



# KNOWLEDGE ABOUT COVID-19 AMONG DENTAL STUDENTS – A QUESTIONNAIRE STUDY AT BELGAUM, KARNATAKA

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## INTRODUCTION

Corona virus are respiratory group of viruses that causes illness from common cold to severe acute respiratory syndrome (SARS). It was first identified in Wuhan city in People republic of china. On 30 January 2020 the World Health Organisation (WHO) Declared COVID-19 as a public health concern<sup>(1)</sup>

The COVID-19 is spread from human to human by droplets, direct contact with an incubation period of 2-14 days. There are preventive measures and standard operating guidelines issued of Ministry of health and welfare and World Health Organisation<sup>(2)</sup>. Health Care workers are in the frontline of direct contact, are the main source of exposure to the infection.

The first case in India was confirmed in Thrissur ,Kerala on Jan 30<sup>th</sup> 2020 who had returned to his home for vacation from Wuhan city<sup>(3)</sup>. India already has 135926 active cases (According to Ministry of health and welfare, Government of India 12 February 2021). And, as the planet struggles, frontline health workers are particularly vulnerable to this infection<sup>(4)</sup>. Coronavirus disease was declared a pandemic by the World Health Organization (WHO) on March 11, 2020<sup>(5)</sup>.

## COVID-19 and Dental Treatment

Health-care workers, in daily physical contact with patients, face an elevated risk of exposure to COVID-19. Among health-care personnel, dentists seem to be those at highest risk. It is necessary to ensure their safety, not only to protect patient health, but also to safeguard themselves from the viral infection and to avoid viral transmission<sup>(6)</sup>

In this setting, dental procedures, in which a large number of droplets and aerosols, containing microorganisms from an infected individual, could be generated, are at high risk of cross-infection between patients and dentists<sup>(7)</sup>

There are many risks dentists may face. Asymptomatic (carrier) patients as well as patients with an acute respiratory illness may present for dental treatment at outpatient dental settings. The growing fear of cross-infection, and the possible role of dental practice in spreading the infection, has obliged dentists to step aside and to confine themselves in home quarantine similar to other nonhealth-care sectors of the population as well as reports of loss of livelihood, as many dentists rely on their dental clinics for financial support<sup>(7)</sup>.

In order to resolve and monitor its spread, dentists should ideally maintain a high degree of competence and honesty. The Centers for Disease Control and Prevention (CDC), the American Dental Association (ADA), and the WHO are providing specific recommendations for dentists to control the spread of COVID-19. Such precautions include PPE, washing of hands, patient assessment, proper usage of rubber dam, anti-retraction handpieces, oral rinsing before the procedure, and clinic disinfection<sup>(7)</sup>.

Hence the aim of the study is to access the level of knowledge of covid-19 among dental students.

## AIM

To access the knowledge of COVID-19 among dental students in the Belgaum state of Karnataka

## MATERIALS AND METHODS

- **STUDY DESIGN**  
This is a questionnaire study.
- **STUDY AREA**  
This study was conducted in Belgaum, karnataka
- **STUDY POPULATION**  
This study was conducted among dental students .
- **INCLUSION CRITERIA**  
Subjects who were voluntary interested to fill the form
- **EXCLUSION CRITERIA**  
Those who are not willing to participate
- **INFORMED CONSENT**  
Informed consent was obtained from all participant
- **ETHICS**  
Ethical issues was given primary importance. Anonymity was maintained.
- **SAMPLING METHOD**  
Convenience sampling
- **SCHEDULING**  
Data collection was a period of one week from January 19<sup>th</sup> 2021-Jan 27<sup>th</sup> 2021
- **SURVEY INSTRUMENT**

An operated administered pre tested questionnaire specially designed for this purpose was used . Information about symptoms, mortality rate,diagnostic tests and all knowledgeable information about covid-19 was asked. Only completely filled forms were considered for analysis.

- **STATISTICAL ANALYSIS**

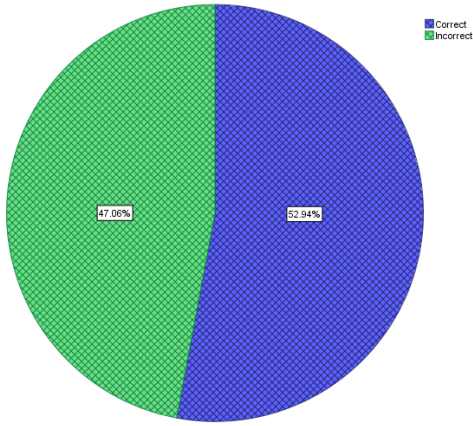
Data was entered in Microsoft excel spread sheet and analysed using SPSS (version 20 software)

## RESULTS

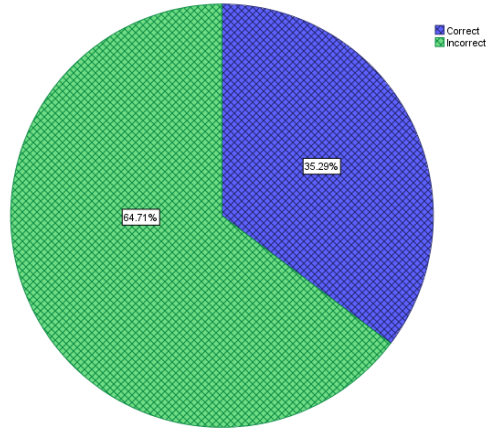
S.no	Questionnaire Items	Correct n (%)	Incorrect n (%)
1	What type of virus is corona?	36 (52.9)	32 (47.1)
2	Which is the first country in the world to get vaccine approval for novel coronavirus?	24 (35.3)	44 (64.7)
3	What are the classical symptoms of covid-19?	64 (94.1)	4 (5.9)
4	what is the type of distribution of novel coronavirus disease?	68 (100)	0
5	Who is at high risk for mortality of COVID-19?	65 (95.6)	3 (4.4)
6	What type of swab is taken for covid-19?	53 (77.9)	15 (22.1)
7	which tract is the most affected in corona?	68 (100)	0
8	which group of health workers are most prone to COVID-19?	39 (57.4)	29 (42.6)
9	what is SARS?	67 (98.5)	1 (1.5)
10	How many days does it take usually take for the symptoms to appear in an infected patient of covid-19?	47 (69.1)	21 (30.9)
11	How many days should the infected patient be isolated?	68 (100)	0
12	What is the standard operating protocol for COVID-19?	67 (98.5)	1 (1.5)
13	What type of test is commonly used to detect covid-19?	62 (91.2)	6 (8.8)
14	what is the type of spread of covid-19?	60 (88.2)	8 (11.8)
15	Are SARS and COVID-19 similar?	17 (25)	51 (75)

Figure-Table 1

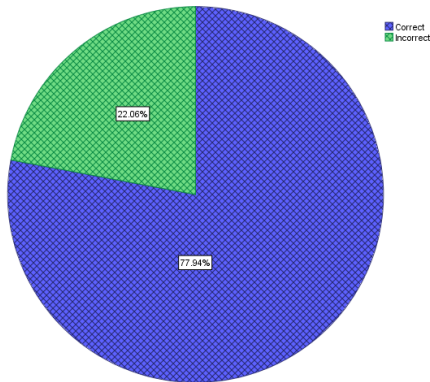
What type of virus is corona?



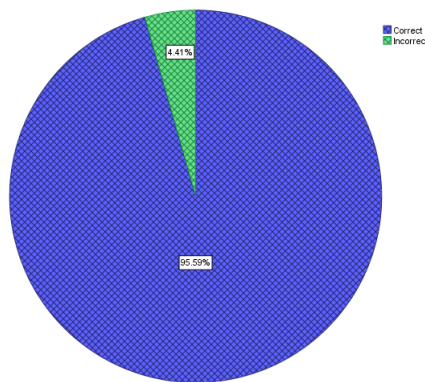
Which is the first country in the world to get vaccine approval for novel coronavirus?



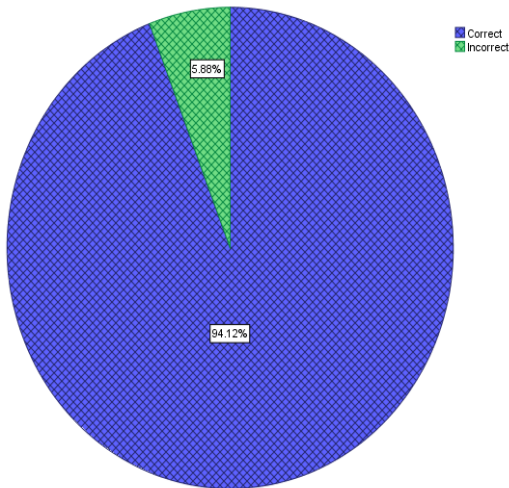
What type of swab is taken for covid-19?



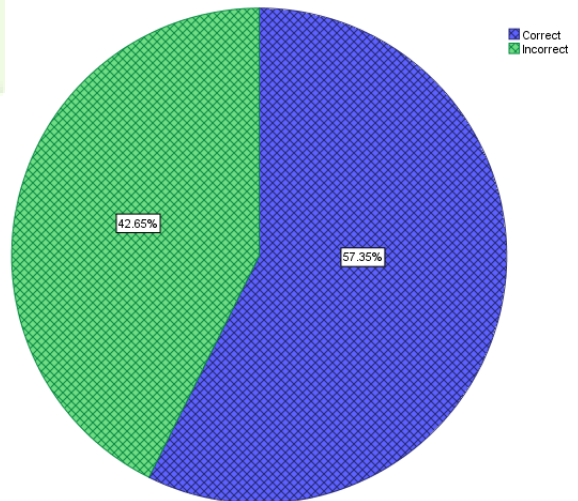
Who is at high risk for mortality of covid 19?



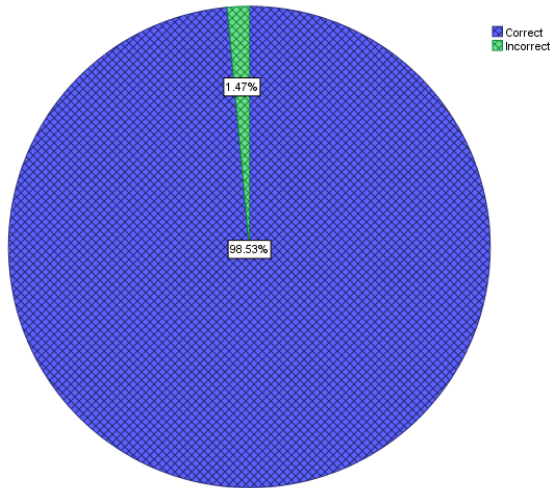
What are the classical symptoms of covid-19?



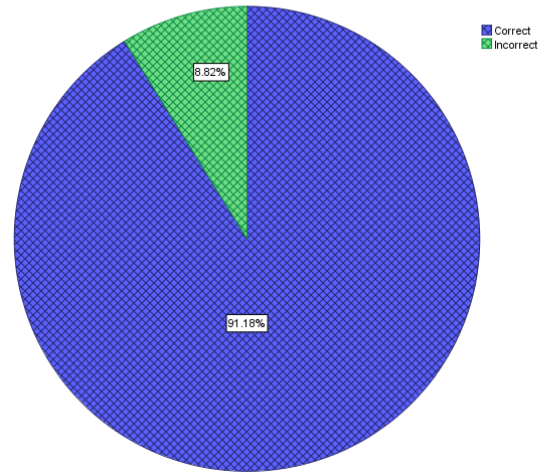
which group of health workers are most prone to covid -19?



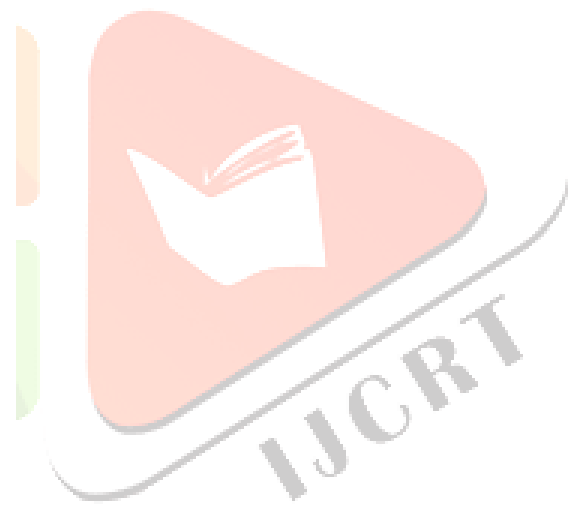
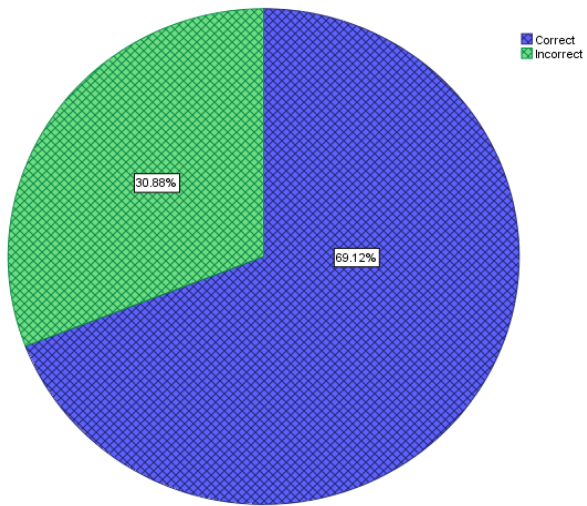
What is SARS?



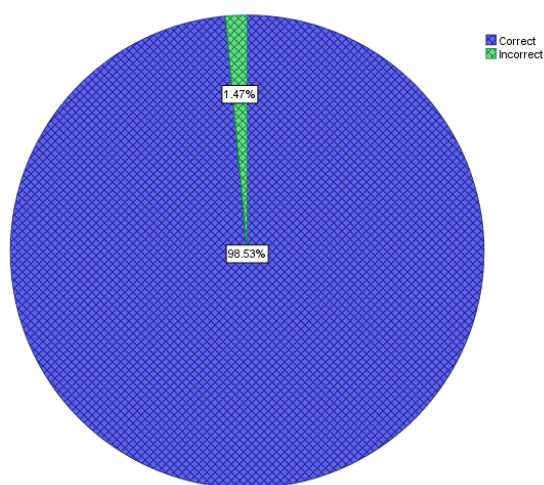
What type of test is commonly used to detect covid-19?



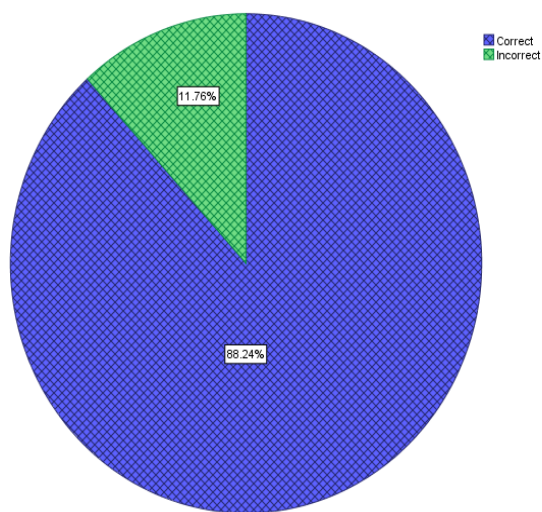
How many days does it take usually take for the symptoms to appear in an infected patient of covid-19?



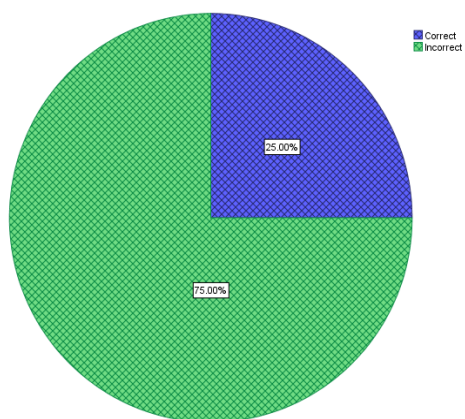
What is the standard operating protocol for covid -19?



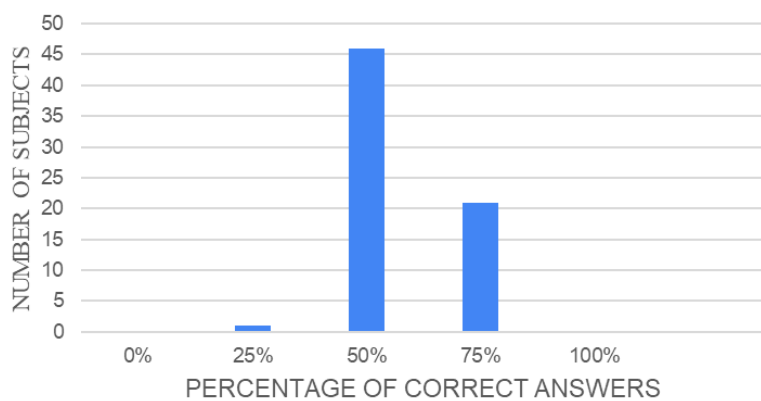
What is the type of spread of covid-19?



Are SARS and COVID-19 similar?



SCORING OF THE ANSWERS



Scoring
0-very poor
25%-poor
50%-Fair
75%-good

## DISCUSSIONS

The COVID-19 pandemic has had a widespread effect worldwide since its outbreak in 2019 in Wuhan. The alarming number of cases worldwide can be attributed to transmission via airborne droplets and to touching or contacting an infected surface. The pandemic of viral respiratory infections such as SARS and COVID-19 demonstrated the importance of effective infection management procedures along with the difficulties faced during the pandemic by health-care professionals<sup>(7)</sup>.

Dental health personnel are at high risk of being exposed to COVID-19 cross-infection due to the complexity of the transmission. The emergence of this pandemic has thus further illustrated the importance of appropriate methods for managing infections<sup>(7)</sup>

The percentage of correct responses was higher in the section of questions on symptoms, mortality rate and the standard operating guidelines in corona. This finding is similar to the study conducted by Joochi Chandra<sup>(8)</sup> *et al* where dental students had good knowledge about symptoms and mortality rate. The reason for having good percentage is due to WHO and CDC taking good initiatives like online trainings, awareness programmes for healthcare professionals and media telecasting information about covid-19.

The percentage of correct answers was low in the section of questions about vaccination . This is due to the reason that vaccination has started only in month of January, and this vaccine has not yet been approved by WHO. According to the figures by the WHO, more than 20 million people have been affected by COVID-19 up till 12<sup>th</sup> febraury , 2020, worldwide with 668,910 deaths. Therefore, this pandemic is now considered to be a public health emergency of international concern.

In present study there was a scoring given to the correct answers of the dental students.1 subject only had a poor score.46 subjects had fair score.21 subjects had a good score. Overall 72.8% of dental students had good knowledge regarding covid-19.

The total knowledge score was not affected by age and education level and it was not significantly different from dental students with less or more work experience. This finding was similar to the study conducted by Joochi Chandra *et al* where they found that high rate of transmission made people increase the dental students attention and knowledge of this pandemic disease<sup>(8)</sup>.

Therefore the current situation requires spreading awareness about covid-19 in dental perspective at an individual level in hospital and private clinics. Participation in COVID-19 awareness by the dental students should be encouraged<sup>(9)</sup>.

## CONCLUSION

Dental students had good knowledge about COVID-19. There should be more emphasize about extra precautionary guidelines for dentists so that dental students protect themselves as well as get trained to help the medical staff in controlling the disease.

Long term measures can be implemented about health disaster management in the undergraduate and post graduate curriculum.<sup>(10)</sup>

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