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ORIGINAL ARTICLE

Knowledge, Attitude and Practices of Medical Students Regarding Covid-19, Pakistan

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ABSTRACT

Background: As a result of the COVID-19 epidemic, many people's lives and livelihoods are at risk. All aspects of everyday life, including education, have been affected by the epidemic.

Objective: As a result, we performed this cross-sectional study to learn more about how students from Khyber Pakhtunkhwa feel about COVID-19.

Methods: This was a cross-sectional study in which respondents completed an online, self-administered form to get the information. Six questions deal with socio-demographics, fourteen ask about knowledge, seven ask about attitude, and eight ask about practice. Raosoft's sample size calculator was used to calculate the final sample size.

Results: Five thousand participants, comprising 2250 (45%) men and 2,750 (55%) women from all across the nation, completed this poll. Analysis of the data was done using a chi-square test. Almost all of the students 4750 (95 percent) were aware that COVID-19 is caused by a virus and that it is a respiratory illness 4600 (92 percent). During the lockout, many students continued to see their family members 2,750 (55 percent), and their family members continued to visit them at home 2950 (59 percent). The students' answers to particular questions concerning the spread of the virus differed greatly. Although (p 0.01), women had more awareness about how to avoid illness transmission from patients who had been infected with the virus.

Conclusion: In the wake of the COVID-19 epidemic, the vast majorities of college students were well-prepared, had a positive outlook, and were actively practicing their knowledge and skills. Aside from demographics and gender, the KAP scores also vary by family size. During times of crisis, it's critical to keep the public informed about the need to practice preventive practices.

Keywords: knowledge, covid-19, attitude, students, practices, Khyber pakhtunkhuwa

INTRODUCTION

The World Health Organization (WHO) has verified instances of pneumonia in Wuhan, China, as of December 31, 2019(1). The bacteria responsible for severe acute respiratory syndrome was identified as SARS-CoV-2. The World Health Organization designated Coronavirus Disease 2019 (COVID-19) as a global pandemic on March 11, 2020(2). According to the World Health Organization (WHO), SARS-CoV-2 has infected more than 1790,550 people in 210 countries and territories. This has led to 109,654 deaths due to COVID-19(3).

The first incidence of COVID-19 was reported in Pakistan on February 26th, 2020. Pakistan reported 5038 confirmed COVID-19 cases and 86 fatalities as of April 12th, 2020. Sindh (N = 1318), Khyber Pakhtunkhwa (N = 696), Gilgit Baltistan (N = 216), Baluchistan (N = 228), Azad Jammu and Kashmir (N = 35), Islamabad (N = 119), and Punjab (N = 2425 instances) have the most cases(4-6).Several levels of health care students treat patients with this highly transmissible pathogen. Because healthcare students are exposed to infected individuals on a regular basis, COVID-19 poses serious occupational health risks (7). According to the literature, student healthcare students lack knowledge and understanding of infection control practices, which results in an inefficient diagnosis process. There have been several thousand cases of infection with the disease, mainly in China (8). It is therefore a priority to prevent the spread of this disease within hospitals.The World Health Organization (WHO) has issued a number of recommendations and organized online training sessions to assist healthcare providers in becoming more aware of COVID-19 and preparing for prevention and management(9). A knowledge, attitude, and practice survey may be conducted to uncover successful techniques for altering society's behaviours(10, 11). At present, Pakistani healthcare professionals are not well informed about healthcare issues.As a result, the present research sought to establish the current state of COVID-19 knowledge, attitudes, and practises among Pakistani healthcare practitioners. In addition, the research uncovered sources of knowledge and hurdles to infection control that healthcare personnel perceive.

MATERIAL AND METHODS

A cross-sectional, multi-centric survey was undertaken in March 2020, at a time when social distancing was being employed to prevent the spread of COVID-19. The researchers employed an online questionnaire to gather data since a population-based survey was not practicable at the time.There are six questions about socio-demographics, fourteen about knowledge, seven about attitude, and eight about practice. Raosoft computed a sample size of 5000. We started collecting data on March 25, 2020, and by April 5, 2021, we had obtained the needed sample size.

Participation in this survey was open to students from all healthcare institutions in Peshawar, including doctors, pharmacists, and nurses. Demographics, attitude, knowledge, information sources, and practise regarding COVID-19 and perceived obstacles to infection control were all examined using a questionnaire.Gender, age, profession, and experience were included as demographic characteristics, as well as a single item regarding the source of information for COVID-19. A Declaration of Helsinki was followed for this investigation. Within the consent section of the study questionnaire was information about the nature of the survey, voluntary participation, the study's aim,and study objectives, as well as declarations of confidentiality and anonymity. The data were analyzed with SPSS Version 21 (IBM Corporation) for descriptive and inferential statistics.

RESULTS

According to 95 percent (4,750 participants) of pupils, COVID-19 is caused by a virus, and it is a respiratory ailment, according to 92 percent (4,600 participants). Most students thought direct contact could transmit the disease (90%) (4,500 participants) but also believed respiratory droplets could (89%) (4,450 individuals answer) transmit COVID-19. Most students (89%) (4,450 individuals answer) believed that individuals with weak immunity or those who were older would be at risk of experiencing severe symptoms. The majority of students were able to correctly identify the signs and symptoms of COVID-19. A total of 37% (1,850) of students were uncertain whether COVID-19 may be transfersviaanimals, poultry, and their products, while 33% (1,650) said it was unlikely that COVID-19 could be transmitted asymptomatically.Anoverall of 37 percent (1,850) of pupils were uncertain whether COVID-19 may be transfersviaanimals, poultry, and their products, while 33% (1,650) said it was unlikely that COVID-19 could be transmitted asymptomatically.

Although most students (65%) (3,250) believethat the best method of preventing the disease is the personal hygiene, they are doubtful if individuals (> 9%) (450) or their household members (> 15%) (750) adhere to the recommended hygiene procedures (Figure 2). More than thirty percent of residents living near the students do not take enough precautions. During the lockdown, almost half of the students visited their relatives (55%) (2,750) and their relatives visited them (59%),(2,950) and 15% of students visited outside without wearing a mask (Figure 3). There were significant differences in the responses to the Knowledge-based questions among students according to their age and province (p 0.05). The 25-34-year-old and 35-44-year-old age groups outperformed (90-91 percent) the 18-24-year-old group in terms of knowledge (86 percent).

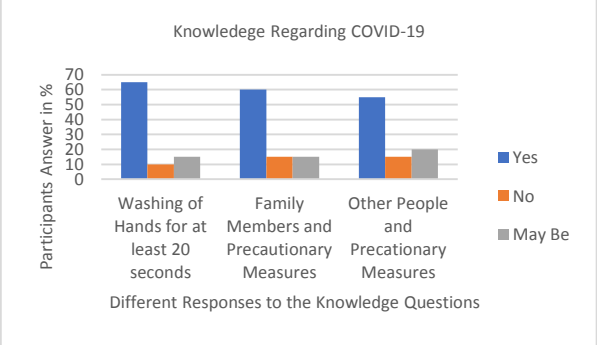

Figure 1: Shows knowledge of participants regarding COVID-19

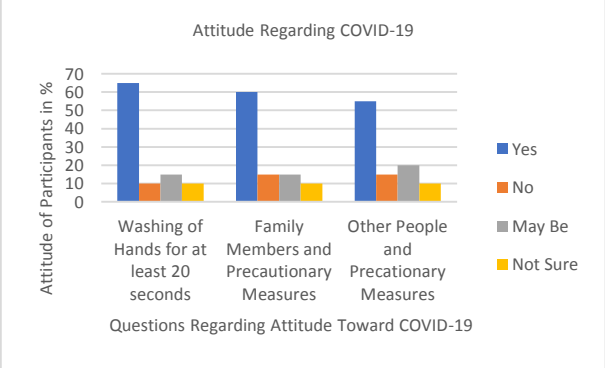

Figure 2: Shows attitude of participants regarding COVID-19

Participants' knowledge replies did not change substantially (p > 0.05) according to their family members, gender, degree, or location of residence. On the other hand, students with more than 10 extended family members provided fewer correct answers (85%), (4,250) which indicates a significant difference in knowledge. Student knowledge did not differ significantly between students from cities and village. Students with positive attitudes knew the importance of hygiene for injury prevention, However, they received a broad variety of answers and assumed that their family members and neighbours were following the precautionary precautions. Male students were much more likely (69 percent) (3,450) than female students to take measures (p 0.05) than female students (66%) (3,300). Based on the degree of the students, there was no significant difference in their attitude responses. Master's students were likewise more careful than their undergraduate colleagues (p > 0.05), despite the fact that PhD students took more precautions than M.S. students (p > 0.05). In villages, students informed us those cases are reported more frequently than in cities. In villages, students informed us those cases are reported more frequently than in cities. Only 70 percent (3,500) of students wash their hands for at least 20 seconds, despite the fact that the majority of students wash their hands often and consistently. About 75% (3,750) of students wear face masks before leaving their homes. About 55% (2,750) of students visited relatives during the lockdown. COVID-19 prevention guidelines were not followed nearly half of the time. Other than in the provinces, Participants from various groups had no discernible differences in their habits.

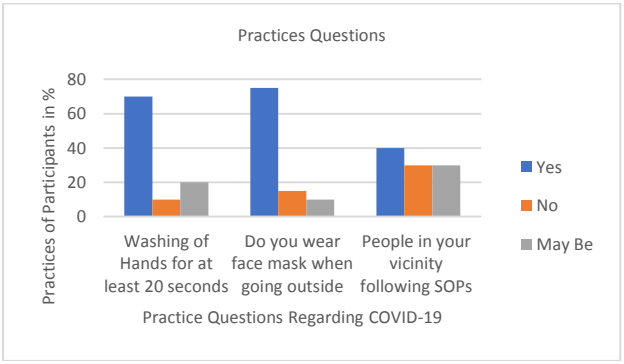

Figure 3: Shows practices of participants regarding COVID-19

DISCUSSION

A coronavirus disease outbreak (COVID-19) was reported in Wuhan, Hubei Province, China during the fourth quarter of 2019. The COVID-19 epidemic was spreading rapidly around the world soon after it emerged and had become a concern for public health. It caused considerable socioeconomic damage throughout the world. Globally, there were approximately 138 million cases documented up till April 15, 2021, leading in over 2.9 million fatalities.Vaccination is not the sole way to prevent the illness from spreading quickly; preventative measures are also necessary. COVID-19 vaccinations are presently accessible from worldwide producers in developed countries.; however, they are more difficult to obtain for mass vaccination in developing countries because the government cannot afford the costs associated with acquiring vaccines from international suppliers. It is therefore important to take strict precautions to reduce the spread of COVID-19 in the developing world. COVID-19 was confirmed in the first two cases in Pakistan on February 26, 2020, in both cases (12) of individuals who had visited Iran. Pakistan has reported 1,252,656 cases and 27,947 deaths as of October 4, 2021. In this study, Peshawar, COVID-19 knowledge, attitudes, and behaviours were tested among Pakistani students.

Students at KP, Pakistan, were asked about their knowledge, attitudes, and behaviours respecting COVID-19. 5000 pupils responded to the survey. There were 45 percent male and 55 percent female respondents. Based on the results of the survey, it was found that most students had access to COVID-19 information and were proactive during the outbreak. The local

government has conducted a successful public health campaign to provide the community with information about public health. According to our findings, 95 percent of university students are aware that COVID-19 is a viral illness. 59.3% of Pakistani survey respondents know that COVID-19 is mostly caused by SARS-CoV-2 (13, 14). In both studies, the results were different, which could be explained by the fact that students involved in the current study came from medical and health backgrounds. Thus, the general population is much less knowledgeable about COVID-19 than they are. Recent research from China and Japan, on the other hand, backs up our results, emphasising the relevance of education in COVID (13, 15). Nearly 57 percent of participants approve of the government's efforts to combat the current epidemic. According to one of the earlier general population polls, just 48% of respondents were happy with government attempts to manage COVID-19 (16), and 50% of participants felt the administration misjudged the pandemic situation. The majority of respondents in this poll had a strong understanding of COVID-19 transmission.

Studies from Pakistan and China provided similar information about COVID-19 transmission (14, 16). 95 percent of the people who took the poll said that the best way to avoid getting COVID-19 is to wash your hands with soap and wear a mask. In order to support these findingsthere are three other studies in Pakistan (16-18). We Ninety-two percent of participants believe that people who have recovered from COVID-19 will benefit the most from a systematic and supportive treatment. The results of our study match those revealed by another study carried out in Nepal (19). According to 73 percent of the participants, COVID-19, particularly poultry, cattle, and their products, is not transferred to humans via animals. COVID-19 is not transmitted to humans by animals, including poultry, cattle, and their products. On the basis of this data, it can be inferred that the students do not think animal products are responsible for the spread of COVID-19.

The majority of respondents (95%) believed that avoiding crowded places and socially distanced interaction were effective ways to avoid being infected with COVID-19. KAP has been found to be present among students during outbreaks in south Korea, Indonesia, China, the United Kingdom, and the United Arab Emirates (20, 21). Among the electronic and print media, social media was found to be the most common source of information about Coronavirus. Most of the information about Coronavirus is found on social media, rather than electronic and print media. Other research from other nations have shown that social media is still the leading source of information(22, 23).Other research from other nations have shown that social media is still the leading source of information(24). This study has revealed that women were more knowledgeable about diseases compared to men. Moreover, women were more likely to practice social distancing, hand hygiene, and wear masks than men. Women were also more prone than males to using social distance, hand hygiene, and masks. The majority of those present believed that enough safeguards were being taken to counteract the epidemic. Only half of the participants thought other people in their environment were taking COVID-19 measures, implying that around half of the individuals in their environment are not taking COVID-19 safeguards. Law enforcement should conduct strict disciplinary procedures in order to execute COVID-19 preventative measures. More than half of the participants thought that it was critical for COVID-19 patients to take proper measures throughout the disease's course. Another study (24), which surveyed a different population, produced related results. The government should take advantage of social media to disseminate information about the measures that COVID-19 sufferers must follow. This will aid in the control of the outbreak. The survey found that half of the individuals visited their relatives during the lockdown, indicating that people aren't taking preventive measures properly, which might lead to an increase in instances in the near future. More than 80% of those polled were optimistic that Pakistan would be able to restrict the spread of COVID-19, but more than 30% were unsatisfied with the government's handling of the epidemic.

CONCLUSION

The participants almost unanimously supported the government's plans to control COVID-19 in the country. According to the survey participants, Pakistan is currently implementing a smart lockdown strategy, but a complete lockdown strategy is preferable. In addition, 90% of the participants think that their nation will be able to defeat COVID-19 in the long run. An all-encompassing strategy to fight the COVID-19 pandemic must include social media channels for disseminating information on disease prevention. It is impossible to extrapolate this study's results to the entire population of the nation since it only included students from one government institution; nonetheless, it can forecast the opinions of university students. This data will also help the government identify areas where it needs to improve in order to stop the spread of this illness.

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