



Prevalence of Covid-19 Awareness Among Physiotherapy Students of Punjab Pakistan

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ABSTRACT

The Covid-19 outbreak has become a major concern for healthcare personnel. The purpose of this study was to look into the level of awareness about covid-19 illness and relevant preventative measurements among Pakistani students studying physiotherapy in Punjab. This study was cross-sectional and observational. It was finished in Punjab, Pakistan, in ten months. After receiving approval for the summary, the investigation was finished in the expected three months. A non-probability handy sampling method was utilized. This study involved 384 physiotherapy students. Raosoft and SPSS was employed as a tool. It's time to use training programs to increase awareness among all physiotherapy students. In Punjab, Pakistan, 71.2 percent of physiotherapy students reported knowing about COVID-19. This indicates a reasonable understanding of Covid-19. The COVID-19 epidemic has This is an issue for healthcare workers. The aim of this study was to find out how much knowledge physiotherapy students in Punjab, Pakistan, have about the Covid-19 virus and related prophylactic measures. This study was cross-sectional and observational. It was finished in Punjab, Pakistan, in ten months. After receiving approval for the summary, the investigation was finished in the expected three months. A non-probability handy sampling method was utilized. This study involved 384 physiotherapy students. Tools like Raosoft and SPSS were used. It's time to use training programs to increase awareness among all physiotherapy students. In Punjab, Pakistan, 71.2 percent of physiotherapy students reported knowing about COVID-19. This indicates a reasonable understanding of Covid-19

INTRODUCTION

Anybody who lived through 2020 knows about the coronavirus, or COVID-19. A disease cyclone developed and moved out of Wuhan, China, at the end of 2019 (1). Everyone developed a habit of social separation due to the coronavirus. Since the corona virus is regarded as a zoonotic virus, a barrier separating people, animals, and homes is necessary to avert a pandemic (2).

The COVID-19 virus is lethal to those with weakened immune systems. Almost everyone who comes into contact with a patient's cough droplets is affected, but those who are most vulnerable are children, the elderly, and those with impaired immune systems. In intimate contact, the primary mode of transmission. Keeping social distance is therefore the most reliable way to prevent this illness. The most common symptoms are fatigue, a dry cough, and fever.

Patients stated Less often experienced symptoms include headaches, sore throats, diarrhea, red eyes, and physical pain. The most common cause of Acute Respiratory Distress Syndrome is coronavirus infection. There may be no symptoms of COVID-19. People who lack symptoms are dangerous because they don't show any symptoms.; yet, can transfer Covid-19 to others (3).

Raising awareness among physiotherapy students is crucial since they will have direct interaction with Covid-19 patients in order to improve their performance. The causal The International Committee on Taxonomy of Viruses designated 2019nCoV, and the agent is SARS-CoV-2. In 2019, a new strain was identified. This virus's earlier strains did not impact people; however, the current strain does. (4). Previously, there was an extremely severe respiratory condition. Covid (MERS-CoV) has affected people. These infections appear to have caused respiratory issues in animals before migrating to humans. MERS-CoV was found to be transferred by camels, whereas SARS-CoV was found to be passed via civet cats to people. The initial cases of SARS-CoV-2 were reported from Wuhan, China, and the virus is believed to have originated in bats. encouraging a human-to-creature transfer from the marketplace. Then, through human transmission, the disease spread from Hubei to the rest of the world. Localized epidemics have recently been recorded in several countries. The Covid virus was deemed a pandemic by the WHO. Humans have previously been infected by SARS-CoV and the Middle East respiratory syndrome Covid (MERS-CoV). It seems that these illnesses' respiratory side effects originated in animals before transferring to people. Whereas SARS-CoV was found to be spread from camels to humans, MERS-CoV was shown to be transmitted from Arabian camels to humans. It is human-to-human transfer that makes the virus extremely contagious. On March 11 2020, the World Health Organization declared it to be a pandemic. (5, 6).

Medical staff are more This mode of transfer makes them susceptible to infection. Aside In addition to the weariness, physical and emotional strain, and long work hours, the highly contagious SARS-CoV-2 illness poses a further challenge to the healthcare system. Finding out how familiar people are with the COVID-19 virus is the aim of this investigation (7). Among those most susceptible to illness because of this mechanism of transmission is medical staff. Aside In addition to the strain of longer workdays, physical and psychological

strain, exhaustion, and burnout, the highly contagious SARS-CoV-2 virus presents a fresh obstacle for the healthcare system. This study aims to evaluate knowledge on COVID-19 illness and related disease control. Medical professionals rehearsing on the Indian health care problem. The World Health Organization and the US Centers for Disease Control and Prevention (CDC) produced this poll-based analysis, which was adjusted for time constraints and medical care workforce figures.

We must ascertain Students studying physiotherapy are familiar of COVID-19 because no studies have been conducted in Punjab, Pakistan, thus far. The research will raise awareness of the level of knowledge physiotherapy students have regarding the covid-19 epidemic.

LITERATURE REVIEW

1. From March to April 2020 Students at Zia Uddin University in Karachi studying healthcare administration participated in a cross-sectional survey that was carried out by Akhtar Ali et al.. A questionnaire was developed to collect data on people's knowledge, attitudes, and practices around COVID-19 in the province of Sindh. They concluded that approximately 76% of the general public (53.5% men and 46.8% women) are aware of the Pandemic's existence and have a basic grasp of it. The majority of them expressed satisfaction with the Sindh government's preventive measures.
2. Pranav D. Modi and associates conducted a survey using questionnaires. to assess COVID-19 awareness among Mumbai's health-care students and professionals. The sample size was 1562, and 71.2% of them provided right answers; medical students had the highest percentage of valid responses. More than 75% of respondents were aware of infection control practices, such as respiratory hygiene, cough etiquette, and a separate, ventilated room in the waiting area for suspected COVID patients; only 45.4% and 52.5% of respondents, respectively, knew how to use a mask and wash their hands after being heavily contaminated.
3. A cross-sectional study was conducted by Beatriz Minghelli et al. to evaluate the pandemic's effects on the services provided by Portuguese physiotherapists. The sample consists of 619 Portuguese therapists. According to the data, the pandemic has hampered the services of 453 (73.2%) therapists, while 166 (26.8%) are still operating normally. The most common preventive measures used by Hand washing (21.5%), mask use (20.3%), material disinfection (19.3%), and glove use are among the therapists who are still employed. (19.3%) normally.
4. In May 2020, Aynalem YA. et al. carried out a study that was cross-sectional. using a web-based survey to examine students' knowledge, attitudes, and practices using covid19, as well as its psychological influence on them and their studies. The study concluded that students had a good level of knowledge, a positive attitude, and strong practice with covid and pandemic.

5. Researchers Ruba M. Jaber et al. conducted a cross-sectional investigation between the 19th and 22nd of March to assess public awareness of covid19. In conclusion, the examined populations' level of awareness is slightly adequate, but weak in certain dimensions such as transmission and treatment awareness.
6. Vivek Rhea et al. carried out a cross-sectional survey of Indian undergraduate dental students to determine their awareness about covid-19. This displays a thorough comprehension and awareness of various aspects of covid19, with the exception of a few illness domains such as transmission mechanism, disease diagnosis, therapy, and disaster management. Undergraduates have not been exposed to a considerable number of clinical cases, which contributes to their limited expertise.

METHODOLOGY

The study was cross-sectional and took around ten months to complete. The study's design was observational. A cross-sectional study.

There were 384 people in the sample. The RAOSOFT calculator was used to determine the sample size.

Formula: $x = Z(c/100).2r(100-r)$

$n = N x / ((N-1)E^2 + x)$

$E = \text{Sqrt}[(N - n)x / n(N-1)]$.

The convenience sampling method was non-probability. The Gujranwala Institute of Rehabilitation Sciences, Royal Group of College, Elite College of Emerging Sciences, Sialkot College of Physical Therapy, Allama Iqbal Medical College, Superior University Lahore, University of Lahore, University of Management and Technology, and Rashid Latif Medical College were among the study locations. The US Centers for Disease Control and Prevention released data and guidelines for healthcare practitioners on March 7, 2020, which were used to construct the sample collection tool questionnaire. All Pakistani students studying physiotherapy in Punjab met the inclusion requirements. The age range of the pupils was 18 to 28. There are people of both genders present. Two groups of students were excluded: all students and students pursuing physical therapy. Severe COVID-19 illness is plaguing the students. The statistical package SPSS_21 was used to examine the data. (for Social Sciences). Bar charts and graphs were used to show the data in a pi frequency distribution.

RESULTS

It was found that 321 of the 384 respondents (83.6%) provided correct responses. 45.4% of pupils knew exactly how to apply the mask. 54.5% were familiar with the chosen hand hygiene approach for visibly filthy hands. 3/4 of respondents were aware of infection management methods such as fast triage, cough etiquette, and respiratory cleanliness. Furthermore, having a distinct location for suspected COVID-19 patients. and 63 (16.4%) subjects evaluated immunization as effective.

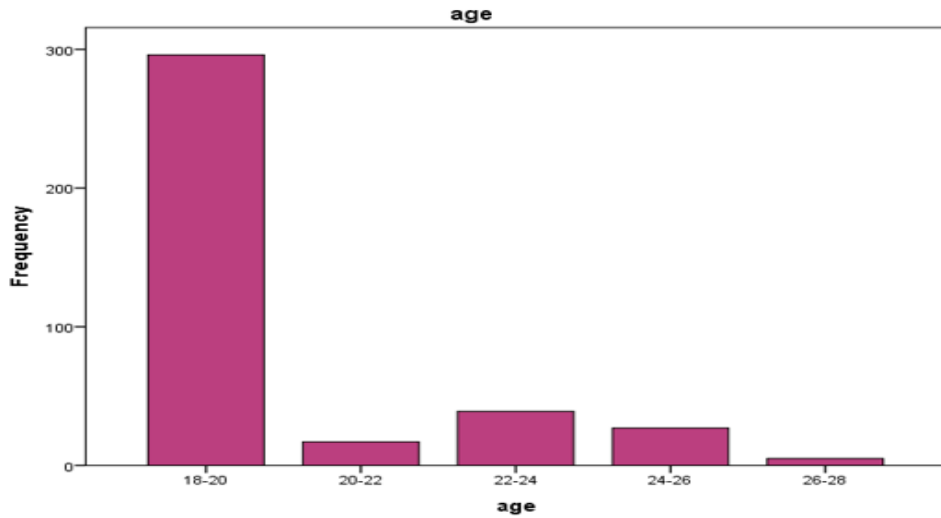


Figure 1. Frequencies/Percentage Distribution of Age

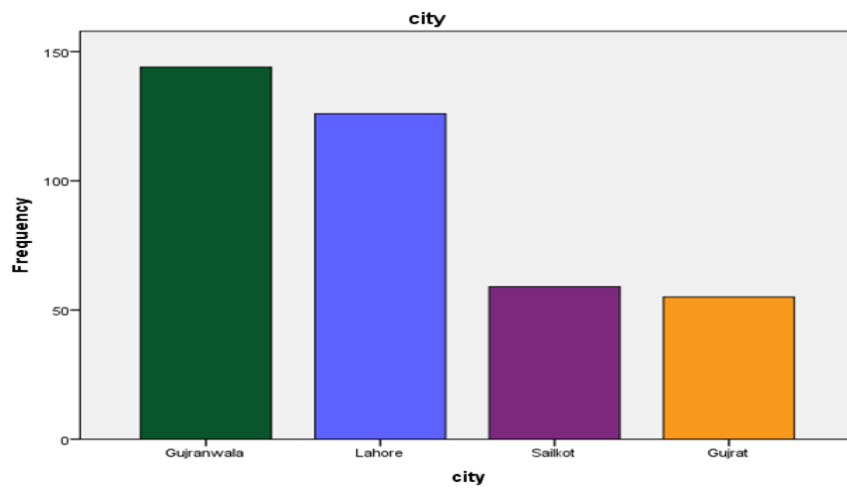


Figure 2. City Distribution

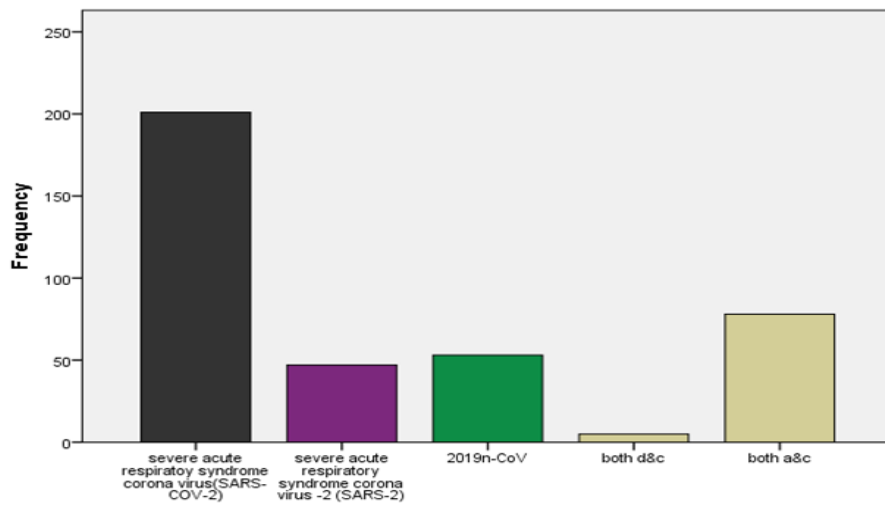


Figure 3. Frequency of Virus Causing Infection

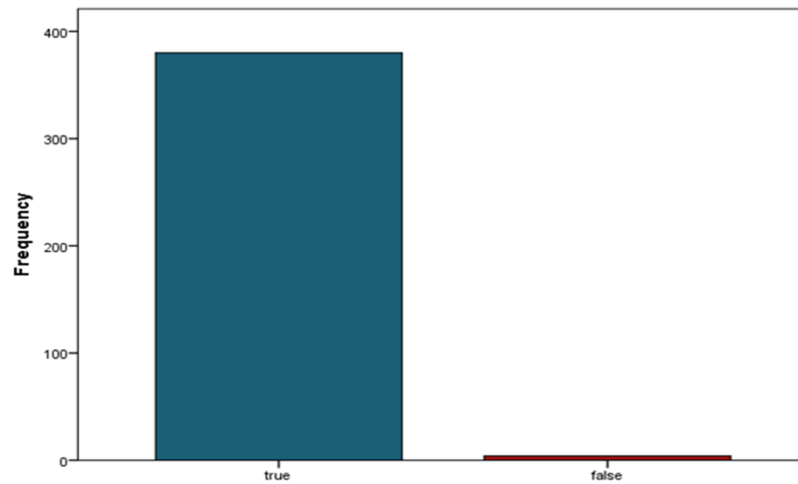


Figure 4. Frequency Distribution of First Report of COVID Cases from WUHAN

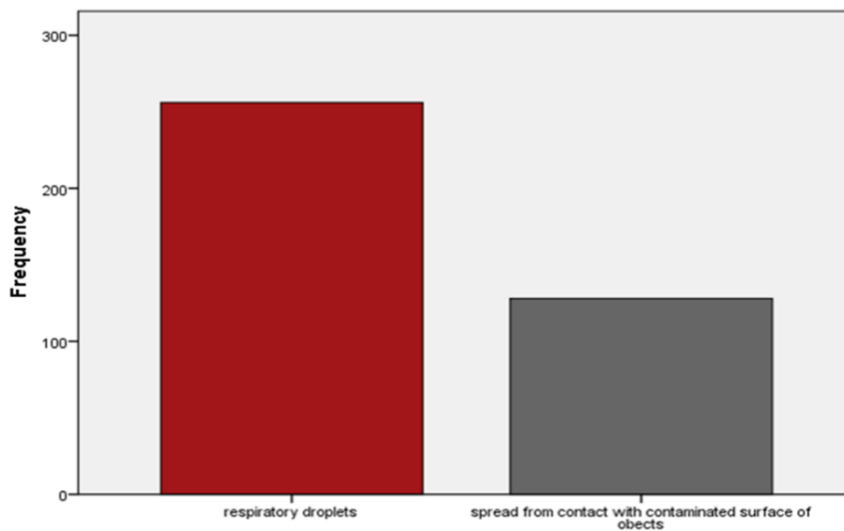


Figure 5. Frequency Distribution of Mode of Transmission

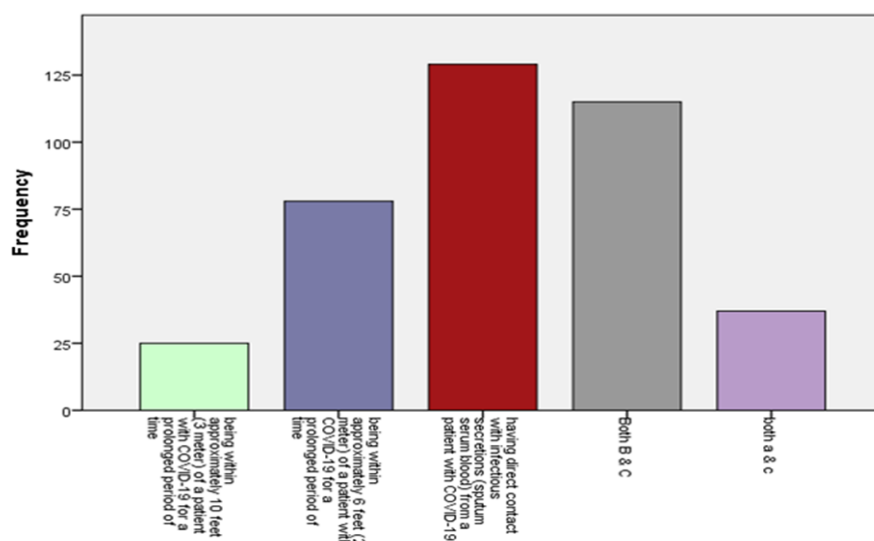


Figure 6. Frequency Distribution of Close Contact

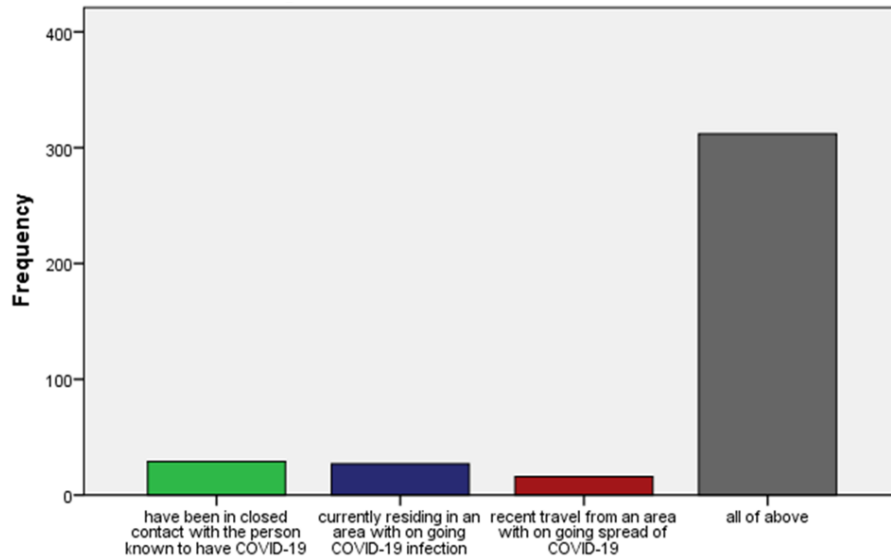


Figure 7. Frequency Distribution of Reported Sign and Symptoms

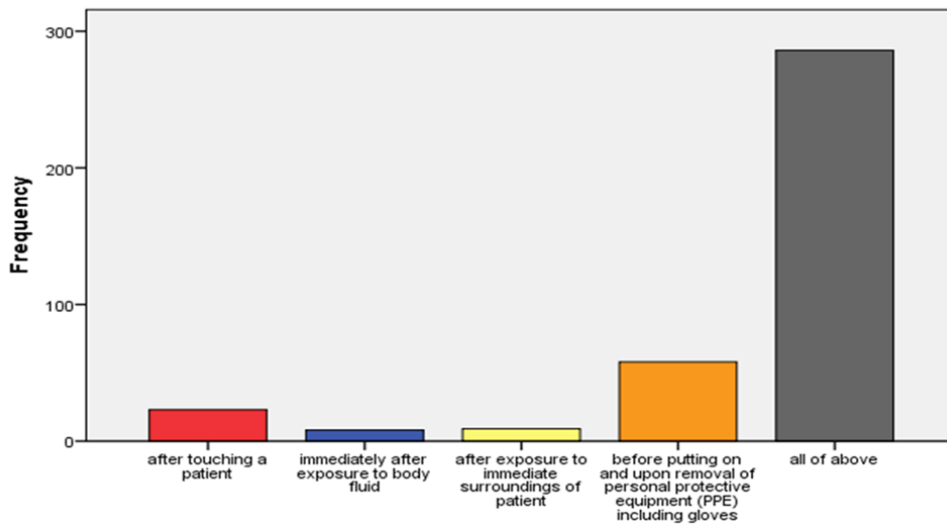


Figure 8. Frequency Distribution of Hand Hygiene

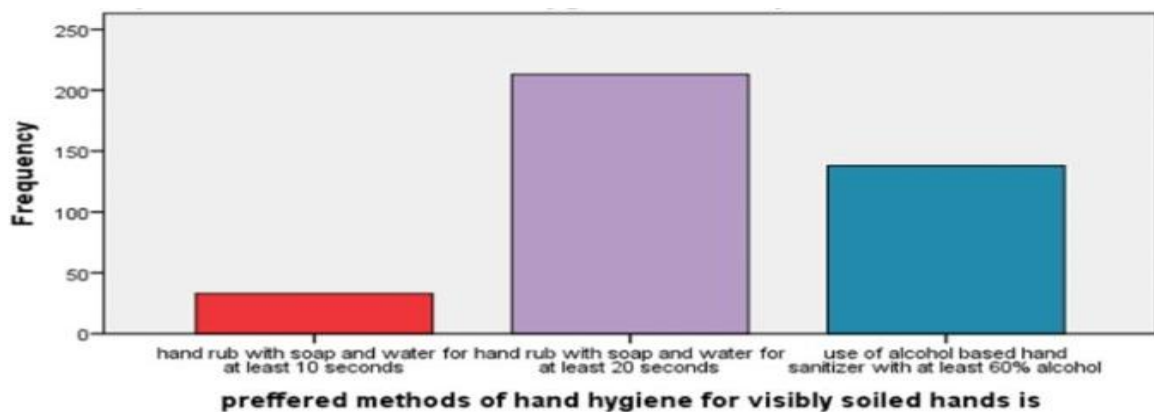


Figure 9. Frequency Frequency Distribution of Hand Hygiene Methods

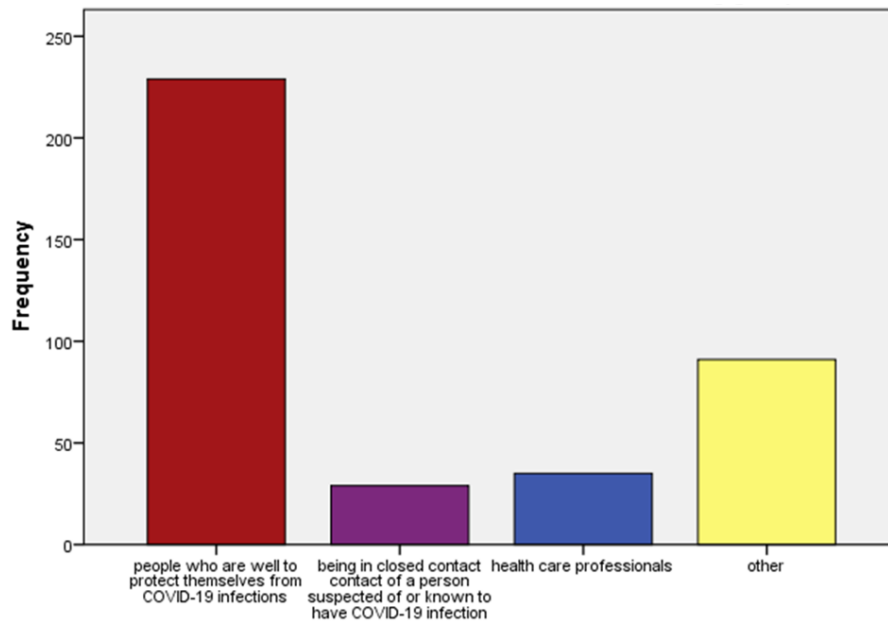


Figure 10. Frequency Frequency Distribution of Face Mask Usage

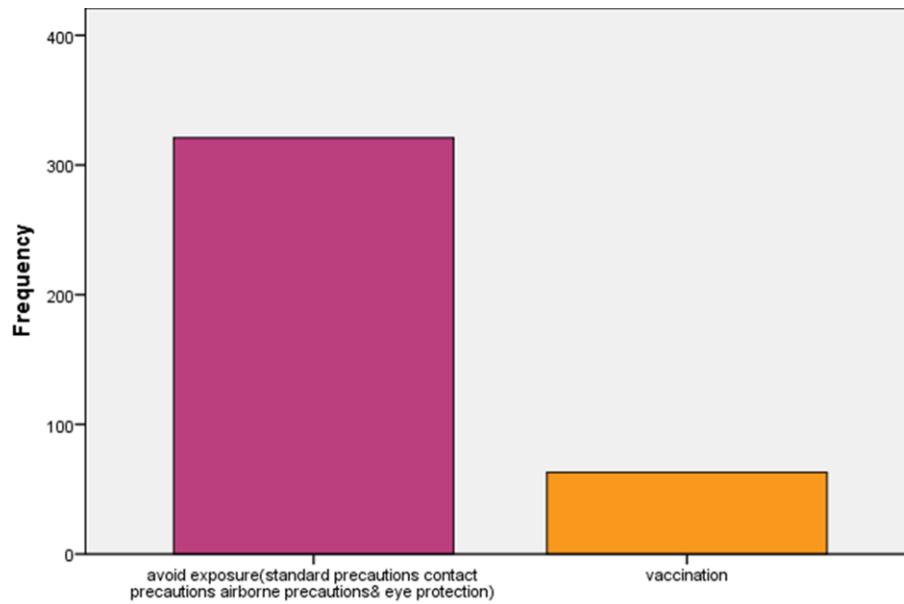


Figure 11. Frequency Frequency Distribution of Effective Prevention Method

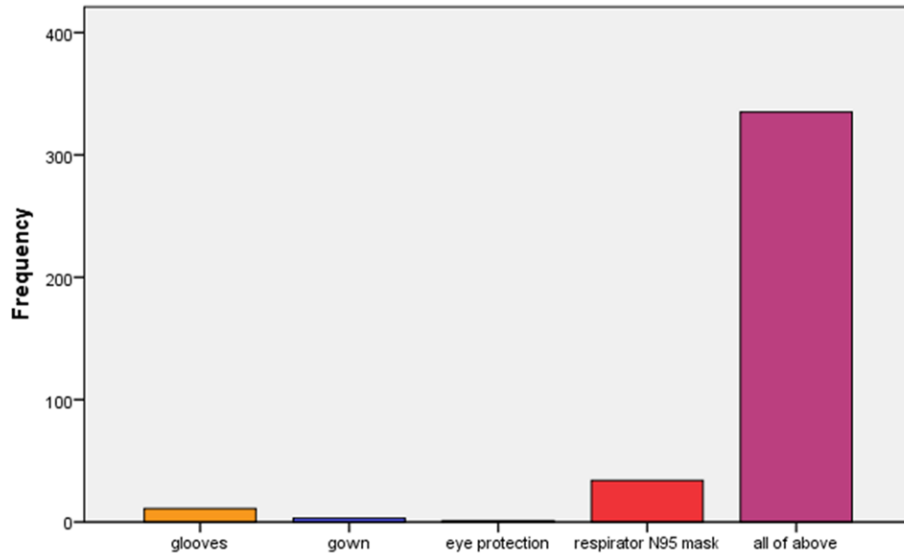


Figure 12. Frequency Distribution of PPE Usage

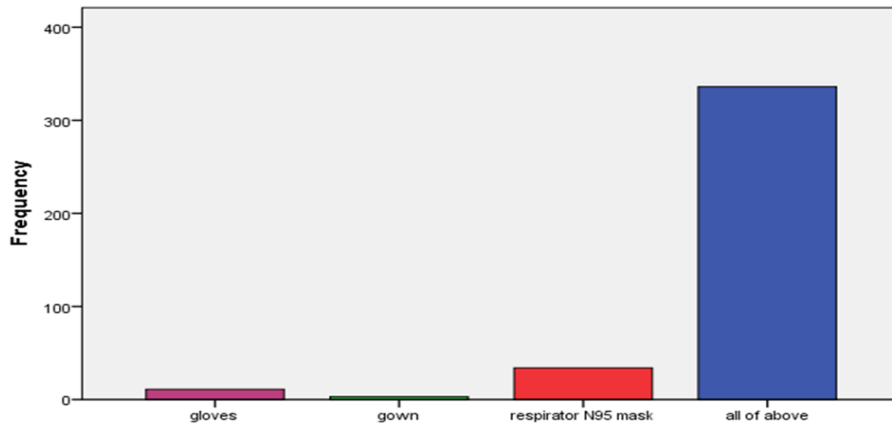


Figure 13. Frequency Frequency Distribution of PPE Usage by HCP

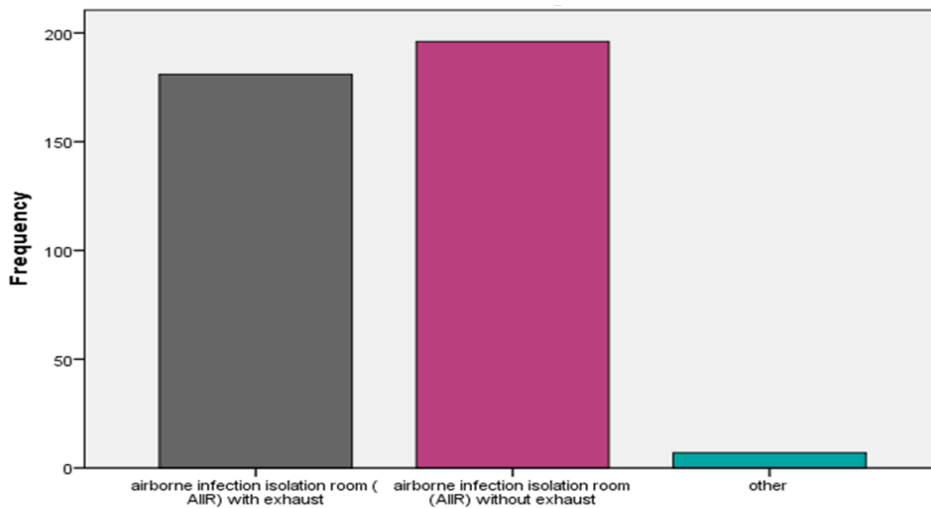


Figure 14 . Frequency Frequency Distribution of Isolation of COVID Patients

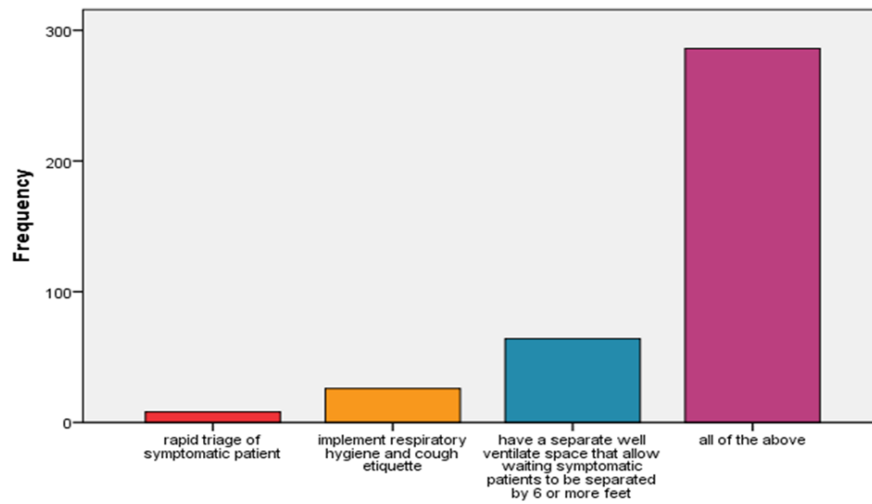


Figure 15. Frequency Frequency Distribution of Control Measures

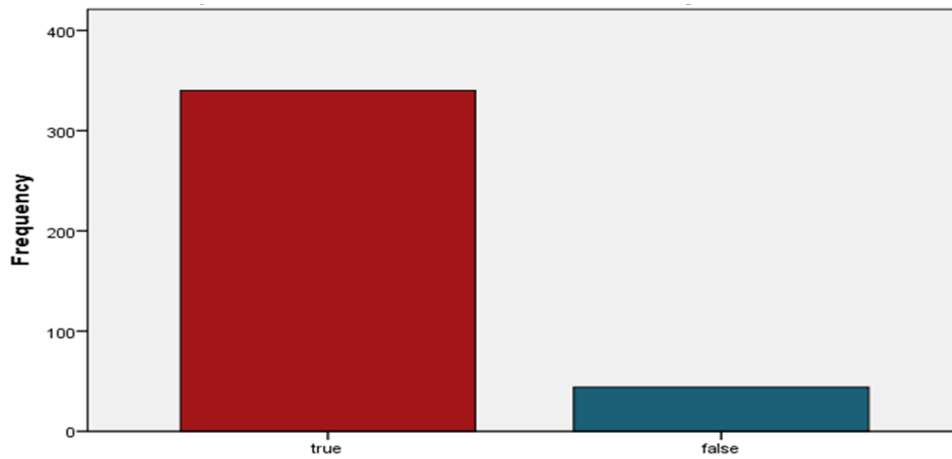


Figure 16. Frequency Distribution of Clinical Management

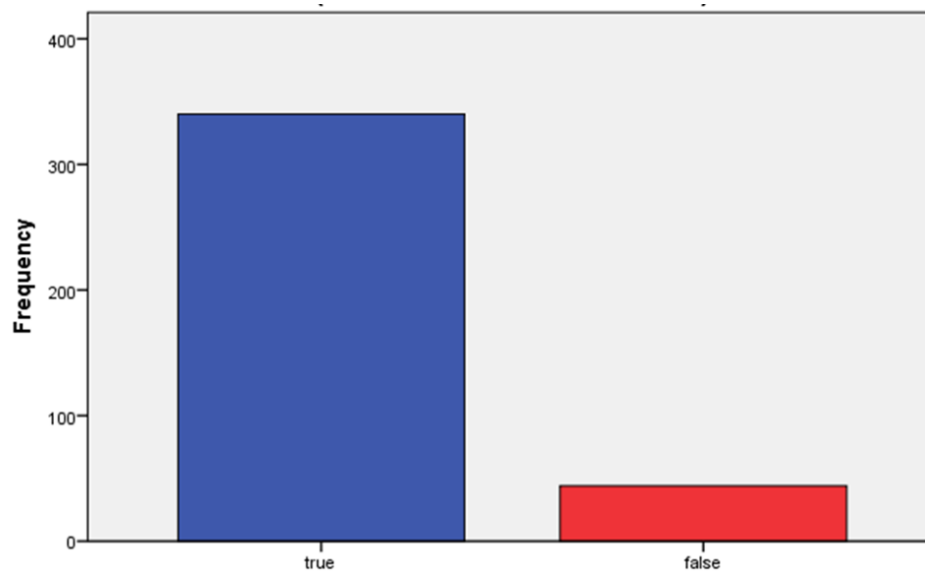


Figure 17. Frequency Distribution of Recommended Infection and Prevention Control Measure

DISCUSSION

This study greatly increased Punjab, Pakistani undergraduate physiotherapy students are aware of the Covid-19 pandemic. The impact of COVID-19 is waning globally. The most crucial component of COVID-19 control is the capacity to differentiate between different types of evidence and define a presumptive case. Regardless, our research revealed that not quite half of the respondents understood how to define a "nearby contact."

The term "nearby contact" refers to being within 6 feet (2 meters) away from a COVID-19 patient for a lengthy length of time, or encountering the irresistible emissions of a COVID-19 patient. Moreover, the Interim U.S. Direction for Risk Assessment and Public Health Management of Healthcare Workers with Possible Exposure to Coronavirus Disease Patients (COVID-19) published by the CDC has extra crucial terminology [LeBlanc, 2020 #25]. Mindfulness was low in all subgroups, with non-clinical/regulatory personnel showing the highest decline. Despite the fact that this gathering is not directly related to patient administration, there is a good chance that nonclinical staff will come into contact with patients in the medical services setting, putting them at risk of contamination (8). The WHO "Five Moments of A "Nearby The term "Contact" is spending a significant amount of time within 6 feet (2 meters) of a COVID-19 patient or coming into contact with the patient's irresistible emissions. Moreover, the Interim U.S. Direction for Risk Assessment and Public Health Management of Healthcare Workers with Possible Exposure to Coronavirus Disease Patients (COVID-19) published by the CDC has extra crucial terminology [LeBlanc, 2020 #25]. Mindfulness was low in all subgroups, with non-clinical/regulatory personnel showing the highest decline. Despite the fact that this gathering is not directly related to patient administration, there is a good chance that nonclinical staff will come into Their danger of contamination rises when they interact with patients in a medical setting (8). When interacting with suspected or confirmed cases of coronavirus, medical staff members were aware of the significance of wearing personal protective equipment (PPE), according to the WHO's "Five Moments of Safety." In medical services settings, the CDC has released Break Contamination Counteraction and Control Suggestions for Patients with Suspected or Confirmed Covid Infection 2019 (Coronavirus). for Personal Protective Equipment. When entering the patient room, use a face mask. and a N95 respirator. The N95 respirator is worn over the face veil while executing or presenting airborne production procedures. Pre-owned veils should be properly removed and hands thoroughly washed. When entering the patient room, you must wear an appropriate costume, which includes goggles or a disposable face protection, as well as clean or dirty hands. If there is a deficiency, clothing should be prioritized for vaporization. Creating techniques (10).

In addition to ensuring enough PPE, comprehend the proper "wearing and doffing" arrangement. The CDC classifies individuals who cover their faces. Over 75% were aware that wearing It is neither necessary nor advised for healthy individuals who have not come into touch with a coronavirus patient to wear a facemask or respirator. Wearing a cover is advised for people receiving medication or being in a medical setting by major health organizations. Even though variations have been seen in their use in local contexts, the unfettered use of veils must be limited to safeguard limited resources for medical service settings. Our study participants had an overall accurate solution rate of 71.2%, with clinical college students having the greatest number (74.10%) and non-clinical/administrative personnel having the lowest (53.64%). A cross-sectional examination of information and thoughts on the Medical personnel in critical medical services communities and emergency clinics in Najran, Saudi Arabia were tested for the Center East respiratory illness Covid (MERS-CoV). The findings demonstrated that the great majority of these workers were aware of MERS-CoV and had adequate information. Consider something related. Doctors and medical caregivers have far more information than other medical care providers. A comparable study of medical care staff in the Kingdom of Saudi Arabia revealed that members lacked awareness about approaching critical illnesses, and announced disease control techniques were regarded troublesome. In South Korea, an investigation into medical workers found a terrible situation. information about MERS modes of transmission Covid This method could help to lessen the medical professional shortage, and possibly Serve A big group of people. Students from different medical care vocations were therefore remembered during our inquiry.

Pre- and post-opening prophylactics are just a couple of the strategies that must be developed immediately to prevent disease in high-risk populations. Numerous drugs are presently under investigation. The antimalarial medication hydroxychloroquine had antiviral efficacy against SARS-CoV-2 in an in vitro pharmacological investigation, suggesting that it could be utilized as chemoprophylaxis for healthcare workers. Hydroxychloroquine is currently being used in clinical trials to treat coronavirus pneumonia; the results will be watched watched (11).

CONCLUSIONS AND RECOMMENDATIONS

71.2% Healthcare students responded correctly, indicating a high Undergraduate medical students' familiarity and understanding with COVID-19 responded surprisingly accurately to the supplied questions. This survey shows that kids are fully aware of their current situation. The research proposes further training lectures and webinars to increase student knowledge of the epidemic..

FURTHER STUDY

Authors may focus their next efforts on raising awareness among doctors.

REFERENCES

- Ağalar C, Öztürk Engin D. Protective measures for COVID-19 for healthcare providers and laboratory personnel. *Turk J Med Sci.* 2020;50(Si-1):578-84.
- Araghi F, Tabary M, Gheisari M, Abdollahimajd F, Dadkhahfar S. Hand Hygiene Among Health Care Workers During COVID-19 Pandemic: Challenges and Recommendations. *Dermatitis.* 2020;31(4):233-7.
- Bulut C, Kato Y. Epidemiology of COVID-19. *Turk J Med Sci.* 2020;50(Si-1):563-70.
- Characteristics of Health Care Personnel with COVID-19 - United States, February 12-April 9, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(15):477-81.
- Cucinotta D, Vanelli M. WHO Declares COVID-19 a Pandemic. *Acta Biomed.* 2020;91(1):157-60.
- Gao J, Hu S. Update on use of chloroquine/hydroxychloroquine to treat coronavirus disease 2019 (COVID-19). *Biosci Trends.* 2020;14(2):156-8.
- Kim GU, Kim MJ, Ra SH, Lee J, Bae S, Jung J, et al. Clinical characteristics of asymptomatic and symptomatic patients with mild COVID-19. *Clin Microbiol Infect.* 2020;26(7):948.e1-e3.
- Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsis E, Katsaounou P. Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Brain Behav Immun.* 2020;88:901-7.
- Rabaan AA, Al-Ahmed SH, Haque S, Sah R, Tiwari R, Malik YS, et al. SARS-CoV-2, SARS-CoV, and MERS-COV: A comparative overview. *Infez Med.* 2020;28(2):174-84.

Santacroce L, Charitos IA, Carretta DM, De Nitto E, Lovero R. The human coronaviruses (HCoV) and the molecular mechanisms of SARS-CoV-2 infection. *J Mol Med (Berl)*. 2021;99(1):93-106.

Umakanthan S, Sahu P, Ranade AV, Bukelo MM, Rao JS, Abrahao-Machado LF, et al. Origin, transmission, diagnosis and management of coronavirus disease 2019 (COVID-19). *Postgrad Med J*. 2020;96(1142):753-8.