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Health Care Professionals Information, Practices and Observations Regarding Coronavirus Second Wave in Vehari, Punjab Pakistan

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Abstract

Pakistan is facing a health crisis due to the COVID-19 second wave which hits the country in October 2020. The study aimed to explore the observations about public behavior, practices, and the information of the health care professionals in Vehari, Punjab Pakistan. Interviews were conducted with health care professionals working in District Head Quarter Hospital Vehari. The study found that the health care professionals have good information and practices towards the various aspect of the pandemic disease COVID-19. In their observation regarding the public, there were some misconceptions and misleading information about the preventive measures against coronavirus. There is a need for a mass level of awareness campaigns on a different platform to end that wrong information for stopping the further spread of disease in the country.

Keywords: COVID-19, Healthcare Professionals, Practices, Information, Pakistan **Introduction**

Coronavirus COVID-19 which affects the respiratory system of the human body has emerged first in Wuhan, China (Hui et al.,2020). The virus nearly paralyzed the public health care system all around the world (Zhou et al.,2020). WHO declared the coronavirus a global pandemic when it spread all around the world outside of China on 12 March 2020 (Sohrabi et al., 2020)? The effects of this pandemic are faced by developed, developing, and under-developing countries. Coronavirus affects around 210 countries around the world, but for prevention, the situation is quite worse in those countries where the public health care system is not so much strong (Ali et al., 2020).

Coronavirus transmits from an affected person by droplets and by contact of an affected person to another. The virus can live inside the human body for up to 4-14days. Patients who are suffered from chronic diseases like diabetes and heart problems and the elderly are at greater risk of this virus. (WHO, 2020). Coronavirus has symptoms like runny nose, fatigue, fever, diarrheic, cough, sour throat, myalgia, and radiographic evidence of pneumonia. In severe cases, it can cause kidney injury, acute cardiac injury, and acute respiratory distress syndrome ARS. (Chen et al.,2020). Currently, a vaccine to cure and protect from coronavirus is not available for the general public in the market throughout the world only protective measures can be adopted to remain safe from effected by COVID-19 (Bhagavathula et al.,2020).

Pakistan is a developing country and considered to be a lower-middle-income country in the world. The country has a population of around 212.2 million with four provinces and three territories. Pakistan is located in one of the most vulnerable geographical locations sharing its border with China, India, Iran, and Afghanistan. China is the country from where this virus emerges first and Iran the first country in the Muslim world where cases of coronavirus emerge both are sharing a border with Pakistan. Daily people come and exist through the border for business and other purposes (Worldometer, 2020). In Pakistan, the very first diagnosed cases of coronavirus on 26 February 2020 traveled from Iran to Pakistan. (Qasim et al., 2020).

The government of Pakistan has employed initially many strategies like lockdown, quarantine centers, testing laboratories closure of educational institutions, and suspension of traveling. Different strategies are taken to control the spread of the virus in the country, but the situation is going worse day by day as the cases are increasing initially (Hayat et al., 2020). On adopting SOP's and strategies

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cases of virus decreases and the situation comes under control in the first wave. The second wave of Coronavirus was declared in the country on 28th October 2020 by the Government of Pakistan. It is declared when cases in the country reported reached more than 750 per day. Active positive cases of the virus reached around 11000 in the country and around 93 patients were put on ventilators in a single day (Shahid et al., 2020).

The effect of coronavirus and its patterns of spread depends upon the behavior, knowledge, and understanding of people about it. A lot of wrong and misleading information is spread all around the country. All this misinformation is mainly spread through social media and text messages from irrelevant people. In the presence of so much misleading information, it is difficult to trust which information correct about the virus by common people. WHO launched a program on their web page named "myths busts" for preventing people from wrong and misleading information (Zarocostas, 2020)? The government of Pakistan is also running different campaigns on what its citizens are perceiving and know about this virus. It is very necessary to educate the people about how particularly this disease is spread, which precautionary measures can be adopted to avoid the affected from this virus and which possible solutions are present to treat patients of it. (Hayat et al., 2020; Barkat et al., 2020). Health care professionals played a key role in spreading this awareness among the public. The behavior of the public is different in all regions of the country only indigenous health care professionals know through their observations and help to minimize misleading information to protect people from the disease.

The behavior of people in Pakistan about how much they are committed to SOPs to control the further spread of disease is necessary to know. Efforts to educate the people to give information to them about the coronavirus but public awareness are made by the health ministry and government of Pakistan. Therefore, it is also necessary to know about the knowledge, attitude of Health care professionals, and practice of people living in Vehari Punjab Pakistan through the observations of health care professionals about the COVID-19. The observations of the health care professionals can only help when they have sufficient knowledge, attitude, and practices regarding the virus. First, it is necessary to know about their practices in hospitals, knowledge, and attitudes according to the guidelines of the Health Ministry of Pakistan or World Health Organisation in Vehari Punjab Pakistan pretending to the second wave of Virus.

Objectives of the Study

The main objective of the study is to explore the information and practices among different Health care Professionals like Doctors, Nurses, dispensers, and Pharmacists. Another objective of the study is to know the public behavior about the second wave of COVID-19 through the observations of Health Care Professionals.

Methods

The Qualitative research design was used to obtain the objectives of the study. This study was conducted in Vehari Punjab Pakistan. An interview guide with unstructured questions was used for conducting interviews. A purposive sampling method was adopted for the selection of a representative sample, where 16 interviews were conducted with health care professionals working in District Head Quarter Hospital Vehari through face-to-face interaction. Interviews were conducted including six interviews from qualified doctors, three each from nurses & dispensers, and three from Pharmacists working in the hospital until the point of saturation was achieved. Interviews were recorded, transcribed. After transcription interviews were translated into the English language from Urdu. Thematic analysis was a technique adopted for the analysis of the data. Data was reviewed many times for making different categories with the help of a coding framework and meaningful themes that were unpacked, to achieve the concerns of the study. The results below are represented according to the similarities and differences found in interviews of respondents. In similarities, the respondent's correlating points are discussed. On the other hand, differences in their information conflicting with a majority of respondents are discussed.

Results and Discussion

The above section referred to how this study was conducted. While the following section discusses the results from the data. It first explains the knowledge, attitude, and practices of the health care professional in Vehari, Punjab pretending to the second wave of COVID-19 in the country. The second part showed the observations of health care professionals regarding people's behavior in

following SOP's for preventing themselves. It also discusses the patterns of people's behavior by which the numbers and deaths are increasing on daily basis.

Knowledge, attitude, and practices among Health care professionals

Health care professional's knowledge and practices of adopting precautionary measures give a significant message to society and prove an awareness among patients (Zhong et al., 2020). The majority of the respondents Health care professional HCPs had very good knowledge, attitude, and practices about the pandemic disease of coronavirus. With the emergence of the second wave in the country, the overall temperature lower throughout the country. During the first wave, it was very difficult to practice and wear personal protective gear in the hospital as the temperature revolves around 35-50c throughout the day. For the respondents, it is not possible to maintain 6 feet distance suggested by WHO as they are treating patients and need to get closer or touch them. HCP's wear surgical masks and surgical gloves while serving in the hospital and strictly advised the lower staff to follow SOP's. Some of the respondents said that they took special care when they went to their homes after performing their duties. They properly disinfect themselves before seeing their family members by taking shower and change the dress. Qualified doctors including some other HCP's spare a room in their house for the disinfection purpose before leaving and entering the house. The routine of disinfecting themselves is repeated at least two times a day. Doctors among health care professionals go for COVID-19 test at least once a week to protect their families, patients, and other public who were in touch with them only when they do not get infected in the past 3 months. As it is more probability that HCP's can be caught by the virus and more vulnerable than others just because they are working in hospitals.

Health care professionals especially doctors were also aware of the new mutation found in the virus, but some of the lower staff like nurses and dispensers found not well aware of the new mutations found in the virus. Majorly the HCPs collect the right information about the disease by using the internet and social media interacting with other HCPs throughout the world by using different social media platforms. (Neto et al., 2020). The health ministry failed to provide the latest information daily about the virus. HCP's know the information about the latest knowledge about mutation from social media and mainly from news agencies. Respondents found that there is much misleading information prevailing on the internet and social media related to coronavirus which can easily mislead HCPs as well as the public. They carefully evaluate and utilize the information getting from the internet and social media by discussing with other HCP's in meetings and general discussions in their daily hospital routine. Sometimes they are evaluating the information available on different internet sources with valid sources like WHO (Bhagavathula et al., 2020).

Studies conducted in Pakistan found that Pharmacists have more knowledge about different diseases in comparison to the physicians and nurses in the hospitals (see also Albarrak et al., 2021). In addition to these, pharmacists more want to get information about the coronavirus and its treatment in comparison to the doctors for finding the cure of the disease. Pharmacists and doctors were found actively engaged in discussions and collaborations to treat the disease and take certain clinical decisions. HCP's get some knowledge related to the treatment from the Pharmacists. Pharmacists playing their role by creating awareness and guiding the people about this pandemic disease. HCPs perceived that overcrowded emergencies, lack of precautionary material, and people with less and wrong information were the major barriers in the hospitals to control the spread of disease and majorly cause the second wave in the country (Saqlain et al., 2020).

Observations of Health Care professionals

Pakistan is a developing country and most of its population is living in rural areas. In Pakistan, people are having different educational levels from illiterate to Ph.D. Level. The level of understanding is different among all the people depend upon their level of education and area of residence. Vehari is located in the Southern part of Punjab Province in Pakistan which is less developed and having not much-educated population. Respondents said that they must deal with many people along with patients in the hospital, everybody has listened about coronavirus but not everybody believed that such type of disease present in the country. They were many myths present among the public like the virus is just propaganda by some foreign countries, by which they will try to chip the Pakistani population through the vaccine. Public living in the urban sphere of the city usually know about the symptoms of a virus and believe that such a virus is present all over the world. Majorly the public

residing in rural areas of the city not aware of the symptoms of COVID-19. The public generally knew that currently there is no cure publicly available in the market present to treat the patients or vaccine is only available for HCP's in the first phase to remain safe from getting infected (see also Hayat et al.,2020).

According to the HCP's common perception found in public of Vehari who visit the hospital is that COVID-19 is just like a minor flue in nature so there is no as much fear of it to get infected. HCP's explained a few reasons for this perception in their observation present found among the public. 1) the public had a low level of education. 2) People think that they had excess to pure and organic found which is not available to other citizens residing in big cities, because of that their immune system is strong than others and can able to fight with the virus. 3) Another perception they had that virus can only survive in cold weather conditions and Vehari is not that much colder city. 4) Majority thought that the coronavirus is only dangerous for the elderly and very few people in their observation think that the COVID-19 can be equally dangerous for all the adult age groups. 5) Concept of self-medication also prevalent among the citizens of Vehari like eating ginger and drinking hot water in the daily routine from not getting the symptoms of the virus (see also Malik, 2020). 6) HCP's found in their observation another misleading information prevailing among people is that virus cannot be transmitted to other people if the patient has no symptoms or simply no fever.

Respondents claimed that in their observation males are more aware of the symptoms of the virus in comparison to females. The reason for having a difference in knowledge about the symptoms may be due to the traditional society we have different gender roles. Pakistani society is patriarchal where all the decisions about the family matters and households are taken by males and females have roles to do households and taking care of the family (see also, Rizvi et al., 2020). Males members in Pakistani particularly in Vehari go out to earn their livelihood so they have more chances to interact with different people discuss their knowledge and updating it by sharing information. On the one hand, this interaction makes them aware of the COVID-19. On the other hand, it equally makes them more vulnerable to getting infected by a virus. Another reason for males having true knowledge about the symptoms of a virus is because they spend more time watching media and reading newspapers on daily basis. According to official records about the infected patient shows the male are more infected in comparison to females as they are going out regularly (Malik, 2020).

The concept of social distancing is also recommended by WHO and gained popularity during this pandemic (Wilder et al., 2020). In the domain of public health, it is always suggested to avoid going to a crowded place because it plays a vital role in spreading the airborne disease not only the COVID-19 (Li et al., 2020). Respondents said that most individuals having very little knowledge about the social distancing concept as they are mixing it with the concept of self-isolation According to WHO guidelines social distancing means the 6 feet difference among people when they contacted each other and to get involved in the public gathering. Studies from all around the world find out that the spread of this virus can only be controlled by maintaining social distances (Ahmed et al., 2020). Hospital is a more vulnerable place for spreading the virus especially in the time of the second wave in the country. HCP's said that in their overall observation especially in hospitals public of Vehari did not maintain a social distance. It is observed that many visitors visit the hospitals along with patients. If one member of the family was caught by a disease all other members came along with that patient to the hospital. They do not consider that hospital is a place from where they can be caught the virus. If a certain patient is admitted to the hospital more than one patient staying with him/her, along with the frequent visit of other family members.

The studies also found out that in HCP's observation people in the city have many misconceptions, misleading information, and knowledge about the COVID-19 but majorly they are aware of the preventive measures. Most of them believe that cleaning and washing their hand many times a day for 20 seconds is not necessary for the pandemic. Along with washing hands, they must avoid touching their face, mouth, and eyes particularly (see also Malik, 2020). The practice is recommended by WHO to stop the spread of disease (Chang et al., 2020; Shah et al., 2020). Many studies had found that actively washing hands for more than 20 seconds can successfully kill the viruses (Levy et al., 2014). In their observation, only a few believed that hand sanitizer and walk-through gates are also effective to kill the virus. Mostly the rural residents not aware of the sanitizers, concerned majority of people were not aware of their use and even cannot afford them. They do not

know that hand sanitizer can be used as disinfectants in their daily routine (see also Ahmed et al., 2020). Those had the right information about the virus mainly due to media campaigns & coverage related to the disease and about preventative measures (see also Malik, 2020). Educated people in Vehari believed that by wearing masks there are fewer chances to get infected. On the other hand, majorly educated citizens believed that an infected patient needed to be isolated immediately (see also Hayat et al., 2020).

HCP's claimed on spreading awareness about the virus on different platforms in the city, people majorly agreed to wash the possible eatable things with soap and non-eatables with chemicals products which are according to the guidelines. WHO confirms that the virus of COVID-19 in houses of people may spread by eatable and non-eatable things if these things are touched by the infected person? WHO also explains that a virus can stay on these products for several hours? In HCP's observation found that the knowledge of people about the virus on eatable and non-eatable things is not satisfactory. They do not know that to just wash the eatable things with soap before using them or leave them for 72 hours which can kill the virus. The washing and leaving the eatable is depended on the type and specification of a particular product. The knowledge of people was not enough to use which product of disinfectors for disinfecting non-eatables is suitable. The reason for that lesser knowledge about chemical disinfectors is print and media which are creating confusion among the people (Ahmed et al., 2020).

Majorly educated people believed that upon adopting the precautionary measures the spread of the virus can easily be controlled in HCP's observation and it is too difficult to tell less or non-educated people. The attitude of individuals to win the battle against the virus is largely depending on the education level and residential status (Hayat et al., 2020). Only educated believed that wearing a face mask is necessary when they are going out as well as they are agreeing with the view that avoids going outside unnecessarily (see also Malik, 2020). In HCP's observation, uneducated people were not wearing face masks even not avoiding going to a crowded place. Some of the respondents said the patient and their attendants just wear the mask in front of us or when they come for the check-up. After leaving the room or some specific areas of the hospital where face masks in strictly ensured to wear. Majorly people just wear face masks due to the strictness of health care professionals for protecting themselves and others from the virus.

Regarding face masks confusion is found among people that which type of masked are needed to be used or which type of face masks are more effective (Ahmed et al., 2020). People commonly believed that only 3M or N95 masks are effective for protection from coronavirus. It is highly recommended by authorities to necessary wear any kind of face mask and leave the specialized face masks like 3M and N95 for the health care workers particularly working with patients affected by this virus. (Feng et al., 2020). The government is continuously spreading awareness about the disease and recommends the citizens stay at home and not go outside unnecessarily. The health authorities and government need to work on awareness campaigns about the intensity and severity of this virus as in HCP's observation people believed that the government is just exaggerated about the threats of the disease (Malik, 2020).

HCP's observed that more risky behavior among young males and especially those who are unmarried. Young males were going to crowded places and somehow violating the measure like social distancing. The attitude of young males was that they believed that disease only dangerous and life-threatening for the elderly or the people suffering from chronic disease (see also Malik, 2020). A link was also found between students and risk-taking behavior on going to crowded places which are mainly due to their young age.

Conclusion

The knowledge of Health Care Professional HCP's in Vehari Punjab, Pakistan was very good in various aspects regarding COVID_19 which was observed in their attitudes and practices pretending to the second wave in the country. Among the general public according to the HCP's observation residential status, age, education, and marital status had a significant role associated with the knowledge, attitude, and practices of the public. There found some gaps in attitudes and practices among the general public regarding the precautionary measures. People believed that one day Pakistan will successfully eradicate the disease coronavirus. Yet, some areas found that where the gap was observed between knowledge and practices of HCPs. For the prevention and effective control of

the disease, there is a further need for training for health care professionals. On the other hand, the Government of Pakistan and the Health Ministry need to drive campaigns and educational programs for eliminating the misleading information spread among the public. Further awareness campaigns and strict measures are needed for completely adopting SOPs suggest by the authorities to prevent the public from the spread of disease.

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