

PERCEPTION AND PRACTICES REGARDING COVID-19 VACCINE AMONG MBBS STUDENTS

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ABSTRACT

OBJECTIVE:

To determine the perception and practices regarding COVID-19 vaccines among the students of Sialkot Medical College, Sialkot.

METHODOLOGY:

A questionnaire performa was prepared regarding perceptions and different practices about COVID-19 vaccination and different choices were provided for selection in September, 2021.

RESULTS:

Total 130 students participated in the survey, 55% were males and 45% were females. 44% students were below 21 years of age. 86% belonged to urban area. 44% students got the information from social media regarding vaccination while 90% students were vaccinated with Chinese vaccination and 9% with other vaccines. Only 56% students observed minimum side effects. None of the students suffered from serious side effects. 56% took precautions before vaccination. 14% students said they would continue the precautions after vaccination.

CONCLUSION:

99% students were found to be vaccinated already in Sialkot Medical College, Sialkot.

KEYWORDS:

Vaccines, coronavirus, COVID-19, perception, Sialkot Medical College, students, awareness.



INTRODUCTION:

Vaccines are effective interventions that can reduce the high burden of diseases globally¹. Equitable access to safe and effective vaccines is critical to ending the COVID-19 pandemic, so it is highly encouraging to see provision of so many vaccines and going into development. WHO is working tirelessly with partners to develop, manufacture and deploy safe and effective vaccines².

The coronavirus disease 2019 (COVID-19) vaccination drive in Pakistan began in February 2021 after half a million doses of Sinopharm vaccine (BIBP-CorV vaccine) were supplied to the country by the People's Liberation Army of China³ Later, on February 22, 2021, the government initiated the vaccination campaign for other healthcare workers. In March, April, May and June 2021, a mass vaccination campaign was introduced for populations above the age of 70, 65, 60, 50, 40, 30, and 18, respectively⁴

More than 8 million doses of COVID-19 vaccines have been arrived in Pakistan through COVAX so far during the period of this study i.e. September, 2021, and more are on the way. This includes 2.4 million doses of AstraZeneca, 100,160 almost 0.1 million doses of Pfizer and 5.5 million doses of Moderna, the latter donated by the United States under COVAX' dose-sharing mechanism⁵. "UNICEF supports the Government of Pakistan's drive to ensure an efficient and effective roll-out of the COVID- 19 vaccination campaign," says Aida Girma, UNICEF Representative in Pakistan⁶.

According to a study, 70% of the population should be vaccinated to attain herd immunity⁷. The total daily doses

administered at designated COVID vaccination centers had increased to somewhere between 600,000 and 900,000 doses (as of the last week of July 2021).⁸ Information regarding the perception of vaccines among medical students in a medical college would be beneficial for the institution to design appropriate educational programs. Studies focusing on the perception of vaccine safety are few, so this study can be a valuable addition to the literature. Understanding healthcare workers' perceptions on vaccine safety can enable governments to initiate appropriate early strategies to improve vaccination rates among the public. Hence, the present study was conducted to assess the perceptions and practices of the COVID 19 vaccine among medical students in Sialkot Medical College, Pakistan.

METHODOLOGY:

A questionnaire performa was prepared regarding perceptions and different practices about COVID-19 vaccination and different choices were provided for selection in September, 2021.

The performa was provided to a total of 150 students of different classes through simple random selection. These performas were provided online and choice was given to either fill it during college hours or at home. This cross sectional study was conducted from 13th September to 27th September, 2021.

The ethical committee of Sialkot Medical College, Sialkot granted the permission to conduct the study.

RESULTS:

The survey revolved around forms filled by 130 medical students who responded our survey from Sialkot Medical College. 55% of



them were males. 44% of students were below 21 years while rest of the students were above 21. 36% were students of 1st year, 31% 4th year, 13% of 3rd year, 12% of 2nd year and 8% were students of Final year. All students were Pakistani nationals, from which 86% belonged to urban area. 99.2% (n=129) students were vaccinated while 0.8% (n=1) student was unvaccinated. 86% students were fully vaccinated while 14% students were partially vaccinated.

While asking about COVID-19, 77% of students described that it was an infectious disease, 10% replied that it was an autoimmune disease, 8% of students said that it was zoonotic disease while 5% of students assumed that it was an inflammatory disease. Regarding a question about constitution of vaccine for Covid-19, 91% of students answered that it was a substance used to stimulate the production of antibodies, 5 percent replied that it was an anti-inflammatory substance while 4% assumed that it was an antidote to a poison. When we asked the students what made you get vaccinated? 44% students thanked the social media, 29% described peer pressure, while 27% got for travelling purpose.

Amongst the vaccinated students, 55% students were vaccinated with Sinopharm, 35% students SinoVac, 6% students from Pfizer and 4% students were vaccinated from Astrazeneca, so 90% students got Chinese vaccine. 56% students replied that they took precautions before vaccination.

Regarding side effects of vaccination, whether they observed or not, 56% students gave positive answer. 50% of them felt pain at the site of injection, 31%

students suffered from fever while 16% students observed fatigue. While asking the students that did they contact COVID after getting vaccinated? 85% students answered Yes while 15% students replied No. Students replied a question that would you advise someone to get vaccine? The answer of 98% percent students was, positive. When we raised a query to students that would you stop taking precautions after getting vaccinated? 86 percent students told us positively yes.

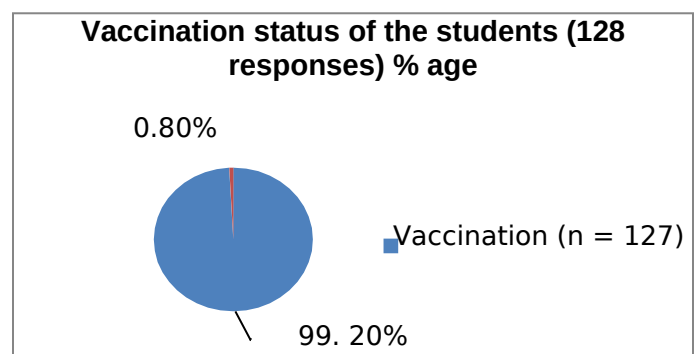


Fig. 01

Vaccination status of the students

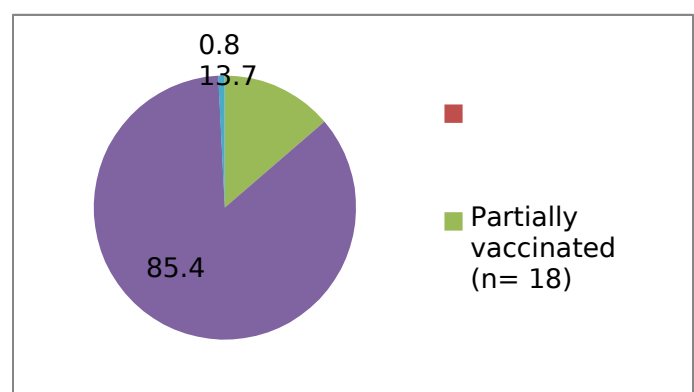


Fig. 02

Vaccination status of the students, fully or partially.

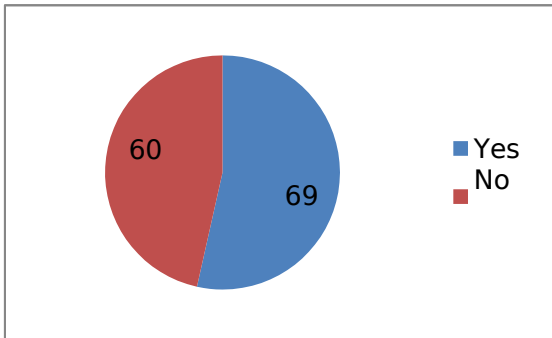


Fig. 03

Did participants take any precaution before getting vaccine?

Class	% age	n=
1st year	36	47
2nd year	12	15
3rd year	13	17
4th year	31	40
5th year	8	11
Total	100	130

Table-01

Students of different classes who participated in survey

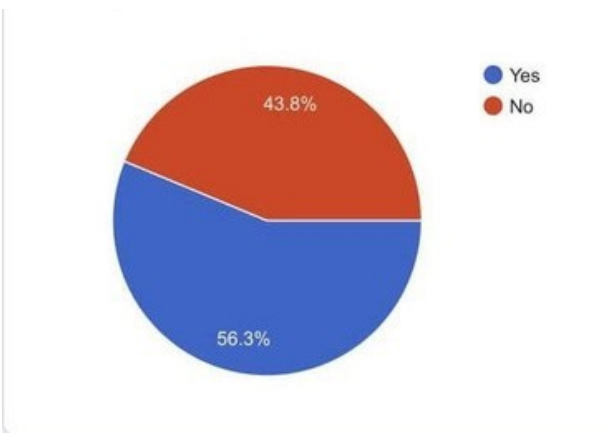


Fig. 04, Side effects

Did the participants experience any side effects?

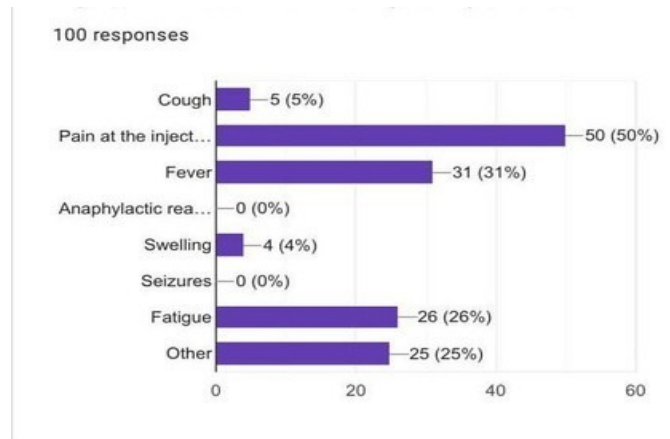


Fig. 05, Types of side effects

If yes, what side effects did the participants experience?

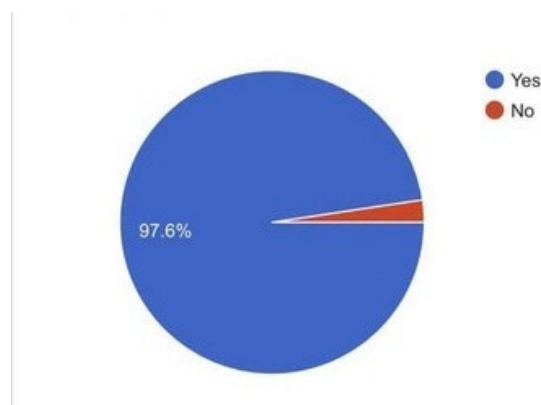


Fig. 06, Advise for vaccination

Would the participants advise someone/ others to get vaccine? **DISCUSSION:**

The Covid-19 vaccination drive depends on the acceptance of vaccines among masses. Vaccine hesitancy is a top 10 global health threat that can negatively impact Covid-19 vaccine uptake.

We decided to collect our data through a questionnaire because it will help in quick assessment of vaccine acceptance/hesitancy among different population groups in our college. Secondly, the finding obtained by the questionnaire will provide healthcare providers an insightful understanding about various drivers and barriers associated with



covid 19 vaccine. Therefore, following a systematic methodology, we developed a questionnaire that was concise and easy to comprehend. The questionnaire enabled us to interpret vaccine acceptance or hesitancy by assessing knowledge, attitude, practices and concerns related to the Covid-19 vaccine. In the questionnaire, we also evaluated various sources of information that might influence their decision regarding vaccination. Along with this, the attitude of people towards the vaccine was assessed by interpreting their willingness to get vaccinated and extending recommendations to their friends and family.

In the current study, we found out that 56.3% individuals experienced side effects after getting vaccinated. This finding aligns with a study conducted in Bangladesh⁵ in which 90% of the participants believed that the vaccine might have side effects.

97.2% students in our research said they would advise others to get vaccinated. The same was found in the mentioned study⁶ where about 2/3rd agreed that they would recommend the vaccine to their family and friends. In our study, there was also a very small proportion of students who were not convinced to get vaccinated, stressing the need for public health officials to take more awareness raising measures. 44% students in our study said they were convinced by social media to get vaccinated, making social media the most influential source for people to get the vaccine. This also highlighted the major impact social media had made in the overall positive attitude towards the vaccine. The second source influencing

students to get vaccinated was peer pressure, with 29% students having been convinced by it. It showed that unvaccinated students who were surrounded by students who supported and got the vaccine were likely to eventually get themselves vaccinated as well.

CONCLUSION:

Almost all the students of Sialkot Medical College under study were found to be vaccinated, which was important to deal with the COVID-19 crisis.

RECOMMENDATIONS DURING EPIDEMICS

Use of social media to spread awareness among the unvaccinated people would help to motivate the public to get vaccinated.

Also health care workers should be encouraged to actively participate in campaigns during any kind of epidemic.

NOTE: This study was conducted in 2021

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