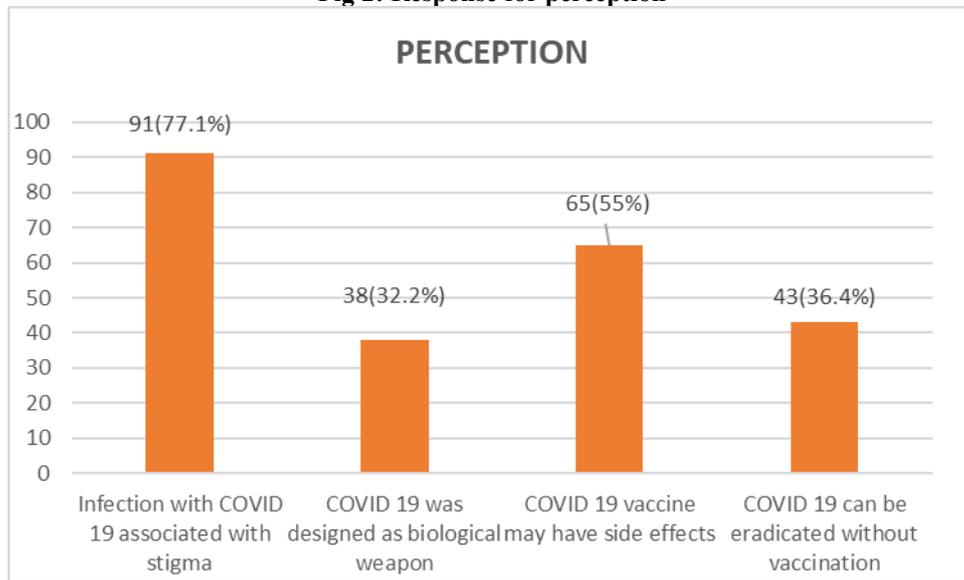


Figure 2 shows the results of perceptions, 77% of students believed that infection with COVID-19 is associated with stigma, 32% believed that the disease was designed as a biological weapon, only 55% has the perception that ill ventilated room can transmit the infection and only 36 % believed that COVID-19 can be eradicated without vaccination if people followed strict preventive measures.

IV. Discussion

In the present study, the knowledge, attitude, and perception towards COVID-19 among 1st-year MBBS students were assessed. It was found that 97% of students had good knowledge of COVID-19.

It was found that 115 (97%) of students are willing to follow the instructions if they ever receive a brochure containing information about COVID-19, showing a positive attitude. It is worth mentioning that sufficient COVID-19 knowledge scores, positive attitudes, and acceptable perceptions were found among the students.

During pandemics like COVID-19, the health care system is put under great pressure, forcing the authorities to recruit undergraduate medical students to provide care to patients⁶. People are combating COVID-19 by adhering to preventive measures; however, it is primarily influenced by their knowledge, attitude, and perception against the pandemic⁸.

The satisfactory level of knowledge observed in the present study is consistent with the findings of these studies.⁹⁻¹¹

This study was performed among medical students and not the general population. The major limitation of the present study is that the sample sizes are limited to the students of the first year government medical college, and hence, the results based on the sample sizes used could not be generalized to the general population. Although it can certainly help the state to enhance awareness regarding KAP in the general population. A few demographic variables are also a limitation. Given these, more studies should be conducted in the near future to investigate the KAP for COVID-19 in various states and countries.

V. Conclusion:

Overall, the students showed expected level of knowledge, attitude, and perception regarding COVID-19. It is important that the medical students should be updated about emerging public health situations, so that they can give proper information and advice to their friends and family.

Conflict of interest: Non declared.

References:

- [1] Who. Coronavirus Disease 2019 (Covid-19): Situation Report. Geneva:World Health Organization; 2020. P. 72. World Health Organization. Coronavirus Disease 2019 (Covid-19) Situation Report — 26. Avail-Able From: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200215-sitrep-26-covid-19.pdf?sfvrsn=A4cc6787_2
- [2] <https://en.unesco.org/covid19/educationresponse>. [Accessed 12 January 2021]
- [3] World Health Organization. Timeline Of Who's Response To Covid-19. <https://www.who.int/news-room/detail/29-06-2020-covid-timeline>. [Accessed 9 June 2020].
- [4] Hager E, Odetokun Ia, Bolarinwa O, Zainab A, Okechukwu O, Al-Mustapha Ai. Knowledge, Attitude, And Perceptions Towards The 2019 Coronavirus Pandemic: A Bi-National Survey In Africa. *Plos One* 2020;15(7):E0236918.
- [5] Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, Et Al. A Novel Coronavirus From patients With Pneumonia In China, 2019. *N Engl J Med* 2020;382(8):727–33, Pmid: 31978945.
- [6] Khasawneh Ai, Humeidan Aa, Alsulaiman Jw, Bloukhs, Ramadanm, Al-Shatanawi Tn, Et Al. Medical Students And Covid-19: Knowledge, Attitudes, And precautionary measures. A descriptive study from Jordan. *Front. Public Health* 2020;may 29:8
- [7] Baheti A, Chimurkar L, Varma S. Evaluation Of Knowledge, Attitude And Practice Towards Corona Virus Disease 2019 (Covid-19) Among Second Year Medical Students In Post Lockdown Period. *Int J Med Sci Diagn Res.* 2020;4:5-10.
- [8] Holshue MI, DeBolt C, Lindquist S, Lofy Kh, Wiesmanet J, Bruce H, Et Al. First Case of 2019 Novel Coronavirus In The United States. *N Engl J Med* 2020;382:929–36.
- [9] Kasemy Za, Bahbah Wa, Zewain Sk, Haggag Mg, Alkalash Sh, Zahran E, Et Al. Knowledge, Attitude And Practice Toward Covid-19 Among Egyptians. *J Epi-Demiol Glob Health* 2020;10(4):378–85.
- [10] Alzoubi H, Alnawaiseh N, Al-Mnayyis A, Abu Lubada M, Aqel A, Al-Shagahin H. Covid-19 — Knowledge, Attitude And Practice Among Medical And Non-Medical university Students In Jordan. *J Pure Appl Microbiol* 2020;14(1):17–24.
- [11] Hyynh G, Nguyen Tn, Tran Vk, Vo Km, Vo Vt, Pham La. Knowledge And Attitudetoward Covid-19 Among Healthcare Workers At District 2 Hospital, Ho Chi Minhcity. *Asian Pac J Trop Med* 2020;13(6):260–5