

Knowledge, Awareness and Practices (KAP) about COVID-19 in Jazan

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Abstract: Corona viruses are a large family of viruses that can cause diseases ranging from the common cold to Severe Acute Respiratory Syndrome (SARS). A typical presentation of MERS-COV disease is fever, cough and shortness of breath. Pneumonia is a common finding, but not always present. Gastrointestinal symptoms, including diarrhoea, have also been reported. Severe illness can cause respiratory failure that requires mechanical ventilation and support in an intensive care unit. The virus appears to cause more severe disease in older people, people with weakened immune systems, and those with chronic diseases such as renal disease, cancer, chronic lung disease, and diabetes. No vaccine or specific treatment is currently available to prevent. The only way to prevent from COVID-19 is to have proper knowledge and awareness. So, accessing knowledge and awareness among people is very important. In this paper a study have been carried out to access the knowledge, awareness and practices about COVID-19 among the people of Jazan. The data collected in this survey can be used as a baseline data to monitor public perception and their behavior in case of a future outbreak of any infectious disease in Jazan. This study will be useful to get the current level of knowledge and awareness among people of Jazan.

Keywords: COVID-19, Severe Acute Respiratory Syndrome (SARS), Knowledge, Awareness, Jazan.

1 Introduction

Worldwide COVID-19 has affected 210 countries and territories throughout the world. The World Health Organization (WHO) has declared COVID-19 outbreak a global pandemic. The coronavirus that causes COVID-19 is continuously affecting people and has left no part of the world untouched. The impact of the outbreak raises critical issues for the health and safety of people of Jazan, Saudi Arabia. Currently, a report on coronavirus cases by worldometer's COVID-19 data on 1st October 2020 indicates that all over the world there are total 34,172,820 coronavirus cases and total 1,018,957 deaths as well as in Saudi Arabia number of total infected cases is 3,34,605 and death cases are 4,768. (Wikipedia).

In April 2012, an outbreak of respiratory syndrome disease was reported in Middle East countries. The disease was caused by a novel coronavirus called the Middle East respiratory syndrome coronavirus (MERS-CoV). The first victim of corona virus in Saudi Arabia was identified in June 2012 [2]. Then, coronavirus patients were detected in different health care facilities of kingdom of Saudi Arabia and other countries. Most of the cases had a close or far link to the Middle East.

Jazan, which is also known as Jizan, Gizan or Gazan, is a port city and the capital of Jizan province. It is located in the southwest corner of Saudi Arabia and directly north of the border Yemen. Jazan City is situated on the coast of the Red Sea and serves a large agricultural heartland that has a population of 1.5 million, according to a 2010 census.

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Continuous outburst of coronavirus cases has badly affected the whole ecology and economy of Jazan. Only the persons knowledge and perception of coronavirus or any disease can prevent the individual, family, society, nation as well as the whole world from the panic situation. To the best of our knowledge, no previous study addressed knowledge and awareness about COVID-19 among population of Jazan.

Our current understanding about MERS-CoV is that coronaviruses are a large family of viruses that can cause diseases ranging from the common cold to Severe Acute Respiratory Syndrome (SARS) [WHO 2020]. A typical presentation of MERS-CoV disease is fever, cough and shortness of breath. Pneumonia is a common finding, but not always present. Gastrointestinal symptoms, including diarrhoea, have also been reported. Severe illness can cause respiratory failure that requires mechanical ventilation and support in an intensive care unit. The virus causes more severe disease among older people, people with weakened immune systems, and those with chronic diseases such as renal disease, cancer, chronic lung disease, and diabetes [4]. The only way to prevent COVID-19 is to have proper knowledge and awareness. Thus, assessing knowledge and awareness among people is very important. A study of Saudi Arabia revealed that the basic knowledge on COVID-19 effectively managed the spread of infection [5]. Continuous monitoring and reporting of cases and deaths over the following several months represent a critical importance for the comprehensive evaluation of COVID-19 status and implementation of appropriate precautions in GCC countries [6]. Knowledge of COVID-19 reduces unnecessary anxiety and transmission of the virus, so it saves lives [7]. A study conducted in Egypt showed that the main source of COVID-19 information among senior students was social media, television and published articles [8].

This study will provide key information about the general awareness among mango people as well as their myths and stigma regarding SARS-CoV-2, which causes COVID-19 disease, help the society spread right information and prevent this world from this serious issue. Lack of awareness regarding COVID-19 can cause panic in the community. However, this study can contribute to early health care-seeking behavior as well as the cases information prevents panic, encourages people to early health care and reduces infection and mortality.

The data collected in this survey can be used as a foundation to monitor public perception and their behavior in case of a future outbreak of any infectious disease in Jazan. This study helps identify the current level of knowledge and awareness among the inhabitants of Jazan.

2 Data Collection

The survey was conducted from 30 May 2020 to 20th August 2020 in Jazan. A self-administrative questionnaire was prepared. After preparing the questionnaire, a cross-section online study was conducted using validated questionnaires. The study data was collected using Google platform to understand the knowledge, awareness and practices related to COVID-19 among the residents in Jazan. The link of Google form was posted and circulated using various social media, such as Whats-App Groups, Facebook, Instagram, and emails.

The ethical clearance was obtained from Jazan University Research Ethics Committee.

The participants of the study were informed about the objectives of the study at the beginning of the survey. Online informed consent was obtained from each participant before proceeding with the questionnaire. Participants were assured that their confidentiality would be maintained, and they could refuse to answer any questions or skip the question any time, and the results would only be used for research purposes. The study target was 388 samples.

3 Target population or study respondents

In this study, we have considered eight different target populations, i.e. Early working Males (age group: 15 – 24), Early working Females (age group: 15 – 24), Prime working Males (age group: 25 – 54), Prime working Females (age group: 25 – 54), Mature working Males (age group: 55 – 64), Mature working Females (age group: 55 – 64), Elderly Males (age group: 65+) and Elderly Females (age group: 65+).

4 Sample Size

The prevalence of COVID-19 is still a matter of research and calculating sample size based on some indicator is a big challenge.

For the given study, we have calculated sample size using the formula,

$$n = \frac{\left(\frac{Z^2 pq}{e^2}\right)}{1 + \left(\frac{Z^2 pq}{e^2 N}\right)}$$

where,

- n = Sample size
- N = Population Size
- Z^2 = Level of confidence
- p = Prevalence (here assumed as 50%)
- $q = (1 - p)$
- e = Margin of error (here assumed 5%)

Using this formula, the total sample size for the given study will be 388 individuals.

To make the samples representative to the population stratified sampling method is used. We have divided the total sample size among these eight group (starta) according to gender and age of Jazan population (according to Saudi Census report 2018).

The distribution of collected sample is as follows

Age Group	Males	Females
15 – 24	47	44
25 – 54	137	103
55 – 64	18	14
65+	12	13
Total	214	174

4.1 Sampling Technique

Stratified sampling is a probabilistic sampling method where we divide the survey population into subgroups known as strata by age and gender. From each subgroup samples are selected as per the population proportion of Jazan according to Saudi Census report 2018.

In the next stage survey was conducted among these subgroups to get the response about knowledge, Awareness and practices related to COVID-19. The response frequencies were analyzed using SPSS statistical software.

4.2 Research Objective

The present paper aims to investigate knowledge, awareness, and practices associated with COVID-19 among the people in Jazan region during the outbreak.

4.3 Research Question

To analyze how knowledge, awareness and practices about COVID-19 are varying among people of Jazan with respect to their socio demographic characteristics.

4.4 Study Variables

The questionnaire consisted of demographic characteristics, including age, gender, education level, religion, city, duration of stay, occupation, marital status, type of family, type of house, food habit, place of residence, and the number of family members in the household. The study focuses on accessing knowledge, awareness and practices about COVID-19 among the people of Jazan.

Knowledge about COVID-19 is assessed by the following questions

- What is Coronavirus?
- Do you think that the virus will not survive in the temperature of Jazan?
- From which body part does coronavirus enter into the body?
- Can coronavirus be transmitted through cough droplets?
- Can Corona virus be transmitted through animal in humans?
- Can camel transmit the virus of COVID-19 disease?
- Corona virus can be found in an individuals with no signs or symptoms?
- Do you believe that children and elderly people are on a high risk of COVID-19 infection?
- Do you know that how many days people should isolate themselves after being in contact with COVID-19 patients?
- Can coronavirus be transmitted from one person to another?
- If Yes, what are the ways of coronavirus transmission?
- What are the sign and symptoms of COVID-19 infection?
- What is the source of information regarding COVID-19 ?

Awareness regarding COVID-19 is assessed by the following questions

- Are you aware of any vaccine against COVID-19 disease?
- Do you know or are you aware of the health facility where you can get tested for COVID-19 disease?
- Can COVID-19 infected patient be cured?
- To what extent does COVID-19 threaten human civilization?
- To what extent are you worried that COVID-19 can be dangerous for you or your family?

The practices regarding COVID-19 are assessed by the following questions

- Do you believe that regularly claning of your hands with an alcohol-based hand rub or washing them with soap and water can stop the spread of coronavirus ?
- Do you think quarantine or self isolation can stop the spread of coronavirus?
- How often do you go out during the episode of COVID-19 pandemic?
- How often did you use face mask when you go out?
- During lockdown period, did you go out to see/meet your relatives/family friends?
- Do you think health care services in Jazan Hospitals are satisfactory?

5 Results

5.1 Percentage Distribution of Population by background characteristics

Table 1 shows the percentage distribution of the population background characteristics. One third of the males and around 44 percent of females in this study belong to Jizan city. Other males in study were originally from Samtah (12%), Abu Arish (10.2%) and Sabya (9.3%) while females mainly came from Baish (10.5%), Sabya (10.5%) and Abu Arish (9.9%). Around two-third of the males and 45% of the females were staying in rural areas at the time of study. Among these, more than 89% of both sexes were staying at the current place of residence for more than 6 months. More than 95% of males and 93% females were Muslims, followed by Hindus. More than half of the males and females were under-graduates, around 15% of both were high-school students and more than 13% of both sexes had doctorate degree. Thirty-six percent of the males and one-fifth of females had governmental job. 39% males and 22% females in the study were students while around one-third of the females were housewives. Around half of the males and one-sixth of the participants in the study were married, while 44% of the males and 31% females were unmarried and the rest were separated, widowers or divorced. Eighty-seven percent of the males were staying in joint family compared to 54.7% females while more than one-fourth of the females were part of nuclear family. Around one-fifth of the women were single at the time of survey. More than 70% of both males and females owned their houses. Around 4 of the 5 males or females had rated their health as good. Less than 1 percent of females rated their health as bad or critical, but none of males had rated the health as critical or bad. More than 82% of males and females responded that they didn't have chronic diseases. Around 1% of males and 5% of females responded to be a vegetarian (without egg), 7% of males and 6.4% females were vegetarian and ate egg while the rest were non-vegetarians. Almost 52% males and 61% females responded that they interacted with 1 – 5 person on day-2-day basis while 21% males and 13% females daily meet more than 10 persons. Almost one-fourth of both males and females were daily going to work. More than 90 percent males and 80% females commuted using personal vehicle for work. Moreover, 28 percent of males and 21% of females responded that they usually walk or use means of transport through a crowded place during COVID-19 outbreak.

5.2 Knowledge about COVID-19

Table 2 addresses knowledge regarding coronavirus, its symptoms and other related factors. According to the survey, 67% males and 78% females respond that the coronavirus is a large family of viruses that may cause illness among animals or humans. Also, one-fifth of males and 15% females think that coronavirus is a single-family virus which may cause illness among animals or humans. More than one-fifth of males and one-third of females responded that it may not survive in the temperature of Jazan. More than three-fourth of both males and females responded that COVID-19 may enter through the mouth, nose or eyes. Fifty-six percent males and 44% females think that COVID-19 may be transmitted through cough-droplets, 56% males and 35% females think that COVID-19 may be transmitted through animal in human, while 46% males and 36% females think that camel may transmit COVID-19. Almost all males and 97% females responded that coronavirus can be transmitted from one person to another. More than 92% of both males and females responded that it can be found in an individual with no signs or symptoms. Around 90% males and 94% female believe that children and elderly people are on a high risk of COVID-19 infection. Ninety-one percent males and 84% females responded that people should isolate themselves for 14 days after contact with COVID-19 patients while around 3% of both sexes didn't know it. Males responded that it may be transmitted from one person to another by handshake (87%) followed by hugs (82%), sharing personal belongings (79%), close contact (78%), talking and sharing food (62% each) and working Together (60%) while more than eighty percent women think that COVID-19 may be transmitted by handshake (88%), close contact (85%), hugs (83%), and sharing personal belongings (80%). Fever was the major sign of having COVID-19, followed by dry cough and pain in throat. Social media like Facebook, WhatsApp, Twitter, Instagram are the major source of information on COVID-19 for both males (82%) and females (86%) while the government websites are other important sources for more than 73% of both sexes. Furthermore, roughly 78% females get information on COVID-19 from family, friends or neighbour.

5.3 Awareness regarding COVID-19 in Jazan

Table 3 covers awareness regarding COVID-19 in Jazan. Around 10% males and 12% females responded that they are aware about the vaccine against COVID-19 disease. More than three-fourth of males and four-fifth of females knew about the health facility where an individual can get tested for COVID-19 disease. More than 98% of both sexes think that COVID-19 infected person may be cured. Almost 42% of males and 62% of females think that COVID-19 is a big threat to human civilization. More than 42% of the males and 61% of females are worried that COVID-19 can harm them or their family members.

5.4 Practices about COVID-19 in Jazan

Table 4 shows participants response about the practices among people in Jazan regarding COVID-19. Approximately four-fifths of males and nine-tenth females believe that cleaning and washing hands with an alcohol-based hand rub or soap and water can stop the spread of coronavirus diseases. More than 95% of people in Jazan believe that self-quarantine or self-isolation may help to stop the spread of coronavirus and it is essential to stay more than 1 meter (3 feet) away from other persons during COVID-19 outbreak. It is reported that more than one-fourth of males and one-sixth of females engaged in social gathering during the COVID-19 outbreak. Almost 22% males and 15% females responded that they go out to see/meet their relatives/family friends during the lockdown. Around 70% of males and 94% of females are satisfied with healthcare services provided by the hospitals in Jazan.

Table 1: Percentage Distribution of Population by different background Characteristics

Background Characteristics	Males(%)	Females(%)
City		
Abu Arish	10.2	9.9
Alddair	3.7	2.3
Alddarb	0.9	1.7
AhadAlmasariyah	7.0	1.7
Alaridah	4.2	1.2
Alharth	0.5	1.7
Alharth	0.9	1.7
Baish	4.2	10.5
Damad	0.9	0.6
Farasan	0.0	0.6
Jizan	33.0	44.2
Sabya	9.3	10.5
Samtah	12.1	7.0
Atwal	7.4	2.3
Haroob	0.5	1.2
Faifa	5.1	2.9
Place of Residence		
Rural	63.3	45.3
Urban	36.7	54.7
Duration of stay		
Less than 1 Month	4.2	5.8
1 – 3 Months	4.2	1.2
3 – 6 Months	2.3	1.2
More than 6 Months	89.3	91.9
Religion		
Muslim	95.3	93.6
Christian	0.5	1.2
Hindu	4.2	5.2
Qualification		
Primary	0.5	10.5
High School	17.2	15.1
Under Graduates	58.6	51.2
Post Graduates	7.0	9.3
Doctorate	14.0	13.4
Others	2.8	0.6
Occupation		
Salaried Government	36.7	20.9
Salaried Private	6.0	13.4
Business or Self Employed	5.6	0.6
Health Care Provider	0.5	6.4
Not working for money	2.3	1.2
Home Maker House wife	0.5	31.4
Retired	7.4	4.1
Students	39.1	22.1
Others	1.9	0.0
Marital Status		
Married	51.6	59.3
Unmarried	44.7	30.8
Widow or Widower	0.9	5.2
Separated or Divorced	2.8	4.7
Types of Family		
Joint	87.0	54.7
Nuclear	5.6	26.2
Single	7.4	19.2
Type of House		
Own	74.4	70.9
Rent	25.6	29.1

Table 1: Continued.. Percentage Distribution of Population by different background Characteristics

Background Characteristics	Males(%)	Females(%)
Rate your health		
Good	79.1	80.8
Somewhat Good	15.8	14.5
Average	5.1	3.5
Critical	0.0	0.6
Bad	0.0	0.6
Do you have Chronic Disease		
Yes	17.7	16.3
No	82.3	83.7
Food Habit		
Vegetarian with Eggs	7.0	6.4
Vegetarian without Eggs	1.4	4.7
Non Vegetarian	9.3	10.5
Vegetarian and Non Vegetarian Both	82.3	78.5
How many people do you interact with everyday after COVID – 19 epidemic		
Interact with no one	17.2	17.4
1 – 5 Persons	51.6	61.0
6 – 10 Persons	10.2	8.7
More than 10 Persons	20.9	12.8
During COVID – 19 episode do you go for your regular work		
Yes	23.7	23.3
If yes, How do you commute to your work		
Personal Vehicle	90.2	80.0
Local Transport	7.8	15.0
Government Transport	2.0	5.0
Do you usually walk or use means of transport in a crowded place during COVID – 19 outbreak		
Yes	28.8	21.5
No	70.2	78.5

Table 2: Knowledge about COVID-19

Variables	Males (%)	Females (%)
What is Coronavirus		
It is large family of viruses which may cause illness among animals or humans	66.82	78.16
It is a small family of viruses which may cause illness among animals or humans	17.76	6.32
It is single family of viruses which may cause illness among animals or humans	19.63	14.94
Do you think that the virus will not survive in the temperature of Jazan?		
Yes	20.50	34.90
No	79.50	65.10
From which body part coronavirus enters into the body		
Mouth	34.58	63.79
Nose	37.38	67.24
Eyes	21.96	55.75
All the above	75.70	79.89
None of these	0.93	0.57
Can coronavirus be transmitted through cough drops		
Yes	56.20	43.80

Table 2 Continued..Knowledge about COVID-19

Variables	Males (%)	Females (%)
Can coronavirus be transmitted through animal to humans		
Yes	55.80	34.90
Can camel transmit the virus of COVID-19 disease		
Yes	46.00	36.60
Coronavirus can be found among individuals with no signs or symptoms		
Yes	92.10	92.40
Do you believe that children and elderly people are on a high risk of COVID-19 infection		
Yes	89.30	93.60
No	3.30	1.20
Don't Know	7.40	5.20
Do you know that how many days people should isolate themselves after being in contact with COVID-19 patients		
One Week	2.80	8.70
10 Days	0.90	3.50
14 Days	91.20	83.70
16 Days	1.90	1.20
Do not know	3.30	2.90
Can Coronavirus be transmitted from one person to another		
Yes	99.5	97.1
If Yes, what are the ways of transmission of coronavirus		
Handshake	86.92	87.93
Talking	62.62	35.63
Hugging	82.24	83.33
Close contact	77.57	85.06
Sharing food	62.15	49.43
Sharing personal belongings	78.97	79.89
Working together	59.81	28.16
What are the sign and symptoms of COVID-19 infection		
Cough	46.26	72.99
Dry cough	82.71	86.21
Fever	96.73	93.10
Headache	58.88	51.72
Stomachache	22.90	33.33
Pain in throat	79.44	84.48
What is the source of Information on COVID-19		
Public Announcement	67.29	70.11
Radio	25.23	30.46
TV News	60.75	69.54
Newspaper	31.78	48.28
Social Media like Facebook/Whatsapp/Twitter/Instagram	82.24	85.63
Family, Friends or Neighbour	49.07	78.16
Government Websites	75.23	72.99

Table 3: Awareness regarding COVID-19 in Jazan

Variables	Males (%)	Females (%)
Are you aware of any vaccine against COVID-19 disease		
Yes	9.8	12.2
No	90.2	87.8
Do you Know the health facility where you can get tested for COVID-19 disease		
Yes	77.2	80.2
No	22.8	19.8
Can COVID-19 infected patient be cured		
Yes	98.1	98.8
No	1.9	1.2
To what extent can COVID-19 threaten human civilization		
Not at all threat	4.2	2.3
Not very threat	6.0	7.0
Moderate threat	22.3	4.7
Somewhat threat	25.1	23.8
Big threat	42.3	62.2
To what extent are you worried that COVID-19 can be dangerous for you or your family		
Not at all worried	4.2	1.7
Not very worried	8.4	2.9
Moderate worried	22.3	8.1
Somewhat worried	22.8	25.6
Very worried	42.3	61.6

Table 4: Practices regarding COVID-19

Variables	Males (%)	Females (%)
Do you believe that regular cleaning of your hands with an alcohol-based hand rub or washing them with soap and water can stop the spread of coronavirus?		
Yes	80.5	90.1
No	9.3	5.8
Don't Know	10.2	4.1
Do you think quarantine or self-isolation help to stop the spread of coronavirus?		
Yes	95.3	95.3
No	2.8	1.7
Don't Know	1.9	2.9
Is it important to stay more than 1 meter (3 feet) away from any person during COVID-19 outbreak?		
Yes	93.5	96.5
No	3.3	1.2
Don't Know	3.3	2.3
How often do you go out during the episode of COVID-19 pandemic		
Daily	28.8	12.8
Once a week	35.3	75.6
More than once a week	35.8	11.6
How often did you use facemask when you go out		
Regularly	80.9	90.1
Sometimes	16.7	7.0
Never	2.3	2.9

Table 4 Continued..Practices regarding COVID-19

Variables	Males (%)	Females (%)
During lockdown period, did you go out to see/ meet your relatives, family or friends		
Yes	22.8	15.1
No	77.2	84.9
Do you think that health care services provided by the Health care in Jazan Hospitals are satisfactory?		
Yes	69.8	93.6
No	30.2	6.4

6 Discussion

Coronavirus is an emerging problem that highly threaten public health globally. In this panic situation, when no vaccine is available, only some preventive measures, such as knowledge, attitude and practices (KAP) of people regarding coronavirus can play a significant role in reducing the infection rates and control the situation which is getting worse and worse. Thus, this study aimed to assess KAP regarding COVID-19 among Jazan population.

The findings indicate that most of the participants have knowledge regarding COVID-19. This is consistent with other studies that have also assessed the satisfactory level of knowledge regarding COVID-19 among Saudi population [9 – 13]. The present study and other studies illustrate that female respondents are more knowledgeable about Coronavirus [10,14]. Concerning attitude regarding COVID-19, respondents showed a positive attitude towards the virus. Approximately 98% respondents are convinced that the coronavirus is curable disease. The study showed that around 70% of males and 94% females are satisfied with the health care service of Jazan hospitals. This is consistent with the results of a study conducted in China, where the majority of subjects believed that the disease is curable and their country will combat the disease [15], while other studies suggest that people tend to express negative emotions, such as anxiety and panic that could affect their attitude [16].

Regarding practices, majority of the participants believe that regular cleaning the hands with an alcohol-based hand rub or washing them with soap and water, self-isolation and 1 meter (3 feet) social distance can stop the spread of coronavirus. Four-fifth of the males and nine out of ten females wear mask regularly. Thus, it is supposed that the participants adopted good and safe practices which support the study done in Saudi Arabia [17]. However, in case of public engagement considerable percentage of male population daily go to public places during pandemic. This can result in high risk of community transmission within the population although it is possible that most of the male participants visit public places because of their work obligation. Therefore, in this period it is essential to encourage firms/organization to adopt working from home to minimize the risk. Moreover, the figures have also illustrated that substantial percentage of population are visiting their relatives/family friends during this period which is a risky behavior for both sides. These activities can be controlled or minimized by educating them about various sources of transmission. Thus, these findings can provide a basis to the policymakers and health care professionals who are in charge of public health interventions as well as awareness raising programs and policies.

6.1 Strengths and Limitations

To the authors knowledge, this is the first study that assesses KAP regarding COVID-19 among Jazan population. The data were collected from 30 May 2020 to 20th August 2020, which is quite recent. Thus, the results may help health authorities to develop any preventive strategies for the future events. However, it involves some limitations; for example, the data adopted in analysis were self-reported, which might suffer from reporting bias. Furthermore, questionnaire was self-administrative on KAP regarding COVID-19. Hence, we could not be in the position to do proper econometric identification because the data we do not have a valid instrument to eliminate the endogeneity.

7 Conclusion

The present paper evaluated knowledge, attitude and practices regarding coronavirus among Jazan population. Majority of the participants were Muslims and undergraduates, lived with families and owned their house rated their health good,

did not have any chronic disease and had non-vegetarian food habits.

Social media like Facebook/Whats-App/Twitter/ Instagram are the major source of Information regarding COVID-19 for both males and females both sexes depend on the government websites.

Females had more awareness than males in all aspects and almost all the respondents irrespective of gender think that COVID-19 infected person might be cured. Roughly 42% of the males and 62% of females thought that COVID-19 highly threatens human civilization and can be dangerous for themselves or their family members. Regarding practices, the majority thought that regular cleaning of the hands with an alcohol-based hand rub or wash them with soap and water, self-isolation, wearing mask and 1 meter (3 feet) social distance can stop the spread of coronavirus. Majority of males and females satisfied with health care services in Jazan hospitals.

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Conflict of Interest The authors declare that they have no conflict of interest.

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