

Stress relievers of social distancing adopted by the general public in the Covid-19 pandemic

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ABSTRACT

This survey found that the majority of participants are uncomfortable and unable to stop worrying during the pandemic, which might be due to unexpected shifts in socializing being replaced by social distancing. The COVID-19 pandemic has an impact on worldwide populations and transforms people's lifestyles when they know about social distancing for the first time. This study consists of a survey of the general population during the pandemic for their stress-coping methods during the period of March 2020 to January 2021. A total of 403 individuals were recruited in this study, among them 267 (66.3%) females and 136 (33.7%) males. Most of the study participants were healthcare providers. This survey found that the majority of participants are uncomfortable and unable to stop worrying during the pandemic, which might be due to unexpected shifts in socializing being replaced by social distancing. The survey found different coping strategies in the Pakistani population for coping with anxiety and depression during the peak days of lockdown. Among them praying, using social media, and watching movies are mostly observed activities. Eight coping strategies were found: Praying, watching movies/series, using social media and socializing with loved ones (e.g., through video calls), cooking, engaging in exercise, being occupied with gardening, engaging in meditation activities, and medication.

KEYWORDS: COVID-19, stress, anxiety, social distancing, stress relievers

INTRODUCTION

The pandemic of the new coronavirus disease 2019 (COVID-19) posed a significant threat to the general population's physical and mental wellbeing [1]. The first case of covid 19 was identified by the world health organization's (WHO) China office on 31st December 2019 in Wuhan City, Hubei Province, China [2]. In many decades, it is the third time a zoonotic coronavirus has affected the human population. The Chinese public health and medical community's rapid response enabled this clinical disease identification and initial understanding of the infection's epidemiology [3]. It was declared a global health emergency due to COVID 19 outbreak by WHO on January 30, 2020. It is related to the same family of viruses as common cold and SARS, however, SARS was the most well-known case of coronavirus epidemic [4]. COVID-19 are a wide group of viruses that can affect both animals and human, and can cause respiratory diseases in humans ranging from common colds to even more severe infections [2]. The

characterization of COVID-19 as a pandemic does not suggest that the virus has become more lethal. Rather it is recognition of the global distribution of the disease.

Coronavirus 2019 can spread through tiny droplets, like many other respiratory viruses, that are released from an infected person's mouth and nose as they cough as it may produce up to 3000 droplets. These droplets can land on people's clothes and surfaces around them [5]. To prevent further spread of coronavirus, social distancing is advised; which is a public health practice that will reduce the disease transmission and flatten the curve. [6]A global pandemic's outbreak induces fear and anxiety among others, and allegedly affects every individual's cognitive well-being. Due to the perpetuated possible consequences of the COVID-19, the lives of infected people, friends and family are at stake [7]. Because of this pandemic COVID-19 outbreak, it can be stressful for people as they are at social distancing and they fear about their own health and health of their loved ones. Fear and anxiety about a disease can be debilitating in adults and children and trigger intense emotions. Coping with stress will improve you, the people you care for, and your society [8]. Everyone responds to stressful situations differently so how you respond to the outbreak will rely on your history, cultural difference and the things that make you different from others. People who are more at risk include older people, those who are already suffering from chronic disease, people with mental health conditions and health care providers. So, they respond more strongly to the stress of this COVID 19 outbreak. Due to COVID 19 pandemic, people are stuck indoors and getting stressful about their own safety and safety of their loved ones, people are having disturbed eating and sleeping pattern, difficulty in concentrating, worsening of chronic health conditions, over the counter use of drugs, increase in rate of drinking alcohol and smoking tobacco [8, 9].

It is important to recognize that its initiation and spread can lead to cognitive dysfunction, anxiety and public fear, which can lead to negative assumptions [10]. Those who suffer from mental disorders such as anxiety and depression, self-quarantine is particularly more stressful for them. In this chaotic time, it is necessary to look after yourself and engage yourself in something that relieves your stress [11]. This study aims to evaluate different types of stress relievers and the things people do to support themselves working mostly in COVID 19 crisis and the current lockdown period.

Objectives

1. To assess the relation of stress relieving factors in general public because of social distancing.

MATERIALS AND METHODS

This was a cross sectional study conducted by the students of Masters in Healthcare management and Master of Philosophy, Ziauddin University Clifton Karachi from March 2020 to January 2021 during COVID-19 Pandemic lockdown. The sample size was calculated based on the proportion of 50% at bound of error 5% and confidence interval of 95%. It was calculated as $n=384$, but was increased to 403. A total 403 individuals (18 and above) of both genders were recruited in this study and individuals who were unable to give consent or had language barrier were excluded from this study. It was a questionnaire-based study in which a set of questions were asked using

Google forms. Two types of Performa were made; one was based on the demographic data while the second was based on stress relieving factors possibly used by the general public during quarantine of Covid-19. Non- Probability convenient sampling technique was used. Ethical approval was taken from Ziauddin University Ethical Review Committee (ERC). The questionnaire was shared with the general public through social media forums i.e.WhatsApp, Facebook & email. Responses were collected for a period of three days. Data were analyzed using SPSS version 20. The results were expressed as frequencies and percentages and chi square test was applied to test the significance.

RESULTS

A total number of 403 participants submitted their response in duration of 04 days for the study. In this study, there were 267 (66.3%) females and 136 (33.7%) males, most of them were from Karachi 189 (46.9%) and followed by Islamabad 88 (21.8%). Educationally 98 (49.1%) were graduate, 182 (45.2%) were highly educated (postgraduates) and among them 190 (47.1%) were Health care providers (Doctor and Dentist). Majority of the participants work in a public sector 286 (71%) and 362 (89.8%) were working from home because of the pandemic situation. The demographic data of the subjects are given as shown in Table 1.

Table 1: Demographic data

Characteristics	Groups	Number of participants (n)	% of participants
<i>Age groups (years)</i>	<20	9	2.2
	20-30	212	52.6
	30-50	143	35.5
	>50	39	9.7
<i>Gender</i>	Male	136	33.7
	Female	267	66.3
<i>Marital Status</i>	Single	142	35.2
	Married	252	62.5
	Divorced	4	1
	Widowed	5	1.2
<i>Educational Status</i>	Middle school	5	1.2
	Matric/ O level	4	1
	Intermediate / A level	14	3.5
	Graduate	198	49.1
	Postgraduate	182	45.2
<i>Work Set-up</i>	Private	286	71
	Public	117	29

This pandemic has reminded us that human connection can spread illness but this connection is also important to stay mentally well. Almost 254 (63%) felt anxious and nervous and 213

(52.9%) were unable to stop worrying when they were asked about their feelings regarding social distancing during this pandemic. Most of their quarantine time was spent sleeping and doing house chores. The coping strategies utilized to relieve the stress and its significance is given in Table 2.

Table 2: Coping strategies in the lockdown of COVID-19 (n=403)

Stress relievers	Response in frequency	
	n (%)	
	Yes	No
<i>Social media</i>	207 (51.4)	196 (48.6)
<i>Exercise</i>	130 (32.3)	273 (67.7)
<i>Watch Movies/ series</i>	218 (54.1)	185 (45.9)
<i>Pray</i>	284 (70.5)	119 (29.5)
<i>Gardening</i>	43 (10.7)	360 (89.3)
<i>Cooking/baking</i>	174 (43.2)	229 (56.8)
<i>Medication</i>	29 (7.2)	374 (92.8)
<i>Meditation</i>	43 (10.7)	360 (89.3)
<i>Others</i>	47 (11.7)	356(88.3)

Table 3: Comparison of coping strategies between males and females

Characteristics		YES	NO	P-value
<i>Sleep</i>	Male	72	65 (137)	0.051
	Female	113	154 (267)	
House chores	M	41	96 (137)	0.000
	F	180	87 (267)	
<i>Cook</i>	M	26	111	0.000
	F	157	110	
Study	M	40	97	0.815
	F	75	192	
<i>Exercise</i>	M	40	97	0.138
	F	60	207	
Work from home	M	74	63	0.000
	F	61	206	
<i>Others</i>	M	22	115	0.171
	F	30	237	

Maintaining their routine, and healthy lifestyle, spending quality time with family, and talking to their friends made them more positive and connected. Participants with kids at home engage them by playing with them 130 (32.3%), involving them in house chores 77 (19.1%), and doing homeschooling 51 (12.7%). Thus, 270 (67%) were staying inside and 133 (33%) were still going out, and they were just going out for groceries or in an emergency. During the lockdown, even if the weather is nice, 171 (42.5%) participants never opted to go out to enjoy themselves. When gender was compared with coping strategies, females showed higher frequency in prayers and cooking/baking observing significant findings with p -value=0.002, 0.000 respectively and cooking/baking with a, 0.000 (Table 3).

DISCUSSION

In the current study, we briefly interviewed the Pakistani populace to assess the psychological effects of the COVID-19 epidemic and its contributing elements. In addition to the evident illness and mortality, this pandemic caused psychological suffering and negative mental effects on the populace, which has spent the last 2 years under constant lockdown and quarantine. The lockdown and curfew restrictions in Pakistan have had an impact on everyday life and led to psychological issues [12]. COVID-19 has impacted the mental health of people at various levels of society due to the pathogenicity of the virus high mortality rate, and rate of spread, including infected patients, healthcare workers, families, kids, students, patients with mental illness, and even workers in other sectors [13, 14, 15].

Everyone deals with stress and anxiety in different ways, but some people experience it more than the other. People who were more stressed in this COVID-19 pandemic include adults who were at high risk for getting a severe form of the illness or have co-morbid conditions, people with mental disabilities, and healthcare professionals, such as nurses, doctors, and staff members who are in direct contact with the affected individuals [16]. Using the depression, anxiety, and stress scale - Short Form, Wang et al. conducted a comparable survey on Chinese to confirm the psychological consequences of the COVID-19 epidemic (DASS-21) [17].

Millions of people have experienced lockdowns. Many of them have lost their jobs as a result of the abrupt move to working from home [18]. In this study, when participants were asked about social withdrawal during this epidemic, about 254 (63%) expressed anxiety and nervousness. The hardest thing to deal with for many people is the ambiguity surrounding coronavirus. When asked about their thoughts regarding the social isolation they experienced during this epidemic, 213 participants in our survey (or 52.9%) reported that they were unable to stop worrying. Survey results identified that majority of the participants 283 (70.2%) were praying to cope up with stress out of which 202 (50.1%) were females. According to a recent study, anxiety and depression were much more common in males than in females among healthcare professionals who were in contact with COVID-19 patients (38.75 and 45.95%, respectively) [19, 20].

The current study demonstrated, mostly people of Pakistan coped with the stress by using social media (51.4%), watching movies (54%) and by praying (70%). People frequently turn to religion for peace during difficult times and the pandemic of COVID-19 is no exception. A study by Bentzman et al., showed that the COVID-19 issue has caused Google searches for prayer to

reach their highest level ever seen (relative to all Google searches), which is similar to our survey findings (**Table 2**). More than half of the world's population has prayed to eradicate the coronavirus [21].

In our study, other than praying, people are coping with the stress by watching movies (218 – 54.1%) and using social media (207 - 51.4%). In a similar study by Cauberghe et al., stated that anxious individuals reported using social media more frequently to actively explore ways to adjust to the present circumstance, and less frequently to remain in touch with friends and family. Anxiety has a strong beneficial indirect influence on happiness via active coping. Participants who were lonely were more likely to utilize social media to compensate for a lack of social contact [22]. Psychological distress and anxiety that go untreated for a long time might lead to more severe mental health problems [23].

In our study, almost 254 (63%) felt anxious and nervous and 213 (52.9%) were unable to stop worrying when they were asked about their feelings regarding the social distancing during this pandemic. In light of the results of this study, it is clear that an alarmingly high number of people felt anxious and nervous and are using different stress relievers to cope up with the anxiety and depression caused by the COVID-19 pandemic. Similarly, a recent study in Brazil found that anxiety and depression can impact people who are likely exposed to high levels of stress and are on the front lines when it comes to infections, such as those working in healthcare [24]. Furthermore, additional research done in China found that physicians and nurses had significant levels of stress and anxiety [25, 26].

Some of the limitations of this survey included smaller sample numbers and self-administration of the tests. Additionally, it may be influenced by self-reported bias when people react to news and popular opinion. Furthermore, we were unable to compare stress relievers prior to and following covid-19, which might be a future recommendation.

CONCLUSION

The pandemic of COVID-19 has had a severe influence on public mental health, as a result people of Pakistan adopted different coping strategies. Among all the coping strategies, praying was the most common strategy found maybe due to religious believes in Pakistani population, other than praying, watching movies and using social media were also mostly used.

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