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Participants' experiences of coronaviruses infection

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Abstract---Background: Coronaviruses affect many populations worldwide. Their experience varies according to the severity of the infection. Some of them had a mild infection which was treated at home while the severer cases were treated at the hospital. Aim: This study explored the experience of the infected population by COVID-19 in 2021. A qualitative study design was conducted in 2021, and a structured electronic questionnaire was used for data collection from fourteen individuals diagnosed with COVID-19, and agreement was taken from each participant after a full explanation on the first page of the questionnaire. The data were analyzed using Colaizzi's method and Excel program, to assess the participants' experiences related to coronavirus infection. Results: the result shew the different participants' experiences during the infection period with coronaviruses particularly, symptoms, treatment, psychological experience, and complications. Conclusion: The data was collected during this pandemic phase to compare different experiences related to the nature of the infection to get information that can help in constructing education programs to raise population awareness about this problem.

Keywords---Coronavirus, Patient Experience, Symptoms, Treatment, Complications, Qualitative study.

Introduction

The coronavirus disease was discovered in China, in 2019. It is an acute viral infection of the respiratory system. COVID-19 infection spread rapidly resulting in the isolation of the infected individuals for prevention. This study was conducted to explore the experience of infected individuals with COVID-19. Those diagnosed according to their symptoms and PCR test World Health Organization (WHO) the rapid infection of coronaviruses infection, low information about the coronaviruses, and absence of treatment these factors lead to the spread of infection in the world rapidly.

The coronaviruses spread from an infected person through coughing, sneezing, speaking, singing, or breathing. It is important to practice respiratory healthy habits, such as covering the face when sneezing or coughing, and complete isolation at home till recovery.^{1,2,3}

Some symptoms that appeared among COVID-19 populations are like flu symptoms but severe and take a long time up to 14 days after exposure to the virus.⁴ There are no specific drugs for coronavirus, so some people used antiviral drugs, anti-inflammatories, and home remedies to minimize these symptoms such as fever, headache, and cough.⁵ Understanding infected individuals' experiences with coronaviruses is essential to help other populations know the nature of the disease. The aim of this study is to assess the experience of participants, particularly during coronavirus infection.

Methodology

Study design: A qualitative study design was conducted in 2021. the participants' number was fourteen individuals who were diagnosed with COVID-19 and agreed to participate. The sample size was similar to the sample size in the study which was conducted in Denmark in 2021.⁶ A structured electronic questionnaire was used for data collection from all participants after a full explanation and written consent on the first page of the questionnaire.

The data was collected and analyzed using Colaizzi's method and an Excel program to explore the experiences of participants related to coronavirus infection.⁷

Colaizzi's methodological approach is used in qualitative research to understand participants' experiences. It consists of seven stages, such as: 1. reading and rereading the transcript, 2. extracting significant statements that pertain to the phenomenon, 3. formulating meanings 4. aggregating into clusters, 5. developing an exhaustive 6. Summarizing of exhaustive description (fundamental information) 7. The credibility of information has 4 steps such as bracketing, intuiting, analyzing, and describing^{8,9,10,11}.

Ethical consideration

This study was adhered to Helsinki Declaration and approved by the Ethics Committee of the Affiliated nursing college. The participants received written information on the first page of the electronic questionnaire about the purpose of the study, with their right to withdraw at any time without consequences and all information will be kept in a secret place so no one can reach it. All participants filled out the electronic questions after agreeing with the informed consent and explanation that wrote on the first questionnaire page before filling it.

Result

Table (1) participants' information data

Items	Categories	%
Gender	Male	36%
	Female	64%
Age group	15-24 years	14%
	25-34	0.0%
	35-44	51%
	45-54	14%
	55-64	21%
	65 &more	0.0%
Educational level	Above University	21 %
	University	75%
	High secondary	7%
	Intermediate	0.0%
	Primary	0.0%
	Others	0.0%
Marital status	Marid	93%
	Single	7%
Nationality	Saudi	36%
	Non-Saudi	64%

Most of the participants were non-Saudi females at the university level of education, married, and in the age group of 35-44 years most of the participants also suffered from hypertension (36%), had cardiac problems (14%), and 57% worked in the public sector rather than the medical or health section. Of the participants experienced related to coronavirus in 2021, Most of them were infected inside Sadia Arabia (86%); while (14%) were outside of Sadia Arabia, and most of them had an infection inside their home (44%) with close contact (78%).

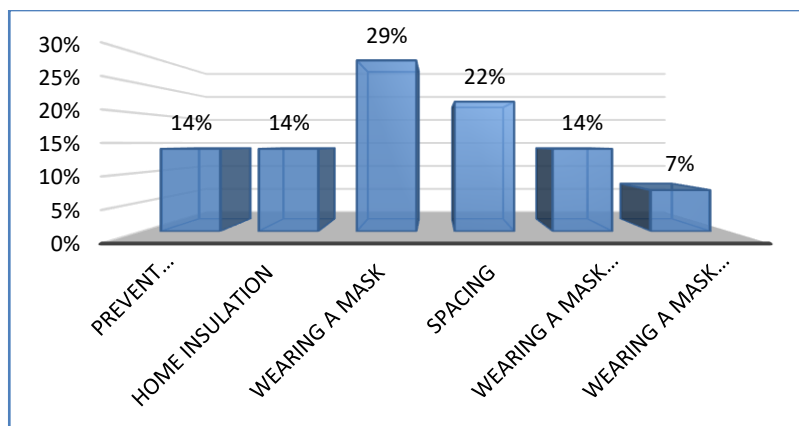


Fig. 1: Precautions applied by participants during exposure to coronavirus infection

The commitment of participants to the precaution increased after being infected with the coronavirus especially home isolation, spacing, and wearing masks.

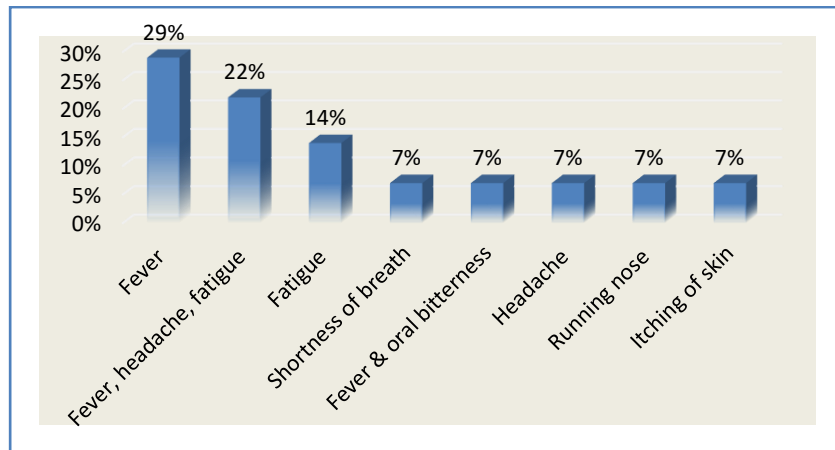


Fig. 11: Experience of participants due to coronavirus Symptoms

Most of these symptoms appear on the first day among most of the participants have a fever, headache, and fatigue, and these symptoms start to increase on the second and third day

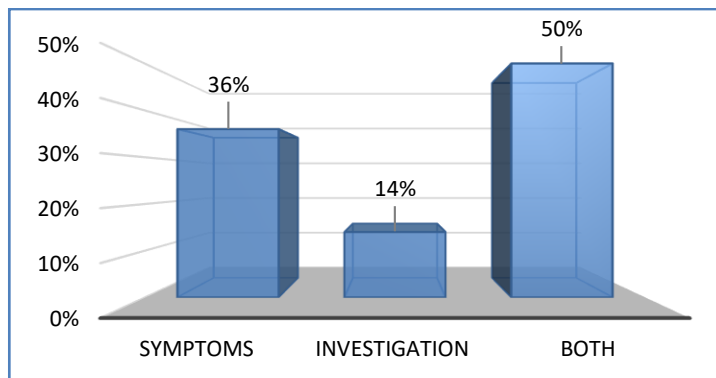


Fig. III: Methods that participants confirmed their infection with coronavirus

Half of the participants confirmed the coronavirus infection using both methods of symptoms and screening for viruses. All participants didn't need ultrasound screening to confirm the infection.

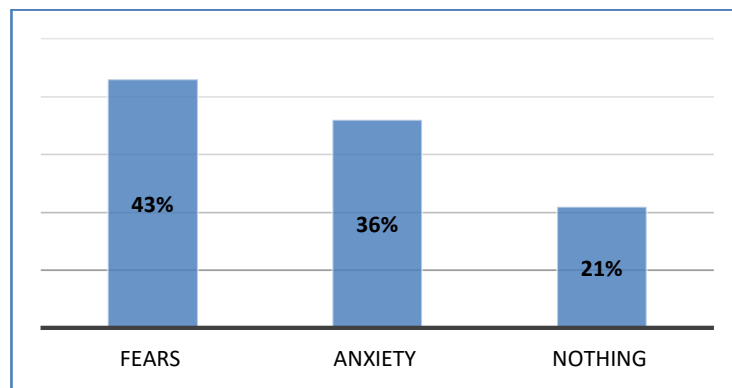


Fig. 1V: The participants expressed their feelings related to the Coronavirus infection Fear (43%) and anxiety (36%) are the most feelings among participants

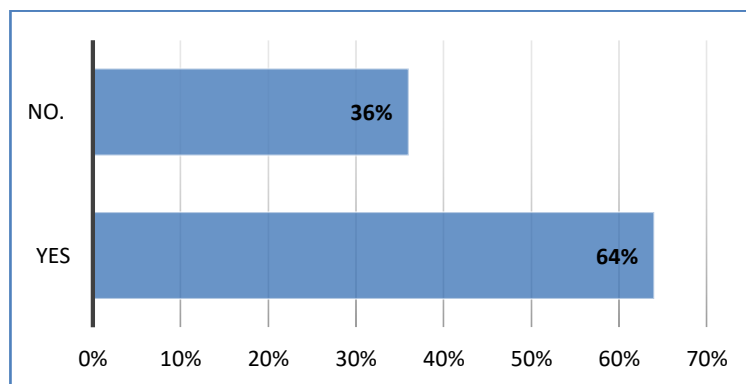


Fig. V: Participants compare similarities between coronavirus and flu symptoms

Most of the participants (64%) confirmed that there are similarities in the symptoms between coronaviruses and flu.

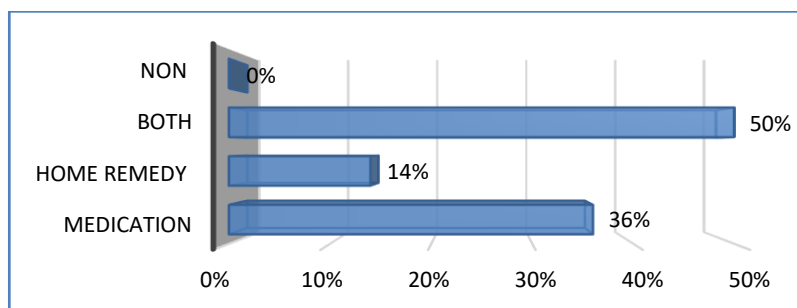


Fig. VI: The treatment used by participants to reduce the coronavirus symptoms

Most of the participants non admitted to a hospital; but treated at home (86%), while only (14%) were admitted to the hospital.

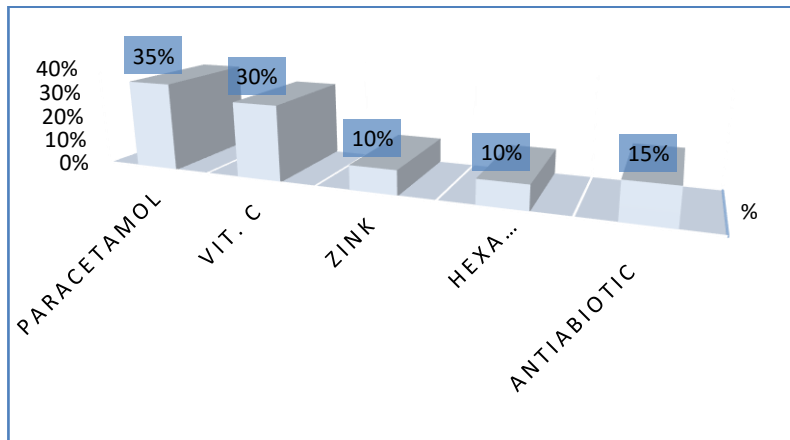


Fig. VII: Medications used by participants to reduce Coronavirus symptoms

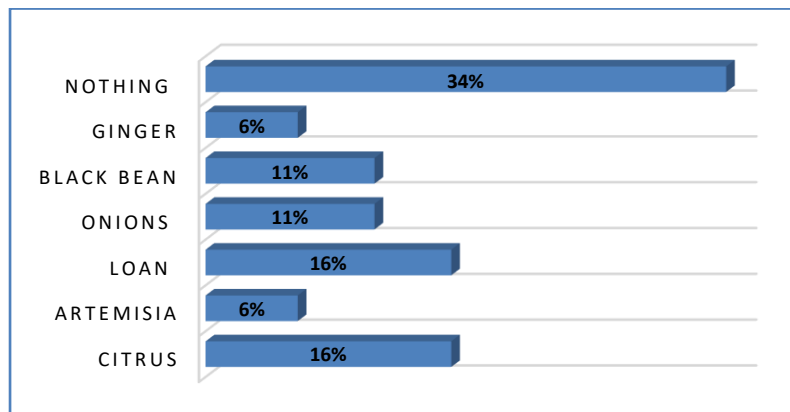


Fig.VIII: Home remedy measures used by participants to relieve coronavirus symptoms

More medications used by participants to relieve corona viruses symptoms are paracetamol (35%) and vitamin C (30%); as well as home remedies such as Citrus, Loan (16%), onions, and Black bean (11%)

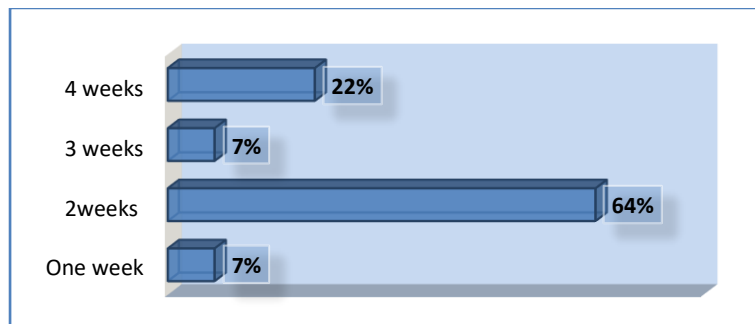


Fig. IX: The recovery period among participants from coronavirus
Most of the participants (64%) recovered within two weeks of the period

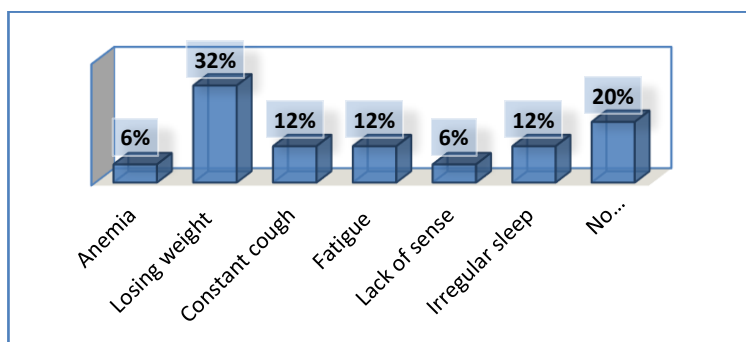


Fig. X: Complications of coronaviruses infection among infected participants
32% of participants losing their weight during the period of coronavirus infection

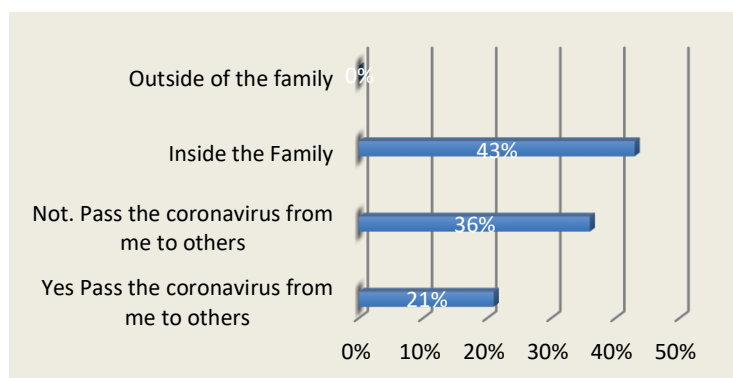


Fig. XI: Transmission of coronaviruses infection by participants

The most infected participants (43%) gave the coronavirus infection to the number of their family while 21% of them transfer the virus outside their family. All participants advised the community to follow coronavirus precautions especially social distancing wearing masks, being overcrowded, and washing hands lastly advised prevention is better than cure.

Discussion

Most of the participants are non-Saudi females, married and at the university level of education. Their mean age was 39.5, suffered from hypertension and cardiac problems. As well as they worked in the public sector rather than the medical or health section. They were infected inside their home in Sadia Arabia when exposed to coronavirus infection in 2021.

The symptoms that appeared on them on the first day were fever, headache, and fatigue and these symptoms start to increase on the second and third days. The commitment of participants adherent to the precaution increased after being infected with the coronavirus especially home isolation, spacing, and wearing masks. These symptoms appeared on the first day among most of the participants who have a fever, headache, and fatigue and these symptoms start to increase on the second and third-day addition fear and anxiety are the most feelings among

participants. This finding agrees with the symptoms that most of the studies detected among participants in 2021 e.g., Bangladesh's study.^{12,13}

Coronaviruses are transmitted from infected people through close contact or exposure to respiratory secretions which are through coughs, sneezes, talking, or sings¹². In this study, most of the participants were infected from poor indoor ventilation and continuous home contact with the infected, especially from their husbands, this study agreed with the study, which found high-risk populations who were really exposed to the infection through close contact.¹³

Also, half of the participants confirmed their infection with coronavirus by both clinical symptoms and PCR swap. No ultrasound screening was done for them. This agrees with European testing strategies of confirmation achieved through PCR tests and symptoms.¹⁴ This book talked about nasopharyngeal swab testing PCR as a standard mode for diagnosis the coronaviral infection^{15,16}

Most of the participants confirmed that there are similarities in the symptoms between coronaviruses and flu most studies confirmed that similarity, especially in symptoms such as Mayo clinic team 17. and CDC agrees with the similarity in symptoms, but CDC approved that COVID-19 was contagious and caused severe illness with long period symptoms.¹⁸

Their treatment experience used paracetamol, vitamin C, Zink, and chloroquine and home remedies such as Citrus, Loan onions, and Black beans respectively to relieve coronaviruses symptoms. Most of the participants non admitted to a hospital but were treated at home. This finding agrees with a study about Zink being essential for developing the immune system and was estimated 30% of the world's population with a deficient and inadequate intake of Zink, which contributed to 800,000 deaths worldwide, according to the World Health Organization (WHO)³.

Narrative review trials explored the clinical effects of LPV/r in the treatment of COVID-19 patients In China, they used antiviruses such as Remdesivir, Lopinavir/ritonavir (LPV/r) in combination for novel coronavirus treatment addition to chloroquine phosphate and hydroxy-chloroquine which reported advantages that inhibited the spread of the virus., In Korea, the viral-loaded dose reduced the clinical symptoms, and no viruses were reported. In this study 10% of participants in this study used chloroquine.¹⁹

Mayo Clinic team proved that antiviral, anti-inflammatory, especially corticosteroid dexamethasone prevented organ dysfunction,' and enhance immunity to fight against viruses and protect the lung from inflammation injury. But FDA explained that Hydroxychloroquine hasn't affected the treatment of COVID-19.^{20,21} The most infected participants gave the coronavirus infection to the number of their family while 21% of them transfer the virus outside their family.

Conclusion

Coronaviruses affected a lot of people. All participants advised the community to follow coronavirus precautions especially social distancing wearing masks, being overcrowded, and washing hands lastly, they advise that prevention was better than cure.

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