PERCEPTION OF HEALTH CARE PROVIDER REGARDING COVID-19 VACCINATION: A QUALITATIVE STUDY IN PESHAWAR KHYBER PAKHTUNKHWA

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ABSTRACT OBJECTIVES

To explore the perception of health care providers regarding covid-19 vaccination.

METHODOLOGY

A phenomenological qualitative study was carried out in tertiary care government hospitals of Peshawar. Data from 15 health care providers were collected via interviews. Permission from the university ethical review board and hospital administration was granted. Consent forms were granted from the participants before data collection.

RESULTS

The mean age of the participants was 34.31 years. Overall, 117 codes were identified after the initial analysis. A total of 15 codes were identified after omitting the unnecessary codes. These 15 codes were arranged into 4 themes as "Information", "Potential Benefits", "Responsibility", and "Hesitancy".

CONCLUSION

The findings of the study concluded that health care providers need information regarding the protentional benefits and they accept that it's the responsibility of them to smoothly proceed the process of vaccination. The study highlighted that information regarding covid-19 vaccination is very important for health care workers. Similarly, potential benefits of vaccination are highlighted and vaccination hesitancy was also described in this study.

KEYWORDS: Perception, Covid-19, Vaccination, Health Care Workers, Tertiary Care Hospital

INTRODUCTION

Corona pandemic is a worldwide emergency that affects almost all countries of the world. The spread of corona disease was initially identified in Wuhan China.¹ The initial symptoms of the diseases were resembling respiratory tract infections such as lover respiratory diseases and pneumonia.² The disease rapidly spread to other countries of the world which forced the health care authorities to pay attention to this killer disease. Globally 185 million cases are reported and four million deaths are registered so far.3 The initial attack of coronavirus is on the respiratory system. Therefore, the symptoms of coronavirus are similar to respiratory diseases such as pneumonia, bronchiolitis, and upper respiratory tract infections.⁴ Furthermore, the signs and symptoms of the corona are flu, fever, cough, loss of taste and smell, sore throat, aches, headache, rashes on the skin, discoloration of the body organs, loss of speech, and chest pain.⁵ To prevent the spread of coronavirus, various steps had been taken. Initially, the health care organizations were failed to provide specific treatment. Social isolation, hand wash, and the use of facemasks were the only solution to control the spread of coronavirus. 6,7 Similar to the rest of worldwide countries, Pakistan also faced difficulties to cover the spread of coronavirus. The

tertiary care facilities in the country provided treatment to the covid-19 infected patients. Initially, the recommended treatment of corona was just like treating pneumonia and other respiratory tract infections. Following the standard guidelines of infection control was utilized to control the spread of infections. 9 In 2021, the health care department successful in introducing corona vaccination. China, America, and Russia were the countries pioneer in developing the vaccines for COVID-19. to work in the corona vaccination. The vaccine trials showed the preventive capacity for corona virus. Vaccination was tested and provided positive results to control the chances of the corona. In the initial phase, health care providers were vaccinated because they were working on the front line and were more exposed to the corona. 10,11 In the same way, people more than 60 years were also vaccinated because They were more prone to disease symptoms than younger population. The severity of corona also depends on the age because in the older age the comorbidities double the chance of death of corona.¹² The role of health care workers is very important in vaccinating the population. Therefore, positive perceptions of the health care providers are very important to cover the corona pandemic with effective vaccination. 13,14 Covid-19 vaccination Campaign were started in Pakistan in 2021 in which the health care

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providers were vaccinated in the initial phase. Furthermore, vaccination has been gradually started for old age people and other populations of Pakistan. 12 Health care professionals are facing a lot of difficulties such as convincing the populations for vaccination, counseling the population about the side effects and benefits. 15 According to some studies, the researcher explored the perception of health care providers regarding the corona vaccination. The findings of the study revealed that health care works experience covid-19 hesitation with getting vaccination. Furthermore, they also reported fear of adverse effects and reactions due to covid-19 vaccination. 16,17 World recommended Organization vaccination for every citizen in Pakistan. Health care providers are the front-line worriers working against covid-19. Health care workers understanding and positive perception is very necessary for the smooth running of the covid-19 vaccination program all over the country. The limited number of individuals is spreading false perceptions among the population and health care workers to affect the covid-19 companies. This study may have vast implications in the health care sector. The findings of the study may create insight among the health care provides regarding the perceptions towards corona vaccination.

METHODOLOGY

A phenomenological qualitative study was carried out in tertiary care government hospitals of Peshawar. Data was collected in Hayatabad Medical Complex (HMC), Lady Reading Hospital (LRH), and Khyber Teaching Hospital (HMC). The study was carried out in June 2021 to November 2021. Overall, 15 health care were included in the study. The sample size for the study was decided upon the data saturation. The study was approved from the ethical review board of Khyber Medical University Peshawar. Permission from the hospital administration was obtained. Data was collected using focus group discussion and interviewing the participants. All the data was organized and thematic analysis was carried out. 18

RESULTS

Overall, 15 health care professionals were included in the study. 5 health care participants each were selected from HMC, LRH, and HMC. Demographic characteristics of study participants are shown in Table 1.

Table 1: Demographic Profile of the Population, (n=15)

		Frequency	%Age
Gender	Male	06	40
	Female	09	60
Age (years)	< than 30 years	03	20
	31-40 years	08	53.33
	> than 40 years	04	26.66
Marital Status	Unmarried	04	26.66
	Married	11	73.33
Education	Bachelor Level	07	46.66
	Diploma Level	08	53.33
	Master Level	0	0
Experience	< than 5 years	04	26.66
	5-10 years	08	53.33
	11-15 years	02	13.33
	16-20 years	01	06.66
	> than 20 years	0	0

Overall, 117 codes were identified after the initial analysis. Axial coding was done after omitting the unnecessary codes. A total of 15 codes were identified after omitting the unnecessary codes. These 15 codes were arranged into 4 themes. These themes were "Information", "Potential Benefits", "Responsibility", and "Hesitancy" (Figure 1).



Figure 1: Thematic Analysis of the Data

The first theme generated was Information. The theme was generated from many codes such as "Name of Vaccination", "Awareness regarding covid -19 Vaccination", "Role of Vaccination", and "Number of vaccinations shots" (Figure 2).

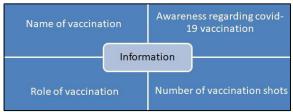


Figure 2: Knowledge

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"I exactly don't know properly about the covid-19 vaccination. It is totally a new thing in the health care system. I don't know whether these vaccinations may have a positive or negative impact on individuals. We follow the government rules and policies" (Participant 3, Age 37). "Different vaccination is available in government health care setups. Private health care setups also take part in the vaccination of people. I remember a few names of covid-19 vaccinations such as sinopharm and sinovac, the other I don't remember" (Participant 11, Age 32). "There are different types of vaccines. Some of them have one shot or some of them have two. It's the job of vaccinators to remember the shots and frequency. I don't exactly know regarding the duration gap between the doses" (Participant 6, Age 34). The second theme was responsibility. This there was generated from four codes such as "Role of health care workers", "Responsibility of the government", " Active participation of the head of the family", and "organizational strictness" (Figure 3).



Figure 3: Responsibility

"In the eradication of corona, the role of health care providers is very important to create the awareness among the people. Health care providers spread the message to their love once and other nearby population" (Participant 2, Age 43). "Government officials should take active part in the campaign of corona vaccination. The government should facilitate the people in their work places in the collaboration with health care department to vaccinate the people in their work place" (Participant 5, Age 44). "Vaccination rate against covid-19 vaccination can be increased by the active involvement of the head of every family member. Every family should educate their family members regarding the importance of covid-19 vaccination and make sure the vaccination of their family" (Participant 14, Age 39). The third there theme is "Potential Benefits". This theme was generated from the codes such as "Disease Spread", "Return to normal life", "Reducing the likelihood of transmission", "Protecting yourself and others" (Figure 4).

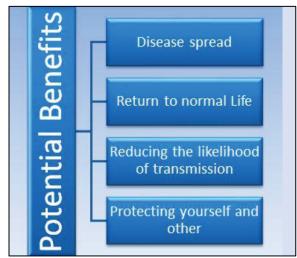


Figure 4: Potential Benefits

"Vaccination is not to protect myself from this deadly disease but it is to keep the community safe from corona. The chances of infection reduced with vaccination and we can keep our family, kids, neighbors and people with whom we are working safe" (Participant 15, Age 40). "I think corona vaccination is very important for everyone. Everything is disturbed due to corona and vaccination is the only way to come out from this miserable situation" (Participant 15, Age 43). "The benefits of corona vaccination are not limited to me. I am a nurse and if I am not vaccinated, how can I prevent my family members and other people safe from corona. If I am vaccinated, it's mean that I am giving benefit to myself as well as to my family and other people" (Participant 13, Age 37). The fourth theme is hesitancy. There were three codes for hesitancy as Fear, Reactions, and Specific vaccination for specific countries (Figure 5).



Figure 5: Hesitancy

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"Although the covid-19 is a dangerous disease but it doesn't have a specific treatment. Vaccination is not the recommended treatment and some of the vaccination is not worldwide approved. A lot of researcher I followed on Facebook said that there vaccination is dangerous" (Participant 15, Age 40). "All the people said that vaccination has a lot of adverse reactions. Some of the nurses and other people died due to corona vaccination. Vaccination clots the blood of the cardiac people that's why the government should consider thinking about vaccination (Participant 12, Age 33). "A very strange thing, some of the vaccination is not recommended for Arabic countries and some of the vaccination used in Pakistan is not recommended in British countries. Majority of the Pakistani are working tout side of the county, I don't understand what the people would do" (Participant 11, Age 32).

DISCUSSION

The basic purpose of the study was to explore the perception of health care professionals regarding covid-19 vaccination. Supporting the findings of the current study, a study was conducted to explore the perception of the health care workers regarding covid-19 vaccination. In this study, participant's perceptions were highlighted in four themes such as "Information", "Potential Benefits", "Responsibility", "Hesitancy". The study highlighted that information regarding covid-19 vaccination is very important for health care workers. In addition, health care providers and the population are required to take the responsibility for creating awareness among people about vaccination. Similarly, potential benefits of vaccination are highlighted and vaccination hesitancy was also described in this study. In the same context, a study was carried out to highlight the perception of health care providers towards covid-19 vaccination. The study reported that 38.3% of participants were a positive perception towards vaccination and they want to vaccinate, the majority (62%) of the participants reported refusal or hesitancy towards covid-19 vaccination.²³ In addition, another study also reported a positive perception of health care workers towards covid-19 vaccination. The findings of the study revealed that 53% of participants want to vaccinate against corona and want the population to vaccinate.24 Besides, a study was carried out in Saudi Arabia to explore the perception of health care providers towards corona vaccination. The findings of the study reported that the majority (77.8%) of participants accept the corona vaccination. 22% of participants reported hesitancy towards covid-19 vaccination due to lack of knowledge regarding corona vaccination and rumors

about corona vaccination.²⁵ In the same context, studies supported the findings of the current study and revealed that hesitation due to vaccination, lack of knowledge regarding the effectiveness of covid-19 vaccination, and unawareness regarding the potential benefits of corona vaccination is some of the factors which affect the perception of health care providers towards corona vaccinatio.^{23,26,27}

LIMITATIONS

Due to qualitative nature of the study generalization of findings may not be possible.

CONCLUSIONS

The findings of the study concluded the perception of the health care workers towards covid-19 vaccination in four themes. These themes were "Information", "Potential Benefits", "Responsibility", and "Hesitancy". The study highlighted that information regarding covid-19 vaccination is very important for health care workers. In addition, health care providers and the population are required to take the responsibility for creating awareness among people about vaccination. Similarly, potential benefits of vaccination are highlighted and vaccination hesitancy was also described in this study.

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