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**The Mental Health Status among Libyan Cases during COVID-19**

**(Original Research Article)**

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**ABSTRACT:** The emergence of the COVID-19 and its consequences has led to fears, concerns, and anxiety among individuals worldwide. The present study assessed the mental health status among sample of Libyans during the epidemic outbreak. A quantitative cross-sectional study was

conducted in the last week of March 2020 via an electronic questionnaire. The final sample consisted of 193 participants with a mean age of 37 years old. Majority of participants in the study were female (66.8%), married (55%), with a bachelor degree (60%) working in the field of education (35.8%). The current findings revealed that the most common mental anxiety was fear ( $M=3.12$ ;  $SD = .951$ ). Based on an independent t-test, males ( $M=3.19$ ;  $SD = .865$ ) had higher prevalence of fear than females.

**KEYWORDS:** Mental Health, Covid-19, Pandemic, Libyan, Fear, Psychological Impact.

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## INTRODUCTION

The infection caused by the novel corona virus (COVID-19) began in China, spread globally and was declared as pandemic by the World Health Organization. Global statistics include almost 2 million cases, about 120 000 deaths and 440 000 people recovered (WHO, 2019). While there are particular physical health indicators of the disease, such as fever, cough, myalgia, and sore throat (Huijun Chen & others, 2020), the mental health of everyone is affected. In the case of COVID-19, the mental health of people could be affected due to the approaches used to manage the disease such as locking down the country, self-isolating, placing people in quarantine and applying social distancing. Quarantine and social distancing are the separation and restriction of movement of people who have potentially been exposed to a contagious disease to ascertain if they become unwell, so reducing the risk of them infecting others (Samantha K Brooks & others, 2020).

Quarantine and social distancing are public health strategies to limit the spread of COVID-19 by separating people for a certain period of time. In recent pandemics such as severe acute respiratory syndrome (SARS), middle east respiratory syndrome (MERS) and 2009 novel influenza A(H1N1)(Yuchen Ying&others,2020) isolation and quarantine (more extreme forms of social distancing) have precipitated depression and anxiety because confined

people are detached from their loved ones, deprived of personal liberties, and devoid of purpose owing to altered routine and livelihood (Hawryluck L & others, 2004). Media has highlighted COVID-19 as a unique threat, which has added to panic, stress, and the potential for hysteria which means that individuals may be particularly vulnerable to the effects of widespread panic and threat and may therefore have increased mental health challenges (RC Jiloha, 2020).

For people living in countries such as Libya, Yemen and Syria, where conflict, war and crises create complex communities and societies because adversity is a way of life. Gharibah et al, (2020) mentioned that people Had face more than one threat, and the fears, stress, trauma and psychological concerns will be more compacted. People then struggle to cope. According to Rhouma et al (2016), due to an unstable government, access to mental health services in Libya is a problem which means mental illness is not adequately addressed and is unable to find the help they need. research shows that asylum seekers from Libya commonly experienced traumatic events in their home country such as having witnessed violence or death, risked death or was in a combat situation (Crepet, et al., 2017). The first statistics of Covid-19 cases in Libya is 51 with 1 death and 13 recovered. Although this is much less than countries such as the USA, UK, Italy and Spain, the contributory role of media and other communicative channels, could create feelings of stress, anxiety and even depression.

The current published information largely focusses on the nature of the disease and provide insight as to the mental health of people (RC Jiloha,2020). There are particular Needs to reduce mental health challenges which include a parallel epidemic of fear, anxiety, and depression.

People with mental health conditions could be more substantially influenced by the emotional responses brought on by the COVID-19 epidemic, resulting in relapses or worsening of an already existing mental health condition because of high susceptibility to stress compared with the general population (Li Duan&Gung Zhu, 2020).

One psychological aspect of the COVID-19 pandemic is fear. "Fear is defined as an unpleasant emotional state that is triggered by the perception of threatening stimuli" (de Hoog, et al., 2008). Extraordinary situations such as disease outbreaks and epidemics can induce fear among many people.

Demographic variables such as age, gender, social and economic status, and the level of education play their role in responding to various factors, including the epidemic or pandemic, and many studies did not address the impact of these variables on the individual's psychological response during the Corona epidemic, the study provides insight into the mental health status amongst a sample of Libyan participants.

## **MATERIALS AND METHODS**

### **Study Design and Participants**

A quantitative cross-sectional study was conducted to assess the public's mental health status during the epidemic of COVID-19. A snowball sampling strategy, focused on recruiting the general public Libyans who were older than 18 and had accesses to internet and

using social media such as Facebook, viber and WhatsApp.

The study was implemented via an electronic questionnaire in Google forms distributed for A period of one week. The questionnaire consisted of two parts, the first part contained questions related to personal data which are: age, gender, marital status, specialization and degree, profession, while the second part consisted of 16 items dealing with questions related to the mental health related to the Corona virus as well as approaches to self-protection.

A 5-point Likert response scale was applied ranging from never = 1 and always = 5. The average time for completion was about 5 minutes.

The questionnaire was pretested for content validity, length and comprehensibility. content validity was established by expert opinion. The pretest was conducted on 10 volunteer participants (5 males and 5 female) randomly selected from the same sample. After pretesting, no changes were required.

The Cronbach alphas were .86 for fear, .77 for anxiety, .64 for depression and .87 for overall mental health.

### ***The Ethic of the Study***

A paragraph was included at the beginning of the questionnaire asking the participant in the study about his/her approval of whether or not to participate in the study and this paragraph is necessary to continue answering the rest of the questions, and if he/she expressed his/her disagreement then he/she would be excluded from the study sample.

## **RESULTS**

The majority of participants in the study were female (66.8%), married (55%), average age of

37 years, with a bachelor degree (60%) and in the field of education (35.8%).

participants often thought their immunity would protect them from the Corona virus.

**Table 1: Demographic Information of Participants.**

Variables		N	%			
<b>Gender</b>	Male	64	33.2			
	Female	129	66.8			
<b>Family Structure</b>	Single	87	45.1			
	Married	106	54.9			
<b>Education Level</b>	Undergrad Degree	118	61			
	High school diploma	9	4.7			
	Higher Diploma	27	14.0			
	Master	20	10.3			
	PhD	19	9.8			
<b>Occupation</b>	Health	30	14.15			
	Engineer	16	8.3			
	Commerce	1	4.7			
	Technical	8	4.1			
	Education	69	35.8			
	Law	3	1.6			
	Unemployed	19	9.9			
	Other	39	20.2			
	<b>Age</b>		<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>M</b>
		193	18	68	37.2	10.45

They were sometimes unsatisfied with the media messaging to reduce the risk of the virus, always washed their hands to prevent the virus, and often sterilized their homes to prevent infection with the virus

In Table 3, the mental health of the total sample of participants was assessed and showed that the most prevalent feeling was fear ( $M=3.12$ ;  $SD = .951$ ). Based on an independent t-test, males ( $M=3.19$ ;  $SD = .865$ ) had higher prevalence of fear than females ( $M=3.09$ ;  $SD = .992$ ).

This was similar for overall psychological factors. Depression was more prevalent amongst females. These findings were, however, not significant.

In terms of the role of family structure in the psychological factors, fear, anxiety and feeling depressed, single and married participants were compared by using an independent t-test.

The results in Table 4 suggest that, fear was significantly more prevalent amongst married participants ( $M=3.27$ ;  $SD = .863$ ) than those who were single ( $M= 2.93$ ;  $SD = 1.022$ ).

Although not significant, married participants experienced more psychological factors than those who were single.

Participants were asked about their self-protection during COVID-19. In Table 2,

**Table 2: Perceptions of and Behaviors towards COVID-19**

Variables	Never	Rarely	Sometimes	Often	Always
I thought my immunity would protect me from the Corona virus	21 (10.9%)	11 (5.7%)	57 (29.5%)	65 (33.7%)	39 (20.2%)
I am not satisfied with news that reduces the risk of infection with the Corona virus	42 (21.8%)	26 (13.5%)	69 (35.8%)	28 (14.5%)	28 (14.5%)
I wash my hands frequently to prevent infection with corona virus	5 (2.6%)	6 (3.1%)	22 (11.4%)	62 (32.1%)	98 (50.8%)
I frequently sterilize the home to prevent infection with the Corona virus	18 (9.3%)	12 (6.2%)	48 (24.9%)	59 (30.6%)	56 (29%)

**Table 3: Prevalence of Mental Health in Terms of Gender.**

Variables	Total Sample		Females		Males	
	N	M(SD)	N	M(SD)	N	M(SD)
Fear	193	3.12(.951)				
Anxiety	193	1.45(.690)	129	3.09(.992)	64	3.19(.865)
			129	1.42(.647)	64	1.52(.772)
Depression	193	1.95(.968)				
			129	2.01(1.021)	64	1.81(.843)
Psychological Factors	193	1.95(.968)	129	2.36(.743)	64	2.41(.663)

**Table 4: Prevalence of mental health in terms of Family Structure.**

**DISCUSSION**

Variables	Single		Married		t	p
	N	M(SD)	N	M(SD)		
Fear	87	2.93(1.022)	106	1.45(.624)	.099	.013*
Anxiety	87	1.46(.767)	106	1.45(.863)	.099	.921
Depression	87	1.92(1.029)	106	1.94(.919)	-.277	.782
Psychological Factors	87	2.36(.804)	106	2.46(.629)	-1.65	.100

The attention of the world is rightly focused on measures to mitigate the transmission and economic effect of the 2019 novel corona virus disease (COVID-19) pandemic. In this rapidly changing situation, media and social conversations are entirely dominated by the outbreak, and people are exposed to large amounts of information and high levels of stress and anxiety. Simultaneously, people are experiencing substantial changes to their daily routine and social infrastructure, which ordinarily fosters resilience to challenging events that conform this study finding where there was fear, was common among the study sample, especially among men.

The uncertainty about the personal and global effects of COVID-19 is creating great concern, in addition to the specific psychological effect of quarantine. Men preoccupation with the implications of COVID-19 might compromise their ability to sensitively recognize and respond to their families’ cues or distress (Louise Dalton, Elizabeth Rapa and Alan Stein,2020). On the other hand, women showing more depressive feelings than me, which expected according to their sensitive character and concern about their families and children (liu et .al 2020).

This is also confirmed by the results of the current study where fear was significantly more prevalent amongst married participants than those who were single. Additionally the majority of participants in the study were mainly female (66.8%), married (55%), and result reported in many studies were done in chain (NianqiLiu et.al, 2020) Denmark (Kim Sønderskov et.al 2020) and Iran(Amir H. Pakpour A. &Mark D. Griffiths, 2020).

While we cannot rule out alternative explanations, the results of this study suggest that the psychological well-being of the general Libyan population is affected negatively by the COVID-19 pandemic, and more so for females than for males. This resonates well with results from surveys conducted in other countries, and will likely translate into increased demands for psychiatric treatment in the wake and aftermath of the pandemic (RC Jiloha, 2020, Ahorsu, D.K., Lin, C., Imani, V. et al, 2020).

Despite that Libya is experiencing political instability with the transitional government struggling for more than 9 years to restore security, rule of law and public services, all sectors of the state were affected by these political fluctuations where Health services had suffered over the years due to lack of medical leadership, government bodies and regulatory bodies to monitor the quality of health services.

Exposure to violence and terror of all kinds will increase the incidence of problems such as post-traumatic stress disorder, and is likely to lead to a substantial mental health (Abdul Hakim Rhoum et al , 2016), where the mental healthcare that does exist in Libya is mainly in the form of highly centralized institutional in-patient services. There are two hospital services for the entire population, located in two large cities; Patients usually present at a very late stage of illness, and most admissions are involuntary. Patients’ family members or other careers normally try to manage the

situation without seeking any help, due to stigma. It is more acceptable for spiritual healers to be considered as the first option. The next step is usually the patient's general practitioner (GP), because it is seen as less stigmatizing. Psychiatrists are generally the last resort for patients and family (Abuazza, A. 2013).

Present result showed that participants often thought their immunity would protect them from the Corona virus, always washed their hands to prevent the virus and often sterilized their homes to prevent infection with the virus, despite that COVID-19 is highly infectious and can be transmitted through droplets and close contact. Some Patient's health condition is life-threatening and such disease has posed a great threat to global health and safety, so to control the spread of the epidemic and reduce the mortality as soon as possible is our burning issue.

But by far, the specific mechanism of the virus remains unknown, and no specific drugs for the virus have been developed. At present, it is important to control the source of infection, cut off the transmission route, and use the existing drugs and means to control the progress of the disease proactively. so as to better protect the safety of people's lives, take on consideration no recent study present results ensure that the immunity of person could prevent him from catching the infection.

When new diseases strike human societies, limited knowledge regarding disease-causing agents or vectors or modes of transmission become a huge limitation. What is happening with regard to Corona virus disease 2019 or COVID-19 is almost similar, participants of this study were sometimes unsatisfied with the media messaging to reduce the risk of the virus. WHO has published many messages for the general public asking them to codify the information they receive about the pandemic, minimize watching, reading or listening to news about COVID-19 that causes you to feel

anxious or distressed; seek information only from trusted sources and mainly so that you can take practical steps to prepare your plans and protect yourself and loved ones. Seek information updates at specific times during the day, once or twice.

The sudden and near-constant stream of news reports about an outbreak can cause anyone to feel worried.

Get the facts; not rumors and misinformation. Gather information at regular intervals from the WHO website and local health authority platforms in order to help you distinguish facts from rumors.

Facts can help to minimize fears (WHO,2020). Some studies insure the activities on the social media especially WhatsApp have increased largely due to the fear and the free time available due to shut-downs.

Given the very positive experience of the use of social media during natural calamities like floods and in other countries, social media can be useful in disseminating reliable and useful information to the people rather than merely circulating government orders and instructions. However, it is extremely important that the negative role of the social media in increasing fear and panic needs to be controlled (Nayar, K Rajasekharan and others 2020).

Based on the foregoing, there is a need for a presence of primary psychological services in Libya like all other countries, as circumstances have proven that Libya as a country cannot be excluded from any situation that may affect the world.

Therefore, we must be ready to face any developments on any level in addition to taking into account the importance of communication and information that arrives through various means of communication and the extent of their impact on individuals

## **LIMITATIONS**

There are few limitations to this study that warrant a discussion. Due to the use of an electronic questionnaire, many of people cannot answer it since using the electronic copy not the usual thing. In addition, the voluntary nature of the survey may have created a selection bias of the study sample. In this study, participants could have provided a more positive picture toward what happen exactly. This was also a limited number of Responses thus; the generalization of the result would be limited by time that had elapsed since the most stressful period of the peak of the outbreak.

### CONCLUSION

This study has discussed the possible psychological effects of corona virus on a sample of Libyan community members, taking into account what was presented by various studies from different countries, all of which emphasized the psychological impact of the pandemic, and this is what the results of this study presented. In addition to its interest in variables whose relationship to impact has been shown the psychological epidemic of Corona, such as the gender, was affected by the COVID, and the social situation, despite the important results presented by this study as the first study in the Libyan society, there are many limits in terms of sample size, the multiplicity of variables and deeper research in the oil influences Possible relevance. This is what this study recommends in terms of the possibility of conducting future studies.

### COMPETING INTERESTS

We (authors) declare that we have no conflict of interest.

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