Journal of
Research in Psychopathology **2021; Vol. 2, No. 5**
https://dx.doi.org/10.22098/jrp.2021.1399

Original Article

Mental disorders, impact of event and psychological well-being based on the source and duration of social media during the corona pandemic

Mahnaz Akhavanfar *

1. Master of Personality Psychology, Azad Eslamic University, Tehran, Iran.

Abstract

The coronavirus pandemic has caused crises affecting the mental health of the people. In addition, in any social crisis, people often seek out information about the event to be aware of what is happening. The aim of this study is the comparison of mental health problems according to the type of social media exposure and also the duration of its use at the time of corona pandemic. The population of the study was all men and women ranging from 15 to 60 years old in the whole country who participated in the study voluntarily and included a total of 656 participants. To this aim, Mental Health Questionnaire, the Psychological Well-Being Scale, the Impact of Event Scale, the Yale-Brown OCD Scale, and the researcher-made questionnaire on the duration and source of social media were employed. The type of media that people used to follow the news showed a significant difference on psychological well-being, impact of event, anxiety and depression. On the other hand, follow-up time can cause differences in anxiety, stress and psychological well-being between groups. The interaction between duration factor and source type only caused differences in depression, anxiety, and psychological well-being. It should be noted that the prevalence of mental disorders does not show a significant difference, except for stress, which shows a doubling of growth. The interaction of the type of media and the duration of following the news from those media can cause mental health problems and reduce psychological well-being because unreliable social media creates a lot of ambiguity that increases anxiety and stress and the impact of events such as corona pandemic.

Keywords

Anxiety
Corona
Depression
Psychological well-being

Received: 2021/06/08
Accepted: 2021/06/15
Available Online: 2021/06/30

Introduction

In December 2019, a new strain of the corona virus (nCoV-2019) was identified in Wuhan, China, and spread rapidly throughout China. According to the World Health Organization, by mid-June 2020, more than 13.5 million people had contracted the disease and more than 500,000 had died from the coronavirus. The epidemic spread from China to other countries, and in a short time to regions in Southeast Asia (Thailand, Singapore, Malaysia and the Philippines), East Asia (Japan and South Korea), South Asia (India and Nepal), Asia (UAE and Iran), Europe (Italy, Germany, Britain, France, and Spain) and the Americas (Canada and the United States) were affected (World Health Organization, 2020).

In this regard, the spread of coronavirus has caused problems in the mental health of people in many parts of the world (Cucinotta & Vanelli, 2020) and institutions related to the health and well-being of countries have issued instructions to officials and the public. Despite the implementation of these policies and their positive consequences, the negative psychological effects are also widely observed in society (Wu & McGoogan, 2020). Fear of illness, fear of death, spreading false news and rumors, interfering with daily activities, travel

Corresponding author: Mahnaz Akhavanfar, M.A. in Personality Psychology, Islamic Azad University, Tehran. Tehran, Iran. E-mail: rahe.abrisham688@gmail.com.

prohibitions or restrictions, reducing community relationships with co-workers, friends and family, occupational and financial problems, high risk of infection Inadequate protection against pollution, frustration, discrimination, isolation, negative emotions, fatigue and dozens of other consequences of these conditions threaten the mental health of society (Shigemura, Ursano, Morganstein, Kurosawa, & Benedek, 2020) and the result of the current situation, creating mental health problems such as Stress, anxiety, depressive symptoms, insomnia, denial, anger and fear (Jones, Thompson, Schetter, & Silver, 2017). These problems not only affect people's attention, perception and decision-making ability, but also prevent the fight against coronavirus and can have a lasting effect on overall well-being (Kang, Li, Hu, Chen, Yang, 2020).

Experience of epidemic diseases has shown that the occurrence of infectious diseases such as respiratory diseases due to serious physical and mental problems will reduce the quality of life of patients (Dong, Wang, Tao, Suo, & Li, 2019). In 2003, for example, during the SARS virus Prevalence in Singapore, 27% of health care workers reported symptoms of mental illness. Also in the same year, during the Prevalence of the disease in Taiwan, many people developed post-traumatic stress disorder (Li, Guan, Wu, Wang, & Zhou, 2018). People infected with the Mers virus (MERS) in South Korea in 2015 showed symptoms of stress disorders that increased even after quarantine (Srivatsa & Stewart, 2020). Similarly, during the Ebola Prevalence in Sierra Leone in 2014 and in the Democratic Republic of the Congo in 2018, some people had to endure high levels of anxiety and the significant impact of social labeling as sick or in direct contact with infected patients. (Park, Lee, Park, & Choi, 2018). People with these types of illnesses actually report feelings of isolation and fear of transmitting the virus to others (Li et al., 2018). Psychological well-being among individuals during the Prevalence of the Morse virus in 2015 in 2015 has been considered important for adaptation and tolerance of the label as an infected person and has a positive effect on mental health (Shigemura, 2020).

In addition to the problems faced by such contagious diseases, following any social crisis, people often seek out information about the event to be aware of what is happening. However, when information is disseminated through informal or irregular channels, individuals may be exposed to some misleading social and media information (Gao, Zheng, Jia, Chen, & Mao, 2020). In fact, fear of the unknown situation leads to higher anxiety in healthy people with mental health problems (Lu, Stratton & Tang, 2020). So specifically about coronavirus, people go to information about how it spreads, how to stay safe, how to get infected, and how to treat it, especially in cyberspace, to reduce their fear and anxiety about this unknown reality.

Although official news organizations and institutions use all information capacities as well as other individuals and centers using cyberspace, try to provide news updates on social media, awareness Improve people in prevention and intervention strategies, but many personal media outlets and citizens publish true and false information that can lead to more ambiguity (Merchant, 2020) and with conflicting information and rumors. In turn, they cause mental health problems, inject pessimism into society, increase worry and anxiety, and create more insecurity and fear in society (Ahmadrad & Farid, 2020).

The World Health Organization notes that the identification of the main causes of fear, anxiety, and depression that lead to misinterpretation of information and rumors, especially through social media, is very high (Depoux, Martin, Karafillakis, Preet, Wilder-Smith, & Larson, 2020). Studies show that indirect exposure to the mass media through the media can increase the initial rate of post-traumatic stress disorder (PTSD) (Gao et al., 2020). A study also found that social media exposure was positively associated with stress during the Mers virus Prevalence in South Korea (Choi, Yoo, Noh & Park, 2020).

However, no study has been conducted to examine the association between exposure to the type of social media as well as its duration of use and coronavirus-related mental health problems. Therefore, the present study aimed to investigate the differences between anxiety disorders, depression, obsession, stress, as well as psychological well-being and the extent of coronavirus exposure by exposure to the type of social media and the duration of use of those media in it was done during the coronavirus pandemic.

Method

Participants

This research was applied and quasi-experimental and its data were collected online. The statistical population of the study was all men and women between the ages of 15 and 60 years in the whole country who entered the study voluntarily by sending the link of the questionnaires in cyberspace. The reason for this sampling was the existence of special conditions due to the spread of coronavirus. A total of 743 people completed the questionnaires, of which 87 did not meet the entry and exit criteria in responding to the items and were excluded from the sample. Finally, 656 participants of the present study were included. Before conducting the research, the researcher gave a full explanation of how to respond to the items.

First the Demographic Questionnaire and then Anxiety, Depression and Stress (DASS), Ryff Psychological Well-Being Scale, Bill-Brown Obsessive-Compulsive Disorder, and the revised Accident Impact Scale and the researcher-made questionnaire on the duration and source of social media use, which directly referred to the coronavirus, were presented as the last questionnaire.

It should be noted that the inclusion criteria include the ability to complete web-based questionnaires and complete satisfaction in doing so. Exclusion criteria also included giving extreme answers to each of the

questionnaires (marking only the options at the bottom of the spectrum) and not answering more than four items in each of the questionnaires.

Instrument

Anxiety, Depression and Stress Questionnaire (DASS)

The Anxiety, Depression and Stress Questionnaire (DASS) was developed by Levibond et al. In 2017. This questionnaire has two forms that in the present study, the 21-item form has been used, each of which has its dimensions measured by 7 items. The subject should note the intensity of the symptom in each item he / she has experienced during the past week. Each question has a five-point Likert scale. Lovibond showed that retest validity was 0.71 for depression, 0.81 for stress, and 0.79 for anxiety (Lovibond et al, 2017). The validity and reliability of this questionnaire in Iran have been evaluated by Samani and Jokar (2010) which the reliability of the retest method for the scale of depression, anxiety and stress is 0.80, 0.76 and 0.77 and Cronbach's alpha, respectively. For the scale of depression, anxiety and stress were reported as 0.81, 0.74 and 0.78, respectively.

Psychological Well-Being Scale

The Psychological Well-Being Scale was designed by Ryff in 1989 and revised in 2002. Short and 18-question version of the Psychological Well-Being Scale, this version includes six factors including independence, mastery of the environment, personal growth, positive communication with others, purpose in life and acceptance. The sum of the scores of these six factors is calculated as the overall score of psychological well-being. This test is a kind of self-assessment tool that is answered in a six-point continuum from "Strongly Agree" to "Strongly Disagree", the higher the score, the better the psychological well-being. The correlation between the short version of the Reef Psychological Well-Being Scale and the main scale ranged from 0.7 to 0.89 (Ryff & Singer, 2006). Khanjani et al., (2015) also studied the psychometric properties of this form of Reef Psychological Well-being Scale among students. The six-factor model of this scale has a good fit and the internal consistency of this scale using Cronbach's alpha is equal, respectively. With 0.51, 0.76, 0.75, 0.52, 0.73, 0.72 and for the whole scale 0.71.

Revised Accident Impact Scale

The revised Accident Impact Scale was developed by Horowitz et al. In 1979. This test was initially used to investigate the effect of grief in individuals, but gradually it was used for different types of injuries. A 22-item questionnaire, of which 8 items are related to avoidance symptoms, 8 items are related to disturbing thoughts, and 6 items are related to arousal symptoms. This questionnaire is completed as a self-report and he / she is asked to complete the questionnaire according to his / her symptoms in the last seven days. The scoring of this scale on the five Likert scale ranges from never to very high (Horowitz et al, 1979). The validity and reliability of this tool has been studied in several studies, for example, the Chinese, French and German versions have had high validity and reliability. Also, Panaghi (2016) in its Persian version expressed good internal consistency with Cronbach's alpha between 0.67-0.87 and test-retest reliability between 0.8-0.98.

Yale-Brown Obsessive-Compulsive Disorder (Y-BOCS)

The Yale-Brown Obsessive-Compulsive Disorder (Y-BOCS) was developed by Goodman et al. In 1989 to assess the severity of obsessions and coercions, regardless of the number and content of current obsessions and coercions. Unlike other questionnaires in this field, it is highly sensitive to therapeutic changes and is widely used to evaluate the effectiveness of treatments and diagnosis. This scale has two parts: one is the list of symptoms and the other is the severity of the symptoms. 16 items related to obsessive-compulsive disorder symptoms are answered in five options and self-reported. The algebraic sum of scores gives three scores related to obsessive thoughts, compulsive actions, and a total score that includes all items. The reliability and validity of this scale have been studied and reported as desirable in most languages and cultures (Goodman et al, 1989). In Iran, Rajazi et al. obtained the internal stability of obsessive thoughts, coercive actions and the total score of 0.97, 0.95 and 0.93, respectively, and the validity of halving 0.89, 0.91 and 0.94, respectively.

Social Media Duration and Source Questionnaire

Social Media Duration and Source Questionnaire: Researcher Made: In this questionnaire, participants were asked what sources do they follow the news and information about Corona and its prevalence in the country? Options (a) Hearings and quotes from others, (b) Reliable media including radio and television news and reputable news sites, (c) Media in cyberspace including Telegram and Instagram, and (d) insignificance to the source of the news, were available in response. There was also a question about how long to follow the news about Corona, which is in the form of options no (I do not follow information about Corona at all), partial (less than 15 minutes per day), medium (15 minutes to an hour). Per day), high (1-3 hours per day), and very high (more than 3 hours per day).

Data analysis and mean comparison in groups were performed by intergroup factor analysis method using SPSS software version 21.

Results

In the present study, 656 participants were present, of which 445 were women (67.8%) and 211 were men (32.2%) with a mean age of 30.11 and a standard deviation of 7.69. Was. Also, 216 people (32.9%) had bachelors and master's degrees, 89 people (13.6%) had

associate degrees, 231 people (35.2%) had bachelor's degrees, and 120 people (18.3%) had postgraduate studies. Of these, 281 (42.8%) were employed, 184 (28%) were students, 81 (29.1%) were unemployed and 110 (19.76%) were retired. In addition, 320 single people (48.8%), 301 married people (45.9%) and 35 people (5.3%) were divorced. Also 93 people (14.2%) from the hearings and quotes of others, 327 people (49.8%) lack of importance to the news source, 80 people (12.2%) media in cyberspace including From Telegram and Instagram and 156 people (23.8%) from reputable media including TV news and reputable news sites have chosen to know the news related to Corona virus. In addition, 66 people (10.1%) do not follow the coronavirus information at all, 303 people (46.2%) less than 15 minutes a day, 168 people (25.6%) 15 minutes to One hour a day, 61 people (9.3%) spend 1-3 hours a day and 58 people (8.8%) follow the coronavirus news for more than 3 hours a day. Table 1 also shows the descriptive statistics of the research variables:

Table 1. Descriptive Statistics of Research Variables

			Percentage of severity			K-S		Leven			
Variable	Average	SD	Low	medium	Intense	K-S	sig	F	df1	df2	sig
OCD	10.83	8.77	61.1	35.5	3.4	1.14	0.14	0.73	18	637	0.78
Event effect	27.12	15.51	50.3	41.3	8.4	1.04	0.22	0.74	18	637	0.79
Anxiety	5.21	4.07	70.9	27.1	2	1.05	0.23	1.04	18	637	0.45
Depression	6.22	4.55	62.8	32.8	4.4	1.24	0.11	1.26	18	637	0.2
Stress	7.6	4.51	50.6	41.6	7.8	0.98	0.07	1.37	18	637	0.13
Well Being	64.39	12.03	31.9	52.6	15.5	0.31	0.64	1.46	18	637	0.09

The table above shows that the frequency of mental disorders that are likely to be diagnosed in each category is less than 10%. It is also shown that the distribution of data in all variables is normal. Leven test also shows the similarity of variance of variables among groups. According to the results of these two tests, parametric analysis of intergroup factor analysis can be used. In this regard, the table shows the two Wickels lambda for comparison within the group.

Table 2 shows that there is a significant difference between the groups in the study in terms of the type of media source, its duration and the interaction between the two. Therefore, for a more detailed study of intergroup factor analysis, it is given in Table 3:

Table 2. Intragroup Differences of Variables with Wickels Iambda Test

Sig	Df error	Df	F	Value	Effect
0.001	630	8	918.47	0.079	Intercept
0.006	1827.79	24	1.87	0.93	Media source
0.02	2324.92	32	2.19	0.94	Duration of follow-up
0.01	4140.64	88	1.37	0.82	source * Duration

Table 3. Intergroup Effects Test

Effect	Variable	SS	Df	MS	F	Sig
model	Depression	1153.15	18	64.06	3.28	0.001
	Anxiety	895.13	18	49.73	3.17	0.001
	Stress	693.71	18	38.53	1.93	0.011
	Well Being	8347.42	18	463.74	3.41	0.001
	Event effect	16242.38	18	902.35	4.06	0.001
	OCD	1712.86	18	95.15	1.24	0.22
intercept	Depression	5628.99	1	5628.99	288.44	0.001
	Anxiety	3950.92	1	3950.92	252.53	0.001
	Stress	7855.94	1	7855.94	394.94	0.001
	Well Being	599913.25	1	599913.25	4412.79	0.001
	Event effect	118707.27	1	118707.27	534.97	0.001
	OCD	16664.01	1	16664.01	217.7	0.001
Media source	Depression	322.99	3	107.66	5.51	0.001
	Anxiety	277.14	3	92.38	5.9	0.001
	Stress	145.95	3	48.65	2.44	0.06
	Well Being	893.26	3	297.75	4.19	0.03
	Event effect	3213.13	3	1071.04	4.82	0.002
	OCD	280.05	3	93.35	1.22	0.31
Duration of follow-up	Depression	131.04	4	32.76	1.67	0.15
	Anxiety	176.35	4	44.09	2.81	0.02
	Stress	134.92	4	33.73	1.89	0.03
	Well Being	185.94	4	46.48	2.1	0.04
	Event effect	1641.62	4	410.4	1.85	0.11
	OCD	92.64	4	23.16	0.3	0.87
source * Duration	Depression	621.56	11	56.50	2.89	0.001
	Anxiety	514.93	11	46.81	2.99	0.001
	Stress	300.81	11	27.34	1.37	0.18
	Well Being	3831.15	11	348.28	2.56	0.004
	Event effect	2841.72	11	258.33	1.16	0.31
	OCD	1046.70	11	95.15	1.24	0.25

Table 3 shows the type of media that people use to follow the news, showing a significant difference in well-being, impact on the event, anxiety and depression, while it cannot obsess and stress between Cause groups. On the other hand, follow-up time can cause differences in anxiety, stress and psychological well-being between groups. In addition, the interaction between duration factor and source type only causes differences in depression, anxiety, and well-being.

It should also be added that the study of the average of the groups in each factor with Benferoni test showed that people who follow the news through virtual media show a higher rate of depression, anxiety and stress than other groups and After that, there are people who do not pay attention to the news source, who are the most different from other groups. In addition, the study of the mean of the groups with Benferoni test for the duration of follow-up showed that people who spent more than 3 hours a day had the highest level of anxiety and stress and the lowest level of psychological well-being

Discussion

In this study, the aim was to compare the level of mental health as well as psychological well-being and the effectiveness of the coronavirus event based on the type and duration of follow-up of news media. The results showed that anxiety, depression, psychological well-being and the impact of the event were significantly different in individuals with the pursuit of informal sources such as cyberspace than others.

Also, people who followed the news for more than lower psychological well-being. Also, due to the high volume of the present sample, the prevalence of anxiety, depression, stress and obsessive disorders has been implicitly studied. The prevalence of these disorders in severe cases are 2, 4.4, 7.8 and 3.4 respectively.

These findings are different from previous reports such as Noorbala et al., Conducted in 1993 (Noorbala et al., 2014) as well as meta-analysis of epidemiological studies of mental disorders (Mirghaed et al, 2020). It does not show significant except for stress which shows a double growth which is due to the spread of coronavirus and increased stress among people.

However, mental health studies on the prevalence of coronavirus are rare, but based on experiences with infectious diseases such as SARS and Mers, it has been emphasized that the expected consequences on the mental and physical health of individuals in the community can be predicted. A recent review study by Haghoghadam et al. (2016) on the consequences and psychological interventions in the Covid-19 pandemic showed negative psychological effects such as post-traumatic stress disorder, depression, anxiety, stress, sleep disorders and anger in the treatment staff. Other people involved with Covid-19 increased significantly. In this regard, it has been stated that social media is one of the main ways that updates information about coronavirus (Bao et al, 2020). The study also found that more than three-quarters of people obtain news from unreliable sources, which, according to previous research, often predicts a high probability of anxiety and stress (Neria & Sullivan, 2011).

There may be two reasons for the link between media credibility and mental health. During the outbreak of the coronavirus, many misinformation and false reports about the disease bombarded social media and left many citizens with unfounded fears (World Health Organization, 2020), which may confuse people. And harm people's mental health. In addition, many people express their negative feelings and opinions on social media, such as fears, worries, aggressions, etc., which can contagiously affect a social network (Niederkrotenthaler et al, 2019). That is why the World Health Organization is working with the communications sector of countries like China to provide information to a wide audience.

From what has been said, it can be concluded that unreliable media causes ambiguity and consequently mental health problems, which in turn manifests itself as unjustified fear and anxiety. These mental health problems among people may lead to discrimination, labeling, and fraud (Mowbray, 2020). In such a situation, people's emotional reactions are likely to include extreme fear and uncertainty, and negative social behaviors are often triggered by fear and distorted perceptions of danger. In other words, the interaction of media type and duration can make a person's mental health worse; in this way, by following social media in cyberspace and without the necessary credibility, the three hours a day showed higher anxiety and stress, and person becomes aware of unreliable news and announcements that create ambiguity. This ambiguity increases anxiety and stress and reduces mental well-being (Alirezafard & Saffaronia, 2020) and then the person seeks more information for decision-making and comfort, which allows him to spend more time in that media space, resulting in more ambiguity and reduced mental health, and Be psychologically well-off and show higher impact from events such as the coronavirus (Mowbray, 2020).

Finally, it should be added that this study also had some limitations; first, it was a cross-sectional and post-event study, so it is difficult to accurately explain the causal relationship between media and mental health. Longitudinal as well as controlled studies are essential in the future. Also, although a large research sample was considered for this study, it was measured online, which is suitable for rapid evaluation, so some factors, such as respondents' bias, may affect the results. In this regard, in addition to proposing the repetition of the present study with more control, it is emphasized that this study was conducted during the first wave of coronavirus outbreak, but it is likely that the mental health of people affected by long-term disease and the negative impact of using There is a media outlet that warns of the need for an epidemiology of mental health disorders. In addition, the report highlights the importance of publishing news and information updates by the official media at regular intervals during a critical event such as the coronavirus and monitoring informal social media to reduce exposure to misleading and disturbing information. Highlights; Therefore, it is necessary for governments to pay more attention to the importance of the media in the mental health of society when faced with coronavirus and while fighting the coronavirus to pay more attention to mental health among the general public.

Conclusion

It should be noted that the prevalence of mental disorders does not show a significant difference, except for stress, which shows a doubling of growth. The interaction of the type of media and the duration of following the news from those media can cause mental health problems and reduce psychological well-being because unreliable social media creates a lot of ambiguity that increases anxiety and increases stress and the impact of events such as corona pandemic.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Mahnaz Akhavanfar: http://orcid.org/0000-0002-5636-7720

References

Ahmadrad, F. (2020). Psychological dimensions of coronary crisis and educational methods to reduce it. Journal of Educational Psychology, 16 (55), 27-54 (in Persian). doi: 10.22054/jep.2020.52712.3014

Alireza fard, S., & Saffarnia, M. (2020). Predicting mental health based on anxiety and social correlation due to coronary heart disease. Social Psychology Research, 9 (36), 129-141. doi: 10.1371/journal.pone.0231924

Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. The Lancet, 395(10224), e37-e38. doi: 10.1016/S0140-6736(20)30309-3

Choi, D. H., Yoo, W., Noh, G. Y., & Park, K. (2017). The impact of social media on risk perceptions during the MERS Prevalence in South Korea. Computers in Human Behavior, 72, 422-431. doi: 10.1016/j.chb.2017.03.004

Depoux, A., Martin, S., Karafillakis, E., Preet, R., Wilder-Smith, A., & Larson, H. (2020). The pandemic of social media panic travels faster than the COVID-19 Prevalence. doi: 10.1093/jtm/taaa031

Dong, X.Y., Wang, L., Tao, Y.X., Suo, X.L., Li, Y.C., Liu, F., & Zhang, Q. (2017). Psychometric properties of the Anxiety Inventory for Respiratory Disease in patients with COPD in China. International journal of chronic obstructive pulmonary disease, 12, 49. doi: 10.2147/COPD.S117626

Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 Prevalence. Plos one, 15(4), e0231924. doi: 10.1371/journal.pone.0231924

Horowitz, M.J., Wilner, N.R., & Alvarez, W. (1979). Impact of Event Scale a measure of subjective stress. Psychometric medicine, 41: 209-218. doi: 10.1097/ccm.0000000000002361

Jones, N.M., Thompson, R.R., Schetter, C.D., & Silver, R.C. (2017). Distress and rumor exposure on social media during a campus lockdown. Proceedings of the National Academy of Sciences, 114(44), 11663-11668. doi: 10.1073/pnas.1708518114

Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B.X., & Chen, J. (2020). The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. The Lancet Psychiatry, 7(3), e14. doi: 10.1016/S2215-0366(20)30047-X

Khanjani, M., Shahidi, S., Fathabadi, J., Mazaheri, M., & Shokri, O. (2014). Factor structure and psychometric properties of the Ryff's scale of Psychological well-being, short form (18-item) among male and female students. Thoughts and Behavior in Clinical Psychology, 9(32), 27-36.

Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., & Xing, X. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. New England Journal of Medicine. 382:1199-1207. doi: 10.1056/nejmoa2001316

Lovibond, P., Laube, R., & Megahead, H.A. (2017). Psychometric properties of an arabic version of the depression anxiety stress scales (DASS). Research on Social Work Practice, 27(3), 375-386. doi: 10.1177%2F1049731516662916

Lu, H., Stratton, C.W., & Tang, Y.W. (2020). Prevalence of pneumonia of unknown etiology in Wuhan, China: The mystery and the miracle. Journal of medical virology, 92(4), 401-402. doi: 10.1002/jmv.25678

Merchant, R.M. (2020). Evaluating the potential role of social media in preventive health care. Jama, 323(5), 411-412. doi: 10.1001/jama.2019.21084

Mowbray, H. (2020). In Beijing, coronavirus 2019-nCoV has created a siege mentality. Bmj, 368. doi: 10.1136/bmj.m516

Neria, Y., & Sullivan, G.M. (2011). Understanding the mental health effects of indirect exposure to mass trauma through the media. Jama, 306(12), 1374-1375. doi: 10.1001/jama.2011.1358

Niederkrotenthaler, T., Stack, S., Till, B., Sinyor, M., Pirkis, J., Garcia, D., & Tran, U.S. (2019). Association of increased youth suicides in the United States with the release of 13 Reasons Why. JAMA psychiatry, 76(9), 933-940. doi: 10.1001/jamapsychiatry.2018.4156

Noor Bala, A.A., Damari, B., & Riyazi Isfahani, S. (1393). Study of the prevalence of mental disorders in Iran. Medical scholar. 21 (112): 1-11(in Persian).

Panaghi, L., Hakim shooshtari, M., & Atari Mogadam. J. (2006). Persian version validation in impact of event Scale-Revised. Tehran Univ Med J, 2006; 64 (3), 52-60. http://tumj.tums.ac.ir/article-1-974-en.html.

Park, J.S., Lee, E.H., Park, N.R., & Choi, Y.H. (2018). Mental health of nurses working at a government-designated hospital during a MERS-CoV Prevalence: a cross-sectional study. Archives of psychiatric nursing, 32(1), 2-6. doi: 10.1016/j.apnu.2017.09.006

Ryff. C.D., & Singer, B.H. (2006). Best news yet on the six-factor model of well-being. Social science Research, 35, 4, 1103-1119. doi: 10.1016/j.ssresearch.2006.01.002

Samani, S., & Jokar, B. (2010). Validity and reliability of the DASS short version. Journal of Social Sciences and Humanities University of Shiraz, 23(6), 66-77. (in Persian).

Shahed Hagh Ghadam, H., Fathi Ashtiani, A., Rah-Nejat, A.M., Ahmadi Tahoor Soltani, M., Taghva, A., Ebrahimi, M.R., Donyavi, V., & Jahandari, P. (2020). Consequences and psychological interventions in the corona virus pandemic (Covid-19): Review of existing Articles. Journal of Marine Medicine. 2(1), 1-11(in Persian).

Shigemura, J., Ursano, R.J., Morganstein, J.C., Kurosawa, M., & Benedek, D.M. (2020). Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: Mental health consequences and target populations. Psychiatry and clinical neurosciences, 74(4), 281. doi: 10.1111/pcn.12988

Srivatsa, S., & Stewart, K.A. (2020). How should clinicians integrate mental health into epidemic responses? AMA Journal of Ethics, 22(1), 10-15. doi: 10.1001/amajethics.2020.10

World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 Prevalence, 18 March 2020 (No. WHO/2019-nCoV/MentalHealth/2020.1). World Health Organization.

Taheri Mirghaed, M., Abolghasem Gorji, H., & Panahi, S. (2020). Prevalence of Psychiatric Disorders in Iran: A Systematic Review and Meta-analysis. International journal of preventive medicine, 11, 21. doi: 10.4103/ijpvm.ijpvm_510_18

Wu, Z., & McGoogan, J. M. (2020). Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) Prevalence in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. Jama, 323(13), 1239-1242. http://jamanetwork.com/article.aspx?doi=10.1001/jama.2020.7202