

Health Awareness and Attitude Towards COVID-19 Pandemic Among University Students Under Healthcare Training in Al-Madinah

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Abstract

Background: The modern coronavirus infectious disease COVID-19 has been labeled internationally as a pandemic and is considered an emergency to the public health. Many studies were targeting university students as they play a great role after healthcare workers in relaying and spreading the awareness of COVID-19 and its preventive measures among colleagues, families, and friends. Therefore, it is of great importance to increase the knowledge and awareness about COVID-19.

Objectives: In this review article, we compare the most relevant studies that measure health awareness and attitude towards the COVID-19 pandemic.

Method: The articles are obtained from electronic databases such as PubMed, Science Direct and Google Scholar that are published during 2020.

Conclusion: Most studies showed high level of awareness among university students, and social media was found to be their main source of information. Among all the selected research papers, we found that the studies conducted in both the United Arab Emirates and Qassim Universities showed results that may be comparable to our topic.

Keywords: COVID-19; University students; Healthcare training; Awareness; Attitude; Pandemic.

Introduction

Coronavirus disease, also known as COVID-19 is a pandemic disease that caused chaos to the world which rose in December, 2019 hence its name. The very first case that lead to an outbreak happened in Wuhan City in China, causing thousands of deaths [1]. On March the 2nd 2020, the first confirmed case of COVID-19 was reported in Saudi Arabia [2]. As the disease continues to spread rapidly and enormously, affecting peoples' everyday life and bringing about a threat to the public health, it was soon declared by the WHO as a global pandemic in March, 2020 [3].

The highly infectious disease; COVID-19, is the recent member of the family called SARS-COV [3]. It is a respiratory virus that causes symptoms similar to that of a common cold, the

range of symptoms may manifest from mild to severe [3,4]. That said, some people may also not show any symptoms but are still considered infectious to others [1]. Mild symptoms include fever, and shortness of breath, whereas the severe includes pneumonia, severe acute respiratory syndrome and kidney failure [3]. The disease is easily transmitted between humans through a direct contact, for example by droplets, and an indirect contact like the feco-oral. As a zoonotic pathogen, it can also be transmitted from animals to humans [4]. COVID-19 has an incubation period of 2 -14 days [4].

There has not been any successful treatment for COVID-19 yet, and patients are only being treated symptomatically [5]. Vaccines were developed in order to reduce the spread rate of the disease. Managing the symptoms and following precaution methods are effective ways to control the disease [4]. Therefore, it is crucial for everyone to comply with such methods and be aware of the global situation we are all facing. As we go through this article, we are specifically focusing on the university students who are under healthcare training as they play a great role after health care workers in relaying and spreading the awareness of COVID-19 and its preventive measures among people; patients, colleagues, families and friends.. etc. Sharing information about the disease promptly, can improve the responsiveness of the community towards pursuing preventive measures against COVID-19 [2]. It is of great importance to increase the level of awareness towards COVID-19 among university students who are under healthcare training, seeing as their attitude revolves around it and they are included within the group of people who are expected to be at higher risk of infection [4]. That being said, there are no studies that have been conducted about this topic in Al-Medina on university students who undergo healthcare training, which makes it difficult to estimate how much students in this country are mindful about COVID-19 and its seriousness. While we review other researches that are relevant to our topic, we also intend to correlate whether or not there is a relationship between the increase in the number of COVID-19 cases and the level of awareness among university students who are under healthcare training.

Methods

All published researches in the following article were obtained from the databases; PubMed, Science Direct and Google Scholar that are published during 2020.

Literature review

The new type of coronavirus infectious disease; COVID-19 has been labeled internationally as a pandemic, and is considered as an emergency to the public health. Upon its discovery, many studies were done nationally and internationally in order to understand the disease in more detail. Numerous elements were covered within those studies, particularly the knowledge, attitude and perception, also known as (KAP) which is relevant to our topic. Some of those studies are outlined below.

During the first week of March 2020, a cross-sectional, web based study was conducted among HCWs about COVID-19 by Akshaya Srikanth Bhagavathula et al.. The study aimed to investigate the knowledge and perceptions of HCWs about COVID-19. An online survey was developed and distributed randomly to HCWs using social media. A 453 HCWs among a total of 529 participants completed the survey, some of which were male, others were aged

between 25-34 years, and most of them were doctors and medical students. Social media was mostly used to obtain the information. The results showed that a large scale of HCWs had an inadequate knowledge about its transmission, symptoms and onset. Yet, they showed positive perceptions of COVID-19. This study was performed during a time when an overwhelming cases were being reported globally which might limit the generalization of this study. Moreover, it may also be subjected to a recall bias due to the data that was self-reported which depends on the participants' honesty and recall ability [4].

A cross sectional study that was conducted by Asuka Hatabu et al. in Japan between May 22 and July 16, 2020, via an online questionnaire that aims to evaluate the knowledge, attitude and perception towards COVID-19 among their university students. The overall outcome showed a significantly high level of KAP among university students. All respondents demonstrated great knowledge on avoiding enclosed spaces, crowded areas, and close situations. Most respondents showed a moderate or higher frequency of washing their hands or wearing masks. Additionally, more than half of the respondents showed a positive attitude towards early drug administration. Factors that may limit this study involves the fact that it was not done randomly which makes it recruitment bias, and only students with higher awareness may have responded to the survey in a favorable evaluation resulting in a response bias. Sampling error was not calculated along with the response rate, and the anonymity of participants to each other may have been violated. The results of the study cannot represent the entire population of Japanese university students due to the limitation in the sample number and the imbalances that were disclosed within the subgroups [7].

Another cross-sectional study was conducted by Sammina Mahmood et al. in Pakistan aiming to assess the attitude, perception, and knowledge of Pakistani people toward COVID-19 disease. The questionnaire was modified online and was filled by 1,000 individuals after being sent randomly throughout Pakistan. The results demonstrates that participants mainly obtained the knowledge about COVID-19 through the social media. It's been also revealed that student with a medical background had a positive approach towards COVID-19. Some participants believe that COVID-19 is a bioweapon. Most people have acknowledged that fever is the initial symptom and that thermal scanners are effective in detecting the disease. The majority of the respondents consider social gatherings as a way to prompt the spread of COVID-19. All in all, the participants had decent KAP about the preventive measures towards coronavirus disease. The study was limited to only those who were able to fully understand the English language. Also, the received responses were mainly from those of the educated section of the society and have access to the internet. Therefore, the rest were excluded from the study [6].

An observational descriptive cross-sectional study was conducted between March and April 2020 by Hani A. Naseef et al. among students (undergraduate and postgraduate) with a total of 665 at Birzeit University in the occupied Palestinian territories. The study aimed to assess knowledge, attitudes and practices toward COVID-19 among Birzeit University students. The findings of this study indicate that the vast majority of students retained good knowledge, positive attitude and an attentive practice in regards to COVID-19. A great number of the participants relied on the official media briefs in Palestine as their source of information. The study has potential limitations to be considered. Most of all, given that this study was

performed among students, it can hardly represent the general Palestinian population. The study findings is not applicable to be generalized due to the self-selection bias. Furthermore, it may also be subjected to recall bias [1].

In May, 2020, the United Arab Emirates conducted a cross sectional study by Hayder Hasan et al. in which 1,012 (481 health-related and 531 non-health-related) students participated via an online KAP questionnaire. The aim of the study was to assess COVID-19–related knowledge, attitudes, and practices of the University of Sharjah students and compare between health-related and non-health-related majors. The majority of the students were aged 20-25 years old of both health-related and non-health related. Those in the health-related majors had a significantly increased knowledge about COVID-19 leading to a better avoidance of crowded places and maintaining social distancing but still used face mask less frequently. On the other hand, non-health-related students showed less knowledge, though they used the mask more. They also showed less tolerance upon avoiding crowded placed and maintaining social distancing within people. Both health-related and non-health-related students show positive attitude towards controlling the spread of COVID-19. Ultimately, students of the University of Sharjah presented with appropriate knowledge, attitude and low-risk practices toward the prevention of COVID-19 [3].

In the first week of April, 2020, a descriptive study utilized a web-based survey by Sohail Akhtar et al. about COVID-19 pandemic was distributed to 320 students at the Bachelor in Health Informatics Program, Qassim University, Saudi Arabia. The survey was developed using social media platforms and distributed to all students in the program. The aim of the study was to assess the knowledge and perceptions of students at a health informatics program about COVID-19 pandemic. The study reported that more or less than a half of the participants had sufficient knowledge about the signs and symptoms of COVID-19 including the proper modes of transmission of the virus. Nonetheless, more than half had acceptable knowledge about the ways of protection against the disease. As social media was found to be the main source of information to the majority of the respondents, a few number of them had other recourses (Figure 1). The study also showed a significant gap of knowledge existing among health informatics students about COVID-19 regardless of the amount of available information about the pandemic. However, the study cannot be generalized at the national level as it was conducted in one university [2].

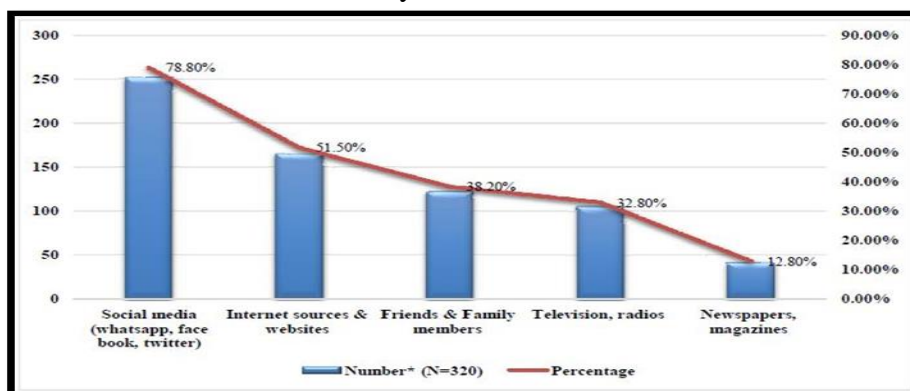


Figure 1 Bar graph showing the percentage of awareness through different resource platform among the respondents

Conclusion

After reviewing six different researches we found that three papers were mainly targeting university students, two of which focused on comparing the health related and non-health related students which is most similar to our topic at hand.

According to those two papers, the study conducted among students in Qassim University showed about 82.2% awareness of the mode of transmission was by coughing and sneezing. Furthermore, it was found to be about 94.7% of awareness in the United Arab Emirates research. The results also demonstrate that participants mainly obtained the knowledge about COVID-19 through social media in both studies. In regards to the attitude however, the United Arab Emirates study showed that both health related and non-health related students had positive attitude towards COVID-19. In conclusion, a large scale of participants had acceptable knowledge and attitude towards coronavirus disease. Essentially, university students must be provided with reliable health information to be an effective influence.

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