Social stigma associated with COVID-19 infection in Saudi Arabia: A population based study

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General Note

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ABSTRACT

Background: Saudi Arabia is one of the nations impacted by the epidemic of COVID-19. *Objectives:* To address psycho-behavioral problems to the pandemic of COVID-19 in the whole population of Saudi Arabia, namely: 1) obstacles to infection control measures against COVID infections; 2) adverse responses to COVID-19; and 3) fear among the general population in Saudi Arabia. *Methods*: An electronic population based cross sectional survey using a validated electronic questionnaire was performed between 23 July and 1 August 2020. Among the whole estimated target population of COVID-19 patients in Saudi Arabia. Using multi-stage random sampling technique all over the governorates. The six-item variant of the State-Trait-Anxiety-Stock (STAS-6) was used to measure rates of anxiety. Estimated target population of 67,000 Covid-19 patients according to last national report of MOH. A multi stage sampling from different affected governorates. Sample size was calculated using Steven Sampthon formula to be 2230 patient. Sample was collected from MOH electronic registries approved by the ethical committee of KSUMC # (78/82/KSUMC/IRB-COVID-3792). *Results*: A total of 1,800 full replies have been received. Almost 60 percent reported having trouble wearing a face mask to guard against COVID infection. The mean and standard deviation (SD) for the overall avoidance obstacle value was 35.8 (SD ± 7.1; scale 18 to 68) out of a maximum 72. Male respondents [odds ratio (OR) = 1.25; 95 % confidence interval (CI) 1.03 to 1.51] and many respondents who regarded their health condition as poor / fair (OR = 1.49; 95 % CI 1.31 to 1.82) were indicators of Strong obstacles to avoidance. Negative feelings such as anxiety (74.6%), accompanied by sadness (43.4%) and stigma (23.0%) correlated with SARS-CoV-2 infection has been identified. The addressing groups that their wellbeing was viewed as poor / fair (OR = 2.19; 95 % CI 1.57 to 3.04) and a higher risk was recorded to get more depressive feelings. Anxiety rating results showed 68.0 per cent (95 per cent CI 65.8 to 65.8 per cent). (70.1) mild to extreme anxiety recorded. Participants who see their well-being as poor / fair (OR = 3.46; 95% CI 12.22 to 5.40) and who were female (OR = 1.91; 95 % CI 1.55 to 2.36) were female; predictors with mild to extreme fear. *Conclusion*: Psycho behavioral measures are expected to promote the management and monitoring of the epidemic of COVID-19.

Keywords: COVID-19, anxiety, Saudi Arabia, psycho-behavioral

1. INTRODUCTION

On January, 2020, COVID-19 triggered by the SARS-2-COV virus, spread out and sparked an outbreak across China (Lu, 2020; Hui, 2020). Then it has spread quickly through Asian countries and across the world. After two months it reached Saudi Arabia. Media interest was given to the first instance of SARS-CoV-2 infection on March 19, 2020. The Kingdom of Saud Arabia showed a slowly progressive trend and the number of patients was not increasing tremendously as other countries of the world (Flahault, 2020). The outbreak did not show any upward trend. As of 31 May 2020, the virus had infected over 21,495 people and claimed 757 lives in Saudi Arabia, and the country had the second-lowest number of deaths all over the world, and the fiftieth-highest number of SARS-CoV-2 cases in the world (WHO, 2020). The outbreak of COVID-19 put a massive strain on the Saudi population. Its accompanied psychological influences were clearly evident. Epidemic-related psycho-behavioral work of this nature compliance with the prescribed prevention steps and adverse emotional effects, Embarrassment, terror, shame, avoidance and panic are among the main problems to be discussed and need better awareness. It is of the greatest priority to recognize the populations of the community most in need of psycho behavioral therapies during the ongoing growing COVID-19 outbreak in Saudi Arabia and provide insights into the production of risk management communications.

The purpose of this research was therefore to explore psycho-behavioral problems relevant to COVID-19 Epidemic, namely: 1) Obstacles to infection control measures against infection; 2) Adverse emotions against infection; Emotions against infection; and 3) Fear in the general population in Saudi.

2. MATERIAL AND METHODS

Data, analytical techniques and analysis resources cannot be made accessible to other studies for the intent of replicating the findings or reproducing the technique. A stratified, multi-stage random sampling technique was used to gather a nationally

representative sample of the general Saudi population ≥ 15 years of age. This study included all 13 provinces of Saudi Arabia. The first step of the study, the allocation of four large cities and four regions in rural areas within each jurisdiction was focused on a chance equal to the scale of the process. Therefore, using a basic random sampling process, two districts or two townships were selected for each city or area, and three communities or towns were chosen within each district or town ship. At the final sampling point, a subset of respondents from each of the 14 sex / age strata (men / women and aged 15-, 25-, 35-, 45-, 55-, 65-, ≥75) were chosen from populations or villages using lists obtained from local authority household records. A minimum of 67,000 COVID-19 patients from 26 metropolitan and rural communities were projected to enroll in the research. In order to reach the sample size and take non-response into consideration in the study, 2230 respondents were randomly chosen and recruited, with an average response rate of 86.4 per cent. Despite exclusion (n=430) due to lack of details on key risk factors, 1800 became registered and the survey was completed. We reach the patients through their mobile numbers and contact them on whatsapp, and formed together a whatsapp group. They all accepted to participate in the questionnaire.
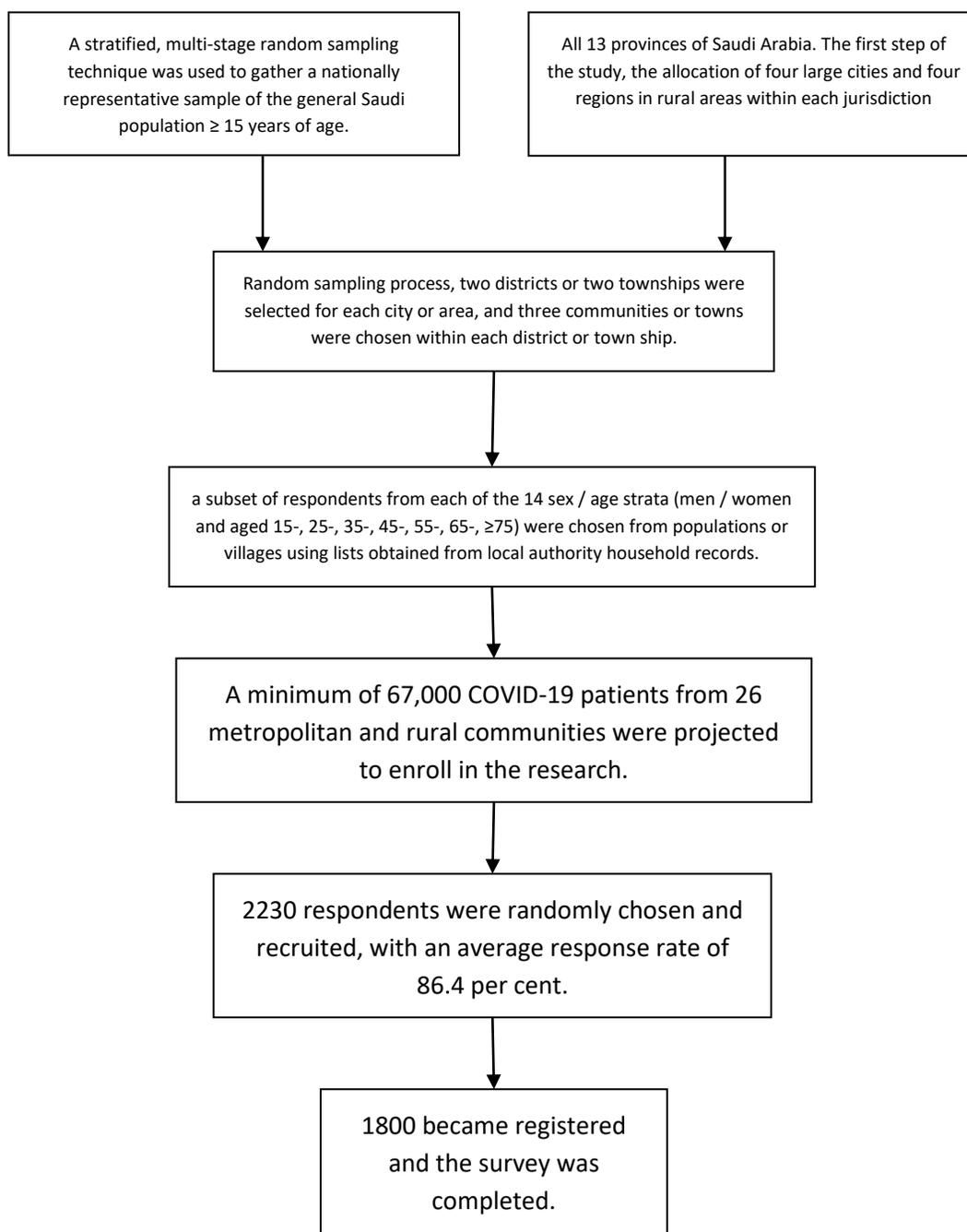

Figure 1 Methodology Flow chart

We launched a web-based-cross-sectional, survey using an electronic questionnaire "Pors-line®", an electronic survey app, between 16 March and 1 April 2020. The use of requirements is that the participants be representatives of the general population of Saudi Arabia and that they were aged around >15 years. Research teams disseminated the survey through social network sites, using Whats-app, to distribute and promote the survey connection Figure 1. Participants were told that their involvement was optional and permission was received. Implicit by the execution of the survey. The questionnaire was written up in English and was then translated into Arabic. The accuracy of the documents was checked by local experts and the survey was then piloted and checked. The questionnaire consisted of seven sections: 1) Demographic background; 2) Assumed health status; 3) Perception about others (e.g. family members; Mates, group members) infected with SARS-CoV-2 ; 4) Potential vulnerability to being infected with SARS-CoV-2 ; Infected with SARS-CoV-2 ; 5) preventive or safety steps against COVID-19 infection; 6) Negative feelings correlated with the occurrence of SARS-CoV-2 ; and 7) Anxiety.

The topic of obstacles to prevention consisted of five parts (18 questions), including the personal section. Protection (6 questions), cough sticker (4 questions), touch measures (5 questions), voluntary lockdown and isolation (2 questions) and prompt notice (1 question). The query questioned the participants as to their degree of complexity in the implementation of preventive initiatives. The answer choices were four-point Likert Grade, with a ranking of 1 [very easy], 2 [easy], 3 [difficult] or 4 [very difficult]. It is the overall cumulative preventive score ranging from 16 to 72, with higher scores reflecting greater rates of difficulty to apply infection control measures. Negative feelings consisted of concerns regarding feelings of apprehension, of hiding, of maintaining a secret, embarrassment, distress and shame correlated with the epidemic of COVID-19 (6 questions). Answer choices would be on a four-point Likert scale, with objects rated as 1 [strongly disagree], 2 [disagree], 3 [agree] or 4 [strongly agreed)]. The theoretical overall negative emotion ratings varied from6 to 24, with higher ratings indicating greater rates of depressive emotion. Anxiety was assessed using the Task-Trait Anxiety Stock variant of the six-item condition (STAS-6) (Hall, 2015; Marteau, 1992). Participants classified the duration of the survey Feel six emotional reactions, namely, being cool, stressed, angry, happy, satisfied and worried, As regards the latest epidemic of COVID-19.

The four-point scale has been used (1 = never, 2 = A little, 3 = modestly, 4 = a lot). The ratings on the three elements are favorably worded. Reverse coded. The cumulative number of the results was deducted (multiplied by 20/6) to achieve the ratings. These were equivalent to those of the complete 20-item STAS (with a scale of 20 to 80). (Hall, 2015) To signify moderate-severe ratings, a cut-off rating of 44 was utilized (Knight, 1983).

Statistical analysis
The reliability of infection control barriers and negative feelings was assessed by assessing external accuracy of the points reflecting the results. The 18 things for obstacles to avoidance. The six elements for harmful emotional ratings had a value of 0.857 the 0.731 (Cronbach's 5-007) respectively. The efficacy of STAI-6 products in the measurement of anxiety rates was determined. 0.722. 0.722. Multivariate logistic regression analysis was conducted using a synchronized forced-entry process. It is utilized to recognize social variables that influence obstacles to preventive and negative feelings. Preventive mechanisms and pessimistic feelings have often had an effect on anxiety rates. It was investigated using a multivariate logistic regression model. Odds ratios (ORs), 95% confidence Intervals (95 percent CI) and p-values have been calculated to every independent variable. The statistical analyzes were carried out using the Statistical Program for human sciences, version 22.0 (Qualcomm corporation, Armonk, NY, United states). The importance point was set at $p < 0.05$.

Ethical consideration
The study was approved by King Saud University Medical City, Saudi Arabia (IF/DR.BUOC_KMS.RE7584C.138.47).

3. RESULTS
A total of 1,800 full replies have been received. As seen in the first and second rows, Table 1"a, b, and c" showed the demographic distribution of patients, along with age, gender classes and total monthly salary levels. Participants to the report had a marginally greater proportion among Bachelor (40.5%) and postgraduate participants (37.7%) degree. Many of the participants came from Eastern region (52.7%), led by Central region (21.4%) and western (14.3%) zones. Just a small portion of them noted their overall health as Poor / fair (10.7%) and 14.8% identified chronic diseases. Almost all of them were diagnosed with COVID-19 (Figure 2).

Table 1a Prevention measures, negative emotion, and anxiety by demographics (N=1789)

| Covariates | N (%) | Uni-variate analysis | | Multi-variate analysis |
		Prevention barriers score 36-68 (n=989)	P value	OR (95% CI) Score 36-68 vs.18-35a
gender				
male		790 (44.2)	0.035	459 (58.1)
female		999 (55.8)	p<0.001	530 (53.1)
age (years)				
18-30		526 (29.4)	p<0.001	270 (57.3)
31-40		563 (31.5)	0.660	270 (57.8)
41-50		389 (21.7)	p<0.001	225 (57.8)
>50		311 (17.4)	p<0.001	
location				
west		255 (14.2)	Ref	149 (58.4)
east		95 (5.3)	0.271	60 (63.2)
north		943 (52.7)	Ref	943 (52.7)
south		114 (6.4)	Ref	63 (55.3)
central		382 (21.4)	Ref	215 (56.3)
educational level				
diploma and below		391 (21.9)		211 (54.0)
bachelor		724 (40.5)	0.835	402 (55.5)
post-graduate medical degree		674 (37.7)	Ref	376 (55.8)
monthly income				
<1000/month		364 (20.3)	Ref	204 (56.0)
1000-3000		487 (27.2)	0.073	245 (50.3)
3000-10000		471 (26.3)	Ref	270 (57.3)
>10000		467 (26.1)	Ref	270 (57.8)
perceived health status				
poor/fair		191 (10.7)	p<0.001	130 (68.1)
good/very good		659 (36.8)	p<0.001	396 (60.1)
excellent		939 (52.5)	p<0.001	463 (49.3)
have had any chronic disease				
yes		264 (14.8)	0.593	150 (56.8
no		1525 (85.2)		839 (55.0)
subjected to embarrassment				
yes		993 (55.5)	324 (66.5)	516 (52.0)
no		796 (44.5)	336 (71.3)	473 (59.4)
feels isolation from people				
no		579 (32.4))	0.038	362 (62.5
yes		1210 (67.6)	p<0.001	627 (51.8)

*p<0.05**p<0.01, ***p<0.001

a Hosmer–Lemeshow test, chi-square: 5.959, p-value: 0.652; Nagelkerke R2 : 0.041
b Hosmer–Lemeshow test, chi-square: 8.617, p-value: 0.376; Nagelkerke R2 : 0.032
c Hosmer–Lemeshow test, chi-square: 13.202, p-value: 0.105; Nagelkerke R2 : 0.109

Table 1b Prevention measures, negative emotion, and anxiety by demographics (N=1789)

Uni-variate analysis		Multi-variate analysis
Negative emotion score 11-24 (n=964)	p value	OR (95% CI) Score 11-24 vs. 6-10b
1.25(1.03-1.51)*	0.294	437 (53.3)
382 (21.4)	Ref	527 (52.8)
287 (54.6)	p<0.001	284 (54.0)
311 (55.2)	0.302	318 (56.5)
318 (56.5)	p<0.001	207 (53.2)
166 (53.4)	p<0.001	155 (49.8)
943 (52.7)	Ref	140 (54.9)
270 (55.4)	0.167	66 (69.5)
502 (53.2)	0.204	500 (53.0)
270 (55.4)	0.835	53 (46.5)
211 (55.2)	Ref	273 (71.5)
225 (57.5)	p<0.001	1.22 (0.92-1.61)
409 (56.5)	0.005	1.25 (0.99-1.56)
330 (49.0)	Ref	451 (66.9)
210 (57.7)	Ref	1.34 (0.99-1.81)
270 (55.4)	0.038	1.13 (0.86-1.49)
258 (54.8)	Ref	1.13 (0.87-1.48)
226 (48.4)	Ref	313 (67.0)
2.06 (1.48-2.89)***	p<0.001	129 (67.5)
1.49 (1.21-1.82)***	p<0.001	383 (58.1)
452 (48.1)	Ref	Ref
152 (57.6)	0.204	198 (75.0)
812 (53.2)	0.835	1018 (66.8)
1.49 (1.21-1.82)***	Ref	532 (53.6)
1.28 (1.05-1.55)*	0.002	432 (54.3)
1.35 (1.09-1.67)**	0.340	321 (55.4) 443
Ref	0.389	643 (53.1)

*p<0.05**p<0.01, ***p<0.001

a Hosmer–Lemeshow test, chi-square: 5.959, p-value: 0.652; Nagelkerke R2 : 0.041

b Hosmer–Lemeshow test, chi-square: 8.617, p-value: 0.376; Nagelkerke R2 : 0.032

c Hosmer–Lemeshow test, chi-square: 13.202, p-value: 0.105; Nagelkerke R2 : 0.109

Table 1c Prevention measures, negative emotion, and anxiety by demographics (N=1789)

Uni-variate analysis		Multi-variate analysis
Moderate/Severe anxiety score 44-80 (n=1216)	p value	OR (95% CI) Score 44-80 vs. 20-43c
483 (61.1)	<0.001	Ref
733 (73.4)	p<0.001	1.91 (1.55-2.36)***
336 (63.9)	p<0.001	Ref
404 (71.8)	0.031	1.53 (1.17-2.00) **
271 (69.7)	p<0.001	1.31 (0.97-1.76)
205 (65.9)	p<0.001	1.00 (0.72-1.39)

191 (74.9)	p<0.001	1.32 (0.90-1.93)
60 (63.2)	0.010	1.04 (0.62-1.74)
608 (64.5)	p<0.001	0.81 (0.61-1.06)
78 (68.4)	p<0.001	0.77 (0.48-1.24)
943 (52.7)	p<0.001	Ref
271 (69.3)	0.708	3.46 (2.22-5.40)***
494 (68.2)	Ref	Ref
489 (74.2)	Ref	Ref
243 (66.8)	0.340	Ref
324 (66.5)	Ref	Ref
336 (71.3)	Ref	Ref
2.19 (1.57-3.04)***	p<0.001	164 (85.9)
1.50 (1.22-1.84)***	p<0.001	1.82 (1.45-2.29)***
364 (20.3)	Ref	563 (60.0)
210 (57.7)	0.008	1.15 (0.82-1.61)
270 (55.4)		Ref
652 (65.7)	0.775	Ref
564 (70.9)	0.022	1.17 (0.94-1.45)
(76.5) 1.57	0.340	(1.24-2.00)***
773 (63.9)	p<0.001	Ref

*p<0.05**p<0.01, ***p<0.001

a Hosmer–Lemeshow test, chi-square: 5.959, p-value: 0.652; Nagelkerke R2 : 0.041

b Hosmer–Lemeshow test, chi-square: 8.617, p-value: 0.376; Nagelkerke R2 : 0.032

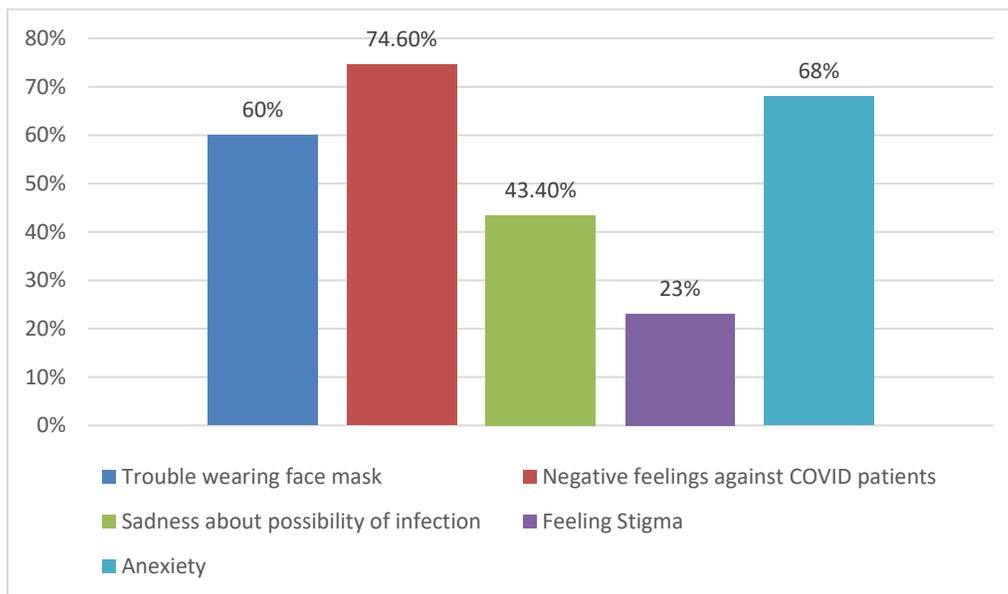c Hosmer–Lemeshow test, chi-square: 13.202, p-value: 0.105; Nagelkerke R2 : 0.109

Figure 2 Distribution of survey findings among respondents

Obstacles to infection control measures

Table 1 illustrates the reaction to the degree of difficulty in complying with preventative measures against COVID. Almost 60 per cent reported identifying in the area of personal security, donning a mask (very difficult / difficult). Generally, the percentage is rather difficult / difficult. Responses for using eye cover were strongest (74.6 per cent). The numbers were marginally smaller

recorded for finding it very difficult / difficult to rinse or clean your hands following exposure to sneezing or cough (13.8 per cent) and rinse hands with soap regularly (15.3 per cent). In reference to cough etiquette, 9.0 percent claimed to have found it very difficult / difficult to cover their nose and mouth. Sneezing and coughing and 10.2% reportedly found it really difficult / difficult to wash your hands with soap (or disinfection of the hands) following hacking or sneezing.

In the division of touch measures, nearly one third recorded finding it very difficult / difficult to hold apart while interacting with others (32.8%) and a significantly higher proportion (36.1%) reportedly found it very difficult / difficult to do so. Stop coming close to someone. So far as voluntary quarantine is concerned, a substantial proportion (24.9%) reportedly found it really difficult / difficult to hold themselves at a social distance if you feel insecure (24.9%) and quit the building (19.4%). The portion recorded to be quite difficult/difficult as for cough etiquette and timely recording, it was smaller than 20%, which indicates that most of the participants have a small degree of discomfort with regards to cough protocol and timely coverage. The mean and standard deviation (SD) for the overall avoidance obstacle value is 35.8 (SD ± 7.1; Range 18 to 68) out of a possible 72. This was the mean. The median is equal to 36 [interquartile range (IQR), 31.0 - 41.0].

Preventive barrier ratings were classified as 36 to 68 or 18 to 35 depending on a median split; as such, a total of 989 (55.3 percent; 95 percent CI 52.9 to 57.6) were classified as possessing a median split. The ranking was 36 to 68 and 800 (44.7 percent; 95 percent CI 42.4 to 47.1) had a ratio of 18 to 35. Table 1 demonstrates the multivariate logistic regression study of population variables correlated to get a better counter Preventive obstacle value relative to women (OR = 1.25, 95 % CI 1.03 - 1.51). Participants who viewed their health condition as poor / fair (OR = 2.06; 95 % CI 1.48 to 2.89) and strong (OR = 1.49); 95 percent CI 1.31 to 1.82) recorded a greater probability of low avoidance barrier levels. Participants with a greater potential vulnerability to SARS-CoV-2 infection noted a greater likelihood of low avoidance barrier scores (OR = 1.35; 95 % CI 1.09 to 1.67).

Poor Feeling

In terms of the answer to the degree of agreement linked to harmful emotions. Infection is of SARS-CoV-2. The highest negative emotions recorded were feelings of fear (74.6 percent). Following is the depression (43.4 per cent), stigma (23.0 per cent), embarrassment (19.7 per cent) and prevention (19.3 per cent). The median and SD for the overall negative emotion score is 11.5 (SD ± 3.7; scale 6 to 14) out of the overall negative emotion level. It's likely out of a maximum ranking of 24. The median value was 11.0 (IQR 9.0 to 14.0). There were poor emotion ratings categorized as a ranking of 11 to 24 or 6 to 10 on the basis of a median break. A minimum of 964, as such (53.9 per cent; 95 per cent CI 51.5 to 56.2) were graded as 11 to 24 and 825 (46.1 per cent; 95 percent of CI 43.8 to 48.5) ranked 6 to 10. Just in the multiple logistic regression analysis. The reported wellbeing condition was a strong indicator of elevated depressive emotions. Respondents who viewed their wellbeing as poor / fair (OR = 2.19; 95 % CI 1.57 to 3.04) and healthy. (OR = 1.50; 95 % CI 1.22 to 1.84) reported a higher probability of higher negative emotions. Scores of those who ranked their overall health is very good. Participants who had subjected to oral/verbal abuse or insult who had been infected with COVID-19 (OR = 1.28; 95 % CI (1.05 to 1.55)

Levels of anxiety

A total of 68.0 per cent (n = 1216) (95 per cent CI 65.8 to 70.1) using the cut-off score of 44 for the STAS score. Of the participants, mild to extreme anxiety was registered. The panel on the right of Table 1 indicates that females (OR = 1.91; 95 % CI 1.55 to 2.36) were more probable to have moderate to severe symptoms. Anxiety involves greater than men. The 18-30 age categories showed the greatest risk of being mild to strong. Extreme fear (OR = 1.53; 95 % CI 1.17 to 2.00). Participants who see their wellbeing as poor / fair [OR, 3.46: 95 % CI 12.22 - 5.40] and good [OR, 1.82: 95 % CI 1.45 - 2.29] reported a greater risk of mild to serious distress than those who class their health condition as it's very good. Those who showed high-very high perceived vulnerability reported higher probability of mild to extreme distress (OR, 1.59: 95% CI 1.24 - 2.02).

4. DISCUSSION

Negative psych-behavioral reactions to the epidemic are known, but have not yet been recorded to be discussed. To the best of our understanding, this is the first research to be published on psych-behavioral reaction to infection with COVID-19 in Saudi Arabia, the Arabian nation that has influenced by COVID-19. The results may provide insight into the strategies needed to address the preventive limitations and allow for immediate clinical care successfully implemented in Saudi Arabia after the eruption of COVID-19. Patients affected by respiratory infections such as influenza must wear masks to reduce the distribution of droplets (Leung, 2020). Previously, World Health Organization (WHO) advised against wearing masks in group environments as there is no proof required for its utility (WHO, 2020). Nevertheless, new research suggests that the surgical and face masks may have been limiting the spread of human COVID-19 and influenza viruses (Leung, 2020). Given the lack of evidence, effectiveness of wearing masks in

group settings, particularly when faced with a new situation as with the epidemic of COVID-19, with restricted replacement choices, the usage of masks become a must. Supported as well as endorsed by the WHO in its most current guidelines (WHO, 2020).

In China, several cities and provinces have worn masks in public. It is mandatory, particularly in places affected by coronavirus. The conclusions on this research, preventive steps also uncovered a weakness in personal security, including the usage of face defense, wearing a facial mask in particular. Abundance of protective equipment, even among medical experts in Saudi Arabia has been heavily publicized in media. The justification for the abundance of use of masks among the participants in this sample may also be attributed to easily accessed masks, however, this indictments further investigation. Thus, step towards promoting mask use as it is important for the general population. On an optimistic way, this analysis revealed that there were obstacles to other suggested hygiene practices or health safety, such as cleaning or disinfecting hands and cough etiquette, was very small both the participants. However, a significant portion of the researchers in this sample did difficulty with psychological isolation and mutual quarantine throughout the utter lack of vaccination and medical treatment. The pandemic of COVID-19 can only be controlled by changes in behavior. For starters, it is important to maintain social distinctions and distance techniques secure. They have been enacted and found to be effective in the current epidemic of COVID-19 (Betsch, 2020; Prem, 2020).

It is also essential that the Kingdom of Saudi Arabia be aware of this rationale and significance of psychological distancing techniques in the battle against the COVID-19 outbreak. This has been stated that the efficacy and cultural effects of quarantine and social distancing should be discussed. Depends on the collective actions of the different groups, including government officials, political representatives and group in general (Lewnard, 2020). Lately, the Center for Disease Control (CDC) advised the use of face mask garments in social places where other mutual distancing interventions are difficult to sustain, particularly in areas with substantial community-based spread and with minimal to no supply with face masks. The population in Saudi Arabia will be made aware of this suggestion in the case of a social collection is inevitable, combined with the existing lack of supply of facial masks (CDC, 2020). Demographic differences in prevention measures identified in this study provide significant insight into guidelines for resolving inequities in preventive inequalities around the number of socio-economic contexts. In this study, Saudi males conveyed a higher level of prevention obstacles found in this analysis support a gender-based approach.

Those who knew those that had been diagnosed with SARS-CoV-2 showed higher obstacles in preventive practices often have valuable details at the demographic level and tackle inequalities in prevention. It is relevant to remember that participants with low perceived health status reported higher preventing barriers taken seriously. The public will be told that there are citizens who have Immuno-compromising or residual serious medical problems, like High blood pressure, diabetes, cardiovascular disease, respiratory illness or cancer are at more Risk of more serious outcomes and mortality (Mao, 2020; Zhou, 2020). It is essential that they be notified about improved preventative measures to prevent COVID-19 infection. It should be found that the study reported that a relatively high percentage conveyed negative emotions for COVID-19 infection. The plethora of harmful feelings to be contained in this research, that is, anxiety, depression and shame, suggests the value of promoting cultivation from a positive approach to SARS-CoV-2 contamination in the general population. Poor Disposition towards infectious illnesses, such as hepatitis B and HIV, have not only been identified to eliminate illness preventing but still inducing other adverse consequences, such as pause in finding medical attention and non-compliance with care (Fana, 2019; Kamen, 2015; Valizadeh, 2017).

Likewise, for preventive measures, study participants with poor self-perceived state of health conveyed stronger negative feelings against contamination with COVID-19. Findings from more than two-thirds of survey participants with mild to serious anxiety it has implied that COVID-19 has a powerful effects on the mental health of the folks of Saudi Arabia. The health authorities ought to classify the segment of the community that needs psychiatric assistance and treatment with successful psychiatric action. In this analysis, Saudi Arabia women were shown to be more susceptible to anxiety than males, suggesting a need for gender based behavioral intervention. The explanation why participants of the younger age category conveyed higher degree of distress was not explored in this research and thus needs further examination and Investigations. The overwhelming amount of knowledge on the novel COVID-19 circulated throughout the social realm. Anxiety, and panic among users have been recorded in the media. It is commonly recognized that social media awareness among youth is higher (Muwahed, 2020).

Social networking remain commonly utilized by the younger generation, and this may clarify why Lower rates of anxiety among them. External psychiatric therapy tools young people's programs, as currently implemented in Saudi Arabia, will be given. Effective in helping young people deal with the social effects of the epidemic of COVID-19 (Duan, 2020). In addition, results that people with low self-perceived state of health have experienced higher panic deserve recognition. As mentioned above, people with bad health are more vulnerable to COVID-19 Infection and severe consequences. In fact, high anxiety in people with ill health is likely to have negative ramifications for their immune reaction, raising their chance of COVID-19 diseases. Healthcare staff will aid in the delivery of therapeutic intervention; in fact, for those with existing medical illnesses, to resolve their psychological suffering. There are some drawbacks to be addressed in the present analysis when evaluating the results. The first constraint involves the existence of internet

polls utilizing social networking as a tool to notify the public of the representative of the community to the respondents may be of interest. In fact, this research has a poor number of participants below tertiary Training level as well as from the Northern and Southern regions.

Another weakness of web material sample is an unwillingness to classify multiple-response respondents. The second restriction is due to the cross-section design of the sample. Although we were willing to identify correlations between exposure (i.e. assumed health condition and vulnerability to exposure to infection) and effects (prevention steps, harmful feelings and anxiety). The cause and effect may not be determined. Second, the answers were focused on self-reporting and could be prone to self-reporting bias and a propensity to display socially acceptable reactions. The tests, thus, it should be viewed with care. Notwithstanding these limits, the research respondents addressed a broad variety of ethnic profiles, which render an immense contribution to the comprehension of public reactions and rates of distress, particularly now that the COVID-19 outbreak has occurred. Saudi Arabia is witnessing rapid development.

5. CONCLUSION

The current research established a significant difference in the usage of facial mask in the prevention of COVID-19. The latest epidemic of COVID-19 has sparked wide-ranging adverse reactions, e motions, including supposed anxiety, stress, shame, belling, humiliation, and avoidance behaviors. The study found a high proportion of the public in Saudi Arabia are experiencing anxiety during the current COVID-19 outbreak. It is important to note that people with a poor self-perceived health status, who are most vulnerable to severe illness from COVID-19 infection, have been found to have high barriers in prevention practices despite having high negative emotions and anxiety levels. Our evaluation found that it is necessary to discuss the psycho-behavioral implications of COVID-19 to promote the monitoring and regulation of the epidemic in Saudi Arabia.

Conflict of Interest
The authors declare that there are no conflicts of interests.

Informed consent
Written & Oral informed consent was obtained from all individual participants included in the study. Additional informed consent was obtained from all individual participants for whom identifying information is included in this manuscript.

Ethical approval
The study was approved by the Medical Ethics Committee of KSUMC University (ethical approval code: (IR.KSUMC.RC.13898.417).

Data and materials availability
All data associated with this study are present in the paper. The data supporting the result of this research are consistent with the previous author on appropriate request.

Peer-review
External peer-review was done through double-blind method.

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