

Original Research

IMPACT OF COVID-19 PANDEMIC ON MENTAL HEALTH AND SOCIAL SUPPORT AMONG ADULTS IN THE AGE GROUP OF 18 TO 60 YEARS RESIDING IN THE FARASAN REGION, KINGDOM OF SAUDI ARABIA

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Abstract: Introduction. The COVID-19 pandemic has brought into focus the mental health of various affected populations. It is known that the prevalence of epidemics accentuates or creates new stressors, including fear and worry for oneself or loved ones, constraints on physical movement and social activities due to quarantine, and sudden and radical lifestyle changes.

Material and methods. This study aimed to assess the impact of the COVID-19 pandemic on mental health and social support among adults in the age group of 18 to 60 years residing in the Farasan community, Kingdom of Saudi Arabia. Through a quantitative survey approach and descriptive design, the 48 adults were selected by the non-probability purposive sampling method. Initially, personal information was obtained. The self-administered questionnaire on the Impact of Event Scale-Revised (IES-R) was used, which was validated in Arabic to determine the extent of psychological impact after exposure to a public health crisis. The modified rating scale was used to assess the negative mental health impact; and impacts on social and family support, need-based Education about COVID-19, and its coping mechanism through pamphlets.

Results. The results of the study were presented as the Psychological Impact of COVID-19 pandemic by "Impact of Event" total score (mean±SD), which was 36.4 ± 17.31 , "Intrusion" domain was 12.83 ± 6.192 , "Avoidance" domain was 13.19 ± 6.81 , while "Hyperarousal" domain was 10.38 ± 4.31 . Also, 6 (12.5%) of the sample suffered a severe impact, 10 (20.8%) were moderately affected, and 12 (25%) were mildly affected. The younger people (18-30 years old), females, and university-educated people reported a higher psychological impact than older males or people with post-graduate degrees. Persons working in the medical field reported a lower psychological impact than others. Also, people who live in urban areas or have chronic diseases had higher psychological impact scores.

Conclusion. Age and rural residency were negative predictors of the "Impact of Event" scores. At the same time, the female gender or the presence of chronic conditions was a positive predictor for the high "Impact of Event" score. Positive impacts had and family and social support.

INTRODUCTION

In recent years, coronaviruses have become a major health hazard worldwide, and they have caused considerable human morbidity. The novel Coronavirus Disease 2019 (COVID-19) has spread globally in a short period. This infection has been transmitted to 213 countries and

territories worldwide and infected 25,925,003 people causing 860,857 deaths (as of September 3, 2020). It has caused the deterioration of everything from worldwide economies to people's social lives. Initially, the COVID-19 pandemic was viewed with ignorance, repudiation, and fright. However, it spread unbelievably rapidly, infecting thousands of people worldwide. Most countries had to lock down their cities, and at that point, people took

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serious notice and started taking precautionary measures [1,2].

The world is suffering from changes caused by COVID-19. Given the argument that the new division of history should be pre-and post-COVID-19 [1,3], humanity is adapting to a new way of life in a new era to take preventive measures for nations and individuals.

While the early spread in China and East Asian countries have recently slowed down, the number of confirmed cases and deaths in Europe and the United States has rapidly increased. Moreover, because COVID-19 has spread to developing countries with relatively poor health conditions, inadequate public healthcare access and information dissemination, and limited (often substandard) medical infrastructure and available professional services, medical supplies, and proper treatment facilities (e.g., several countries in South America, Africa, and Asia among other regions), the pandemic is expected to extend for an unknown period until effective treatments are developed. The supply, distribution, and skilled application are achieved and stabilized over an appropriate time. The widespread occurrence of infectious diseases, such as COVID-19, is closely related to symptoms of psychological distress, mental illness, and physical pain [4].

Furthermore, previous experiences with infectious diseases have shown that the number of people mentally affected by the pandemic exceeds the number of those physically infected by the disease, indicating the massive influence of such disease on mental health. As demonstrated during (Middle East respiratory syndrome) MERS, and severe acute respiratory syndrome (SARS), for example, pandemics had a significantly adverse effect on people's mental health. Due to the (MERS) outbreak in 2015, countless citizens and patients experienced anxiety and fear [5,6].

According to a recent analysis of the psychology and mental state of Korean citizens affected by COVID-19, nearly half of the Korean population (48%), particularly 65% of the population in Daegu, where a mass outbreak had occurred, experienced depressive feelings due to the pandemic. The stress experienced by people due to COVID-19, compared to other disasters, was 1.5 times higher than that during MERS and 1.4 times higher than that caused by local earthquakes [7,8].

The harmful effects of COVID-19 on mental health are considered more extensive and powerful than those of

prior epidemics, and consequently, national mental health is at serious risk. Another concern is that the prolonged pandemic situation may cause physical damage to individuals and a collective form of intense stress [9].

Active treatment and intervention for national mental health have become an urgent need to the extent that psychological and mental quarantine, along with COVID-19 prevention, is a significant and increasingly more serious global concern. Furthermore, there is a need for a psychological support system for mental health and against future disasters caused by epidemics. KSA has become a compelling case in understanding how COVID-19 has caused psychological distress amongst health workers and the general public for the following reasons: First, KSA currently has the largest confirmed number of cases in the Arabian Gulf countries, which means that the likelihood of pressure on the health system and fear of infection, which could cause distress, remain high. Second, despite the potential for increased psychological distress in KSA, no study has been conducted to identify the groups that might be suffering the most due to the pandemic. Third, the Arabian Gulf region has specific characteristics, such as a natural resource-financed health system, that would necessitate that the public health response to COVID-19 is different from the rest of the world, hence the demand for special academic attention. Finally, as Arabian Gulf countries have similar backgrounds, cultures, and religions and face similar challenges, this study on KSA could inform policy design to mitigate COVID-19-related distress in the entire region [11].

SIGNIFICANCE OF THE STUDY:

As the COVID-19 pandemic rapidly spread worldwide, it is inducing a considerable degree of fear, worry, and concern in the population and among certain groups in particular, such as the older. As countries are affected by COVID-19, the elderly population will soon be told to self-isolate for "a very long time" all over the world, although it is well known that social isolation among older adults is a "serious public health concern" because of their high risk for cardiovascular, autoimmune, neurocognitive, and mental health problems [12].

The psychological impact of outbreaks on individuals includes an intense and wide range of psychiatric morbidities. People are likely to experience feelings such as; worry about being infected or getting sick, increased self-blame, and helplessness. Considering mental health issues as a major health concern during the ongoing

COVID-19 pandemic is crucial. It is indispensable to study how people cope with such a major disaster and appropriately understand their mental health status. The ongoing COVID-19 epidemic is inducing fear, and a timely understanding of mental health status is urgently needed for society. Therefore, this present study aims to assess the impact of the Covid-19 Pandemic on Mental Health and Social Support Among Adults in the age group of 15 to 60 years Residing in the Farasan Region, KSA, during the period of the pandemic, to help in conserving the psychological wellbeing of the community.

OBJECTIVES:

1. To assess the extent of psychological impact after exposure to the COVID-19 pandemic among adults in the Farasan community.
2. To assess the negative mental health impact of exposure to the COVID-19 pandemic among adults.
3. To evaluate the social and family support after exposure to the COVID-19 pandemic.
4. To associate the psychological and mental health impact scores with selected demographic variables.
5. Need-based education is given through the Self-Instructional Module on coping strategies for COVID-19.

ASSUMPTION:

People's mental health may be affected if they have less social support after the COVID-19 pandemic.

HYPOTHESIS: There will be a significant association between the assessment scores with selected demographic variables. There will be a significant correlation between psychological and mental health impact and support groups.

MATERIAL AND METHODS

Research approach: this is a quantitative-based cross-sectional study.

Research design: descriptive Survey design.

Research setting: the study was carried out in the Farasan community, Saudi Arabia.

Population: the population for the present study was adults aged 18 to 60 years residing in Farasan, KSA.

Sample size: adults aged 18 to 60 years. The sample size is 48.

Sample techniques: non-probability purposive sampling technique was used for this study.

Criteria for sampling technique.

Inclusion Criteria: adults aged 18 to 60 years. People can read and write Arabic and are willing to participate.

Tool for data collection:

- Socio-demographic characteristics: age, gender, residence, level of education, employment status, or working in the medical field, marital status, and presence of any chronic diseases.
- Impact of Event Scale-Revised (IES-R): It is a self-administered questionnaire validated in Arabic to determine the extent of psychological impact after exposure to a public health crisis [5, 20, 21]. It consists of 22-items and is composed of three subscales, which aim to measure the mean avoidance, intrusion, and hyperarousal. It is very helpful in measuring the effect of routine life stress, everyday traumas, and acute stress. The total IES-R score was divided into 0–23 (normal), 24–32 (mild psychological impact), 33–36 (moderate psychological impact), and > 37 (severe psychological impact). Items were scored on Likert 5-point scales 0 for Not at all, 1 for a little bit, 2 for moderately, 3 for quite a bit, and 4 for extremely.
- Indicators of negative mental health impact: Six modified and validated questions regarding negative mental health impacts resulting from the pandemic were used; these questions had a Cronbach's alpha of 0.88. The domains assess changes in stress from work, financial stress, stress from home, horrified feelings due to the COVID-19 pandemic, apprehensive feelings due to the COVID-19 pandemic, and helpless feelings due to the COVID-19 pandemic (response options for the each: decreased, unchanged/same as before, and increased).
- Impact on social and family support: Investigating the impact of the COVID-19 pandemic on social and family support through a modified and validated reliable questionnaire (Cronbach's alpha of 0.87). The five questions in this questionnaire evaluated support from friends, support from family members, sharing feelings with other family members, sharing feelings with others, and caring for family members' feelings. The response options for these questions were as follows: decreased, unchanged/same as before, and increased, where a lower score indicated lower social and family support.
- Need-based education about COVID-19 and its coping mechanism through pamphlets.

Data collection procedure: Permission was obtained from the Dean of the university college of Farasan and followed ethical requirements. Inclusion criteria selected adults aged 18 to 60 years were offered to sign. The assessment was done after obtaining informed consent. Impact of the Pandemic on Mental Health and Social Support Residing in the Farasan community, KSA, was evaluated by using a

questionnaire and rating scale. After assessing all the tools, the need-based education about COVID-19 and coping mechanisms were taught to the students, and the educational pamphlet was also distributed.

Data analysis: Both descriptive and inferential statistics were used. Mean, standard deviation, and mean percentage were used to assess the impact of the COVID-19 Pandemic on Mental Health and Social Support Among Adults in age 18 to 60 years. Chi-square was used to assess the association between scores with demographic variables. Correlation and coefficient were used to identify the difference between psychological and mental health impacts.

RESULTS

The study included 48 participants, adults residing in the Farasan community, Saudi Arabia, about more than half of the sample, 26 (54%) aged from 18 to 30 years old, and about two-thirds of the sample were female, 29 (60%), and married 31 (65%). The majority of participants were well educated have a bachelor's degree 29 (60%). Also, one-third of the sample worked in the medical field 16 (33%). About half of them work as governmental employees 26 (54%). Most of the samples live in urban areas, 35 (73%). Only 11 (23%) suffer from chronic diseases (Table 1).

No	Demographic Variables	Frequency (No)	Percentage %
1	Age		
	➤ 18–30 years	26	54
	➤ 31–40 years	8	16
	➤ 41–50 years	7	15
2	Gender		
	➤ Male	19	40
	➤ Female	29	60
	➤ Married	31	65
3	Marital status		
	➤ Single/divorced	17	35
	➤ Married	31	65
4	Education		
	➤ ≤ Secondary school	10	21
	➤ High education (Bachelors)	29	60
5	Work in medical field		
	➤ No	32	67
	➤ Yes	16	33
6	Occupation status		
	➤ Unemployed/manual worker	7	15
	➤ Governmental employee	26	54
7	Residency		
	➤ Urban	35	73
	➤ Rural	13	27
8	History of chronic disease		
	➤ No	37	77
	➤ Yes	11	23

Table 1. Socio-demographic characteristics of the sample (n=48)

Table 2 shows the frequency and percentage-wise distribution of the revised impact of the event scale on the COVID-19 pandemic. The highest percentage (39%) of them suffered moderately in the item of pictures it popped into mind. In contrast, only 12% had extremely affected in this aspect. A similar percentage of them suffered moderately in the aspect of "I was aware that I still had a lot of feelings about it, but I didn't deal with them" (33%); "I tried to remove it from my memory" (33%), "Other

things kept making me think about it" (31%), "Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart" (31%), whereas extremely affected by people on these aspects were 8,10 and 6% respectively. Nearly one-fourth of the percentage of them suffered moderately in the aspects of "I thought about it when I didn't mean to" (27%), "I tried not to think about it" (25%), and "My

Questions	Not at all		Somewhat		Moderately		Significantly		Extremely	
	n	%	n	%	n	%	n	%	n	%
1. Any reminder brought back feelings about it	14	29	10	21	10	21	8	16	6	12
2. I had trouble staying asleep	12	25	14	29	9	18	11	23	2	4
3. Other things kept making me think about it.	12	25	13	27	15	31	5	11	3	6
4. I felt irritable and angry	3	27	6	13	9	19	17	35	3	6
5. I avoided letting myself get upset when I thought about it or was reminded of it	7	35	10	21	8	17	8	17	5	10
6. I thought about it when I didn't mean to	9	19	10	21	13	27	12	25	4	8
7. I felt as if it hadn't happened or wasn't	11	23	10	21	9	19	15	31	3	6
8. I stayed away from reminders of it.	12	25	4	9	17	35	11	23	4	8
9. Pictures about it popped into my mind.	12	25	4	9	19	39	7	15	6	12
10. I was jumpy and easily startled.	6	13	11	23	14	29	10	21	7	14
11. I tried not to think about it.	7	15	9	19	12	25	14	29	6	12
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	5	11	15	31	16	33	8	17	4	8
13. My feelings about it were kind of numb.	8	17	11	23	13	27	8	17	8	16
14. I found myself acting or feeling like I was back at that time.	6	13	11	23	14	29	10	21	7	14
15. I had trouble falling asleep.	9	19	8	17	11	23	11	23	9	18
16. I had waves of strong feelings about it.	11	23	8	17	12	25	11	23	6	12
17. I tried to remove it from my memory.	9	19	6	13	16	33	12	25	5	10
18. I had trouble concentrating.	8	17	9	19	11	23	13	27	7	14
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	6	13	12	25	15	31	10	21	5	10
20. I had dreams about it.	9	19	4	9	10	21	16	33	9	19
21. I felt watchful and on-guard.	14	29	10	21	9	19	7	15	8	17
22. I tried not to talk about it.	10	21	9	19	13	27	7	15	9	18

Table 2. Frequency (n) and Percentage (%) wise distribution of Revised impact of event scale on COVID-19 Pandemic

feelings about it were kind of numb" (27%), "I had trouble falling asleep" (23%), "I had waves of strong feelings about it" (25%), "I had trouble concentrating" (23%), and "I tried not to talk about it" (27%). In contrast, the people are extremely affected in these aspects 8,12, 16, 18, 14% respectively. Less than 20% of the people suffered moderately in the aspects of "I had trouble staying asleep" (18%), "I felt irritable and angry" (19%), "I avoided letting myself get upset when I thought about it or was reminded of it" (17%), I felt as if it hadn't happened or wasn't real (19%). "I felt watchful and on-guard" (19%), whereas 4,6,10,6 & 17% of people suffered extremely in these aspects, respectively.

Table 3 shows the frequency and percentage-wise distribution of Improvement in Family and Social Support shows that about social support, more than half of the

individuals reported increased support from family members 33 (68%). The highest percentage received increased caring for family members' feelings, 34 (71%). A similar percentage of people expressed increased support from friends 32 (66%) and shared their feelings with family members 32 (66%). And only 62% shared their feelings with others when in blue.

Table 4 shows that the psychological impact of the COVID-19 pandemic per "Impact Event scale" was 36.4 ± 17.31 , "Intrusion domain" was 12.83 ± 6.192 , "Avoidance domain"- 13.19 ± 6.81 , while "Hyperarousal domain" was 10.38 ± 4.31 . Also, 6 (12.5%) of the sample suffered a severe impact, 10 (20.8%) were moderately affected, and 12 (25%) were mildly affected.

The younger persons, females, and university-educated

No	Improvement in Family and Social support	Decreased		Unchanged/Same as before		Increased	
		n	%	n	%	n	%
1	Getting support from friends	7	15	9	19	32	66
2	Getting support from family members	5	11	10	21	33	68
3	Shared feeling with family Members	6	13	10	21	32	66
4	Shared feeling with others when in blue	7	15	11	23	30	62
5	Caring for family members' feelings	3	6	11	23	34	71

Table 3. Frequency (n) and Percentage (%) wise distribution of Improvement in Family and Social Support

No	Descriptions	Max Score	Mean	SD
1	Intrusion (INT: 1, 2, 3, 6, 9, 14, 16, 20)	Normal – 0-23, Mild – 24-32, Moderate – 34-36, Severe – 36-88	12.83	6.192
2	Avoidance (AVD: 5, 7, 8, 11, 12, 13, 17,22)	Normal – 0-23, Mild – 24-32, Moderate – 34-36, Severe – 36-88	13.19	6.81
3	Hyperarousal (HYP: 4, 10, 15, 18, 19, 21)	Normal – 0-23, Mild – 24-32, Moderate – 34-36, Severe – 36-88	10.38	4.31
Total			36.4	17.31

Table 4. Psychological impact of the COVID-19 pandemic as Impact Event scale (Mean ±SD) (%)

people reported a higher psychological impact than older males or those who were well educated with post-graduate degrees. Persons working in the medical field reported a lower psychological impact than others. Also, people who live in urban areas or have chronic diseases have higher psychological impact scores. Age and rural residency were negative predictors for event score, while female gender or presence of chronic condition was a positive predictor for the impact of event score. A positive correlation was found between psychological impact and Improvement in Family and Social Support.

On studying the association between socio-demographic characteristics and the negative health impact, it was found that married persons experienced increased financial and home stresses and felt more apprehensive during the pandemic. Correspondingly, females also felt more apprehensive, horrified, and helpless than males, like younger persons who felt helpless due to the pandemic.

CONCLUSION

The COVID-19 pandemic has greatly impacted adults residing in the Farasan community and highly affected social support. The most affected groups were younger females, married, not well educated, not working in the medical field, living in urban areas, or having a chronic disease. It caused increased stress regarding work, home, and finances. Also, the pandemic increased the feelings of being horrified, apprehensive, or helpless. However, it increased caring for family members' feelings in many domains.

CONFLICTS OF INTERESTS:

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