

Knowledge, Attitude, and Practices of First Year Medical Students Regarding COVID-19 in Chhattisgarh: A Cross-Sectional Study

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Abstract

Introduction and Aim: Purpose of this study is to investigate knowledge, attitude and practice of first year medical students towards COVID 19. **Material and Method:** A cross-sectional study was conducted among 148 first-year undergraduate students of a tertiary care hospital of Bhilai Chhattisgarh, from April to May 2020. **Results:** Finding of this study showed 93 % of the participants had knowledge about the precautionary actions, 81% about the mode of spread, 96% about infecting agent. Most of the participants had encouraging outlook towards activities to control COVID-19 spread. The practice part was also acceptable with very minor shortcomings. **Conclusion:** Knowledge, attitude and practice regarding covid 19 was found to be acceptable. Some areas in practice part need attention which can be attained by giving informative sessions regarding same.

Keywords: Covid 19, Medical Students, KAP

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Introduction

Globally as on, 28 June 2021, there have been 180,817,269 confirmed cases of COVID-19, including 3,923,238 deaths, reported to WHO. COVID-19 is an infectious disease caused by the most recently discovered COVID-19. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally [1,2]. People with COVID-19 have had a wide range of symptoms reported –ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhoea [3,4]

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It is believed that human COVID-19 are transmitted by air via coughing and sneezing of an infected person, or via close personal contact such as by touching or shaking hands with an infected person. In India, from 3 January 2020 to, 28 June 2021, there have been 30,279,331 confirmed cases of COVID-19 with 396,730 deaths, reported to WHO [5,6]

Public's information regarding preventive measures is so far the only tool available for controlling the spread of COVID-19.

People need to have a clear understanding regarding knowledge, attitudes and practice toward COVID-19.

Medical students play an important role in imparting health education to community; therefore, they should have correct information regarding this pandemic so that they can transfer their knowledge to minimize any gap present for benefit of community.

Therefore, we conducted a study to investigate the KAP towards COVID-19 among the first-year undergraduate students of medical college during the rapid rise period of the COVID-19 outbreak.

Materials and methods

Study subject and data collection

After attaining approval from ethical review committee, a cross-sectional study was conducted among the first-year undergraduate students of a tertiary care hospital of Bhilai Chhattisgarh, from April to May 2020. After making students aware regarding the study objectives, a self-designed questionnaire was distributed to students at the end of one of their online lecture sessions.

Informed consent was taken from each participant and they were informed regarding the confidentiality terms.

We excluded the questionnaire which was incompletely filled.

Total 148 students were included in study

Data Collection

A self-designed pre tested questionnaire was constructed, which consisted of two parts.

The first part was designed to collect socio demographic profile including age, gender, address.

The second part was designed to gather information regarding knowledge, attitude and practice towards COVID 19. Pilot study was conducted to test the feasibility of questionnaire. The results are however not included in the final analysis.

Questionnaire

The self-designed questionnaire comprised of total 10 questions regarding knowledge, 7 for attitude, and 5 for practice. Knowledge section had questions related to participants' knowledge regarding clinical symptoms, transmission routes, prevention, and control of COVID-19.

The options given for these questions were true, false. For scoring we assigned 1 mark for every true answer and false was assigned 0 score. The higher the score therefore meant better knowledge of COVID-19. Similar pattern for scoring was followed for attitude and practise questions also.

Statistical analysis

Completed questionnaires were extracted and exported to Microsoft Excel 2016.

Results

Table 1: Sex wise distribution of study subjects

Gender	Number
Male	85
Female	63
Total	148

Table 2: Knowledge of study subjects regarding COVID-19

S. No	Question	True%	False%
1	COVID-19 is a viral infection	96	4
2	COVID-19 is transmitted by close contact with infected person or animal	81	19
3	Fever, Cough and Shortness of Breath are only symptoms of COVID-19	65	35
4	Patients with co morbidities are at higher risk of infection	76	24
5	Health care workers are at a higher risk of infection	89	11
6	Hand washing is important preventive measure to stop its transmission	93	7
7	Vaccine for COVID-19 is available in markets	67	33
8	Incubation period is 2-4 weeks	54	46
9	No treatment is available for COVID-19	93	7
10	Positive patients can be asymptomatic	78	22

Table 3: Attitude of study subjects regarding COVID-19.

S. No	Question	True%	False%
1	Are you stressed one of your family members may get an infection?	88	12
2	Avoiding large gathering helps to control its transmission	78	22
3	Home quarantine is an effective tool to control its transmission	79	21
4	Using mask when stepping outdoor helps control its transmission	72	28
5	Maintaining social distancing helps control its transmission	78	22
6	Social media is best available tool for source of information	56	44
7	Being young is protective for this infection	76	24

Table 4: Practice of study subjects regarding COVID-19

S. No	Question	True%	False%
1	In recent times I have constantly washed my hands and used sanitizer	78	22
2	In recent times whenever I have stepped outdoor, I have used face mask	93	7
3	In recent times I have avoided all kinds of social gathering	77	23
4	In recent times I have maintained social distancing	68	32
5	In recent times I have kept myself updated with information from valid and official sources	88	12

Discussion

In the present study, the knowledge, attitude, and practice of first year medical undergraduate students of tertiary care hospital of Bhilai Chhattisgarh towards COVID-19 was assessed.

In the study we found majority of the participants had acceptable knowledge of COVID-19. 93 % of the participants had knowledge about the precautionary actions, 81% about the mode of spread, 96% about infecting agent, and of 65% participants about the presenting complaints. Similar findings were observed in other studies also [7-9]. There is still some need of improvement as per the knowledge section is concerned and educational programmes need to be targeted towards this year of student. Almost 72% study thought that wearing a face mask was important in preventing COVID-19 infection. Similar finding was observed in one study [10]. The area of concern was source of information which was social media. This needs to be corrected by informing students that at many a times fake news is spread through social media. One should always consider the source of information before forwarding any such messages. Although very few participants

had negative response. Need of hour is to create awareness among population and ensure that correct information is passed through appropriate media. Concerned authority need to ensure that there is minimum communication gap between public and government. Most of the participants had encouraging outlook towards activities to control COVID-19 spread. Although few 22% of students still did not increase the hand washing frequency during this pandemic. Even though percentage is less but the fact they are medical students and not following preventive measure is matter of concern. More KAP awareness campaigns need to be arranged, existing ones need to be strengthened to combat even these small percentage.

One of the major limitations of the study was that sample size was restricted to only first year medical students. Further studies including other batches of medical students can be conducted for comparison.

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