Impact of The Covid-19 Pandemic on Mental Health And Quality of Life Among Residence in Kingdom of Saudi Arabia

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Abstract- *It has now been a year since the start of the COVID-19 pandemic, which has claimed millions of lives and changed the ways in which each of us relates to and navigates the world. How has the pandemic impacted our lives these past 12 months?This global situation may have a negative impact on the mental health and quality of life of individuals which in turn impacts individuals' performance. A cross-sectional study using an online survey was conducted in Asir, Saudi Arabia between 15July and 15 November 2020 to explore the mental health status of the general population and university students during the COVID-19 outbreak. The mental health and quality of life of two forty-six samples of Saudi residents during covid-19 post lockdown time were assessed. The data were collected through the online self-administered Mental health and quality of life questionnaire used for assessing practical and relevant outcome related questions and the numerical scoring 1 (Not at all), 2 (Some of the times), 3 (Often). In the previous study conducted the females and participants aged 26–35 years were more likely to have higher stress scores. Likewise, a study in Saudi Arabia assessed the psychological impact of COVID-19 and the Depression, Anxiety, and Stress Scale and found that health care workers, students and females had higher levels of stress, anxiety and depression symptoms. Our results also agree with recent studies from China and Italy which revealed that females are more vulnerable to stress compared to males, and that younger age groups had a higher tendency to be stimulated by the surrounding stressors.This study aims to explore the mental health and quality of life among the general population during COVID-19 outbreak, and to identify key population(s) who might need psychological intervention*

Keywords- COVID-19 – is a disease caused by a new strain of coronavirus, Mental health – psychological and emotional well-being, Quality of Life-Life satisfaction

I. INTRODUCTION

The appearance of a new coronavirus disease (COVID-19) was first reported in December 2019 in Wuhan, China. The number of cases has increased exponentially not only in China but in the world. COVID-19 was officially declared a pandemic by the world health organization on March 11, 2020.[1]The number of cases has increased exponentially not only in China but in the world. Globally from December 2019 until the time of writing this article as of 21 May 2021, there have been 165,158,285 confirmed cases of covid-19, including 3,425,017 deaths, reported to WHO.[2] The COVID-19 pandemic has had a major effect on our lives. Many of us are facing challenges that can be stressful, overwhelming, and cause strong emotions in adults and children. Public health actions, such as social distancing, are necessary to reduce the spread of COVID-19, but they can make us feel isolated and lonely and can increase stress and anxiety.[3]

This is often followed by anxiety-related behaviors, sleep disturbances, and overall lower perceived state of health. Individuals with mental illness may be particularly vulnerable to the effects of widespread panic and threat. We anticipate the effects of infectious disease threats to manifest as sheer anxiety and panic: worry about getting an infection, worry about loved ones getting ill, and worry when related symptoms-even minor-are present.[4]

A pandemic has in common with other natural and social disasters (e.g. wars and terrorist attacks) (a) Unpredictability, (b) The intensity of the phenomenon, and (c) The persistence of psychological, cultural, economic, and social effects.[5] The control measures during covid-19 such as curfew, lockdown and social distancing had observed differences in controlling the spread of the diseases around the Kingdom of Saudi Arabia which lead to psychological illness such as anxiety, depression, panic disorder and distress to the people.[6]

There are many healthy ways to overcome and reduce the mental illness and quality of life like **take breaks from watching, reading, or listening to news** stories, take **care of your body such as meditate, eating healthy foods,**

exercise regularly and get plenty of sleep and try to do some other activities you enjoy. Connect **with others and Connect with your community- or faith-based organizations**.[7]

Hence the Researcher decided to assess the level of mental health and quality of life among the general population regarding covid-19 and create awareness of the major threatening health problems and **focus on positive** thoughts like choose to focus on the positive things in your life, instead of dwelling on how bad you feel.[8] Consider starting each day by listing things we are thankful for, maintain a sense of hope, work to accept changes as they occur and try to keep problems in perspective. Use of moral compass or spiritual life for support. If we draw strength from a belief system, it can bring you comfort during difficult times.[9]

Therefore, this study aims to explore the mental health and quality of life among the general population during COVID-19 outbreak, and to identify key population(s) who might need psychological intervention

II. MATERIALS AND METHODS

The ethical clearance was obtained from The Research Ethics Committee at King Khalid University (HAPO-06-B-001) Saudi Arabia with the approval number ECM#2020-0803 dated 20/06/2020. Participation was voluntary and all participants gave informed consent electronically and without any remuneration for their participation. No identifying information was collected to protect the anonymity of participants. Descriptive study design was used in this study. The data were collected through the Google Forms web survey platform to ensure wide reach and easy access. Two hundred and forty-six people completed an online questionnaire which included

Demographic Characteristics of Respondents - Descriptive Analysis

Participants provided their socio-demographic characteristics which includes gender (male or female), age group in years (15-40 years, 41-65 years, above 65 years), educational level (secondary level or college and above), marital status (Single, divorced, married), employment status (retired, unemployed, employed, students) and living area (Urban, rural). Questions comprised based on the mental and quality of life relationship with economic and social. The construct and validity of the questionnaire presented as good and Cronbach's coefficient was 0.648.

Mental health and Quality of life

Mental health and quality of life questionnaire used for assessing practical and relevant outcome related questions and the numerical scoring 1 (Not at all), 2 (Some of the times), 3 (Often).

Social, Spiritual and Economical

The social, spiritual and economical questionnaire used for assessing relevant outcome related questions and the numerical scoring 1 (Not at all), 2 (Some of the times), 3 (Often).

1. STATISTICAL ANALYSIS

The data was analyzed by SPSS version 20.0. Mean (M) and standard deviation (SD) were used to describe demographic data. The percentage of responses was calculated according to the number of respondents per response to the number of total responses of a question and One-way ANOVA to assess association demographic characteristics. Multivariate regression was performed to calculate the association of all variables. A value of $p<0.05$ was considered significant for the entire analysis

III. RESULTS AND DISCUSSION

In the survey, I retrieved 246 questionnaire response was acceptable with a response. The detailed demographic characteristics were demonstrated in (table 1).

Table:1The detailed demographic characteristics were demonstrated

Demographic Variable	Groups	Frequency	Percentage (%)	Mean	Std. Deviation
Gender	Male	11	4.5	1.96	.207
	Female	235	95.5		
	Total	246	100		
Age Group	15-40 Years	27	11	1.89	.313
	41-65 Years	219	89		
	Above 65 Years	0	0		
	Total	246	100		
Educational Level	Secondary Level	15	6.1	1.94	.240
	College & Above	231	93.9		
	Total	100	100		
Marital Status	Single	200	81.3	1.37	.781
	Divorced	0	0		
	Married	46	18.7		
	Total	246	100		
Employment Status	Retired	2	.8	3.71	.551
	Unemployed	6	2.4		
	Employed	53	21.5		
	Students	185	75.2		
	Total	246	100		
Living area	Urban	148	60.2	1.40	.491
	Rural	98	39.8		
	Total	246	100		

The socio-demographic characteristics the larger proportion of female (95.5%), age 41 – 65 years (89%), single (81.3%), 93.9% of the respondents with their educational level college & above, belonging from the urban background (60.2%), most of the respondents are students 75.2%.

Table:2 Priorities of Mental Health Dimensions

S.NO	Mental health Statements	Mean	Standard Deviation
1	Feeling tired for no reason	1.90	.735
2	Worrying about the spread of COVID-19	2.13	.707
3	Afraid to go out	1.88	.792
4	Feeling irritable and anger	1.88	.653
5	Feel as if the pandemic not happened	1.91	.720
6	Trouble sleeping at night	1.70	.712
7	Feeling helpless due to COVID-19	1.78	.741
8	Worrying about future	2.18	.742
9	Fear of getting the COVID-19 symptoms	1.91	.761
10	Trouble concentrating	1.79	.695
Overall mental health score		1.90	.725

The above table revels from "Worrying about future" (2.18) and "Worrying about the spread of COVID-19" (2.13) has been ranked as top most mental health impact in the dimensions. This implies that peoples are given more importance to these statements. The followed by "Fear of getting the COVID-19 symptoms & Feel as if the pandemic not happened" (1.91), "Feeling tired for no reason" (1.90), "Afraid to go out & Feeling irritable and anger" (1.88), "Trouble concentrating" (1.79), "Feeling helpless due to COVID-19" (1.78), and "Trouble sleeping at night" (1.70).

Findings of this study suggested that participants from Asir region were mild and moderate disturbance in mental health and quality of life. 223 (90.7%) samples were mild level of disturbance and 23 (9.3%) were moderate level of disturbances and no severe level of disturbance in mental health and 50 (20.3%) were mild level of quality of life and 196 (79.7%) were moderate level of quality of life and no sever level of quality life noticed.

Difference between Demographic and Quality of Life

The following hypotheses of demographic characteristics are summarized the influences of gender, age, educational level, marital status, employment status and living area and quality of life.

H1: There is a significance difference between demographic characteristics and quality of life

The table illustrate analysis of variance is conducted to find out if any significant difference between the demographic characteristics of the respondents and quality of life. Table 2 shows that the calculated p-values of gender (P=0.071), age groups (P=0.612), marital status (P=0.315), employment status (P=0.116), and living area (P=0.036) are more than 0.05. Therefore, there is no significance difference between the gender, age groups, marital status, employment status, and living area of the respondents.

However, the significant difference found between the educational level (P=0.002) and quality of life the respondents at the 0.05 level of significance. Hence, the hypothesis (H1) is only educational level supported.

Difference between Demographic and Mental Health

The following hypotheses of demographic characteristics are summarized the influences of gender, age, educational level, marital status, employment status and living area and mental health.

H2: There is a significance difference between demographic characteristics and mental health.

The analysis of variance is conducted to find out if any significant difference between the demographic characteristics of the respondents and mental health. Table 3 shows that the calculated p-values of gender (P=0.054), age groups (P=0.313) and employment status (P=0.491) are more than 0.05. Therefore, there is no significance difference between the gender, age groups and employment status of the respondents.

However, the significant difference found between the educational level (P=0.006), marital status (P=0.000) and living area (P=0.016) and mental health the respondents at the 0.05 level of significance. Hence, the hypothesis (H2) is only educational level, marital status and living area supported.

Difference between Demographic characteristics and Social factors

The following hypotheses of demographic characteristics are summarized the influences of gender, age, educational level, marital status, employment status and living area and social factors.

H3: There is a significance difference between demographic characteristics and social factors

The table illustrate analysis of variance is conducted to find out if any significant difference between the demographic characteristics of the respondents and social

factors. Table 3 shows that the calculated p-values of gender (P=0.351), age groups (P=0.536), educational level (P=0.065) employment status (P=0.089), and living area (P=0.407) are more than 0.05. Therefore, there is no significance difference between the gender, age groups, educational level, employment status, and living area of the respondents.

However, the significant difference found between the marital status (P=0.005) and social factors the respondents at the 0.05 level of significance. Hence, the hypothesis (H3) is only marital status supported.

Relationship between Factors

The collected data was analyzed by employing correlations to check the relationships between the variables. Relationship investigation illustrates that the constructs are significantly associated with each other. The correlation matrix analysis detail is shown in below table-3

Table 3. Degree of Relationship between the selected variables * - Sig. at 1% level

	Quality of Life	Mental Health	Social	Spiritual	Economical
Quality of Life	1				
Mental Health	-.143*	1			
Social	-.208**	.675**	1		
Spiritual	.270**	-.016	-.086	1	
Economical	-.037	.357**	.414**	-078	1

Among these factors, the mental health is a main factor and act as a significant determinant to impact quality of life. Based on the data, it is observed that factor loading has been the highest for mental health and then to quality of life. Hence, the instrument items seem to be important. It is observed that there is a high correlation between mental health and social, which shows that there is a chance for social factors to be better COVID-19.

IV. DISCUSSION

Although many studies have examined the physiological effect of COVID-19, this study published investigating mental health and quality of life in asir region of Saudi Arabia.

Findings of this study suggested that participants from Asir region were mild and moderate disturbance in mental health and quality of life. 223 (90.7%) samples were mild level of disturbance and 23 (9.3%) were moderate level of disturbances and no severe level of disturbance in mental health and 50 (20.3%) were mild level of quality of life and 196 (79.7%) were moderate level of quality of life and no severe level of quality of life noticed. In the study conducted in Greece among the university students after lockdown there was a 'horizontal' increase in scores; 42.5% for anxiety, 74.3% for depression, and 63.3% increase in total suicidal thoughts. Quantity of sleep increased in 66.3% but quality worsened in 43.0%. Quality of life worsened in 57.0% (same in 27.9%). There was a 25-3fold increase in possible clinical cases of depression and an almost 8-fold increase in suicidal thoughts.[10]

The fear and anxiety related to epidemics and pandemics also influence the behavior of people in the community. Hence, this study attempted to evaluate the mental healthcare needs and quality of life in the society. It has been in the previous study the anxiety levels of covid-19 were high. More than 80 % of the people were preoccupied with the thoughts of COVID-19.[11]

The previous study reveals that, due to the outbreak of COVID-19 fear, the future workforce is getting anxious about their future career. This means, due to the outbreak of 'Fear of COVID-19' people are becoming depressed and anxious about their future career which is creating a long-term negative effect on human psychology.[12] Feeling anxious about some situations in quarantine and social isolation conditions is not a pathological mental response but a natural response.[13] As was the case previously with the Middle East respiratory syndrome coronavirus (MERS-CoV) the COVID-19 pandemic also causes panic and mental health problems for the general population. In addition, quarantine could affect the psychological health of the public. This can influence the general health and quality of life of people.[1]

Due to the vast losses associated with coronavirus (COVID-19), many people are experiencing sadness, fear, anxiety, and loneliness, as well as anger. People may be feeling anger about deep losses related to jobs, finances, normalcy, routines, cherished activities, the health of self or loved ones, or the ability to see friends and family.[14]

The COVID-19 pandemic formed a serious multi-etiological global mental health challenge influencing every aspect of life and disrupting the social fabric. COVID-19 is a situation able to bring about several fears (e.g., contamination, future, financial instability, xenophobia, and agoraphobia, etc.) and to trigger elements related to anxiety and fear (similar to specific phobias). [15]

Many research suggests that we are depleting our attention resources to avoid paying attention to irrelevant, but

emotionally charged information! Both anxiety and worry eat up the attention and cognitive resources of working memory, resulting in decreased cognitive performance, especially for complex tasks.[16] Under social isolation conditions, individuals' physical activity is also restricted, and sedentary behaviors such as sitting, lying down, playing games, watching television and increasing the use of mobile communication devices result in lower physical activity and energy consumption and consequently increase the risk for chronic health conditions. This situation also negatively affects quality of life.[17]

In all previous studies the mental health of the individuals with good relationship quality scored better than individuals with poor relationship quality or without relationship. Compared to no relationship, a good relationship quality was a protective factor whereas a poor relationship quality was a risk factor.[18]

V. CONCLUSION

This study revealed that the fear of getting corona, worrying about the spread of corona-19 which lead to less concentration, irritable and trouble sleeping at night were the main reason for the mild and moderate level of mental health. It is observed that there is a high correlation between mental health and social, which shows that there is a chance for social factors to be better COVID-19.In the Degree of Relationship between the physical, mental, social, spiritual and economic variables are Significant at 1% level

This confirms that educational intervention to overcome the mental health of the general population and create awareness among the people regarding their physical, mental, spiritual, social and economic wellbeing which will lead to better mental health and quality of life. There is a need to increase the awareness among the various media platforms about psychological challenges during pandemics and highlight the importance of seeking help and engaging in physical activity for the management of mental health disorders. Furthermore, an increase in awareness among the health care professionals in identifying and targeting the high-risk groups of the population who are at risk in developing mental health problems is vitally important

VI. ACKNOWLEDGEMENTS

Nil

VII. CONFLICT OF INTEREST

Conflict of interest declared none.

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