Vol. 1, No. 3, (2020), 30-40
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Published online December, 2020

Journal of Preventive Counselling (JPC)

An Analysis of the Epidemiology of Coronavirus Anxiety and the Demographic Factors Related to It

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Abstract

The purpose of this study was to determine the epidemiology of coronavirus anxiety and the demographic factors related to it in Qazvin, Iran. The method used in this study was descriptive-survey. Its statistical population included all Qazvin citizens in the spring of 2020. A total number of 1167 participants were recruited by convenient sampling and via an online questionnaire distributed on social media. They answered the demographic features and corona disease anxiety scale (CDAS) questionnaires. Their data were imported into the statistical software SPSS 25 and analyzed using the descriptive and inferential statistical tests like frequency test, percentile frequency, and Kruskal Wallis. The results of the analyses showed that the prevalence of coronavirus anxiety among Qazvin citizens was 13.54%. There was no significant difference between coronavirus anxiety level and its related factors in different "gender" and "educational background" groups. But still, in different "age" and "marital status" groups, a significant difference was found. The results of the current study show that as people grow older, coronavirus anxiety level and its related factors increases. Also, it was found that coronavirus anxiety level and its related factors is higher among the older people when compared with the younger ones.

Keywords: Coronavirus anxiety, Epidemiology, Demographic factors

Introduction

Coronavirus became epidemic in Wuhan city of the central Province of Hubei, China in December 2019 (Holshue et. al, 2020; Huang et. al, 2020). On February 11th, World Health Organization (WHO) published the name of the new coronavirus as COVID-19. Also, on March 11th 2020 they declared COVID-19 as a pandemic disease (Who, 2020). From that date onwards, this virus has spread to the other regions of Asia, Europe, Northern America, Southern America, Africa, and Oceanic continents and by March, it has become a global pandemic (Rothe et. al,2019; Chan et. al,2020; Conhecimento,2020).

The total number of coronavirus infected people were 6612301 positive and 391161 deceased cases up to June 6th, 2020. Also, a number of 216 countries were reported to be involved in coronavirus struggle (Who, 2020). Afterwards, the scientists started to work on discovering the specific features of this virus like its contagion and the death rates (Rothe et. al, 2019). Most of the people who are and infected with COVID-19 experience a mild to moderate respiratory problem and get healed without a need to special treatment. Whereas, the old people and the people with serious medical conditions like cardiovascular diseases, diabetes, chronic respiratory diseases, and cancer will most probably experience a serious illness (Who, 2020). This pandemic disease not only has brought with itself the risk of death but also an unbearable mental pressure on Chinese people and the rest of the world (Xiaoyun & Fenglan, 2020). There are some reports regarding the mental effect of this pandemic disease on anyone including the infected ones, medical staff, children, and the elderly people (Chan et. al, 2020; Wang, 2020). Since COVID-19 is a new and one of the most destructive viruses around the world, its appearance and outbreak has caused some real confusions, fear, and anxiety among the people (Who, 2020).

This virus (COVID-19) has caused an immense reaction in people. The media across the borders constantly report its latest status in order for the people to stay tuned. All these concerns cause some real worries for the people which may lead to an increase in the level of public anxiety. The pandemic disease might result in an increase in the level of stress. Anxiety is a prevalent response to any stressful situation (Roy et al, 2020).

When anxiety affects a large population, it may cause a terror and resources drain and it may impose some limitations on daily life activities. Avoidant behaviors directed towards self-medication can lead to a decline in social relationships. Due to anxiety, people choose a different lifestyle and dietary habits. All of this can have a negative impact on mental health. Therefore, fighting with the mental difficulties is of utmost importance in pandemic situation. Infections can lead to various behavioral and mental affects. People can be checked for their prominent stress reactions like insomnia, panic attacks, pathological health anxiety, hypochondria, and an increase in drug abuse. Adolescents and teenagers might exhibit various emotional reactions like irritability, isolation, and aggression (Banerjee, 2020). An early screening of anxiety and timely psychotherapeutic interventions can not only tackle mental crises at the time of pandemic, but also help control the prevalence of these mental problems (Duan & Zhu, 2020).

Anxiety and worry can affect all the people in society. Recent evidence shows that the people who are kept isolated can experience quarantine in the form of anxiety, aggression, confusion, and the pressures of post-traumatic stress disorder (Books et al, 2020).

In a research which was conducted to analyze the mental effects of Coronavirus, 52.8% of the respondents viewed the mental effects of the outbreak of this disease as moderate to severe. Among them, 16.5% exhibited depression, and 28.8% exhibited anxiety symptomatology, and 8.1% reported experiencing stress (Chang, 2018).

The results of research (Roy et al, 2020) which was conducted in India showed a high level of specified anxiety in the experiment. More than 80% of the people were preoccupied thinking about COVID-19. Also, 72% were concerned about their own health and others around them, 12% had insomnia, and 82% decreased their social relationships. 80% of the participants felt the need to seek professional consultation from some experts in the field of mental health to help them confront with the emotional problems.

The results of study (Hang & Zhao,2020) which intended to analyze generalized anxiety disorder (GAD), depression symptomatology, and sleep quality at the COVID-19 outbreak in China showed that the general prevalence of generalized anxiety, depression, and general sleep quality were 35.1%, 20.1%, and 18.2% respectively. Also, with an increase in the number of COVID-19 infected people around the world, the younger people reported a significantly higher level of GAD and depression when compared with the older participants.

The results of a study showed that the level of anxiety in women were more than men, the anxiety levels in age group 20-40 were significantly higher than the other age groups, and with an increase in the educational level, people's anxiety levels were declined. Finally, the anxiety levels were significantly higher among the people who had at least one of their family members, relatives, or friends infected with COVID-19 (Moghanibashi, 2020). It was shown in a research that the anxiety level among the MS patients regarding the probability of Coronavirus infection was moderate to severe (Moghadasi, 2020).

In another research whose purpose was to analyze the effect of remote consultation on mental health of the staff working at the clinics and hospitals specialized for Coronavirus patients, the results at the first level of anxiety and depression related to Coronavirus were 79.2% and 82.1% respectively (Ghazanfarpour et. al,2020).

Anxiety can weaken the immune system of the body and make it vulnerable towards some diseases like Coronavirus infection (Alipour et. al,2020). Accordingly, people should learn some strategies to fight with the anxiety. Considering the quick outbreak of this disease and a lack of research in this field, it seems that doing research to help identify this disease and specially the anxiety caused by it and the strategies to fight this anxiety is a necessity. It actually can help people's life quality and the mental health of all the society. Since Coronavirus is an unknown virus and its psychological dimensions on the people are still under scrutiny, the necessity to investigate it further was felt (by the authors' of this paper)..

Methods

This research has used a descriptive survey method. Its statistical population consisted of all Qazvin citizens in the spring of 2020. Since we didn't have access to the full list of the names in the population, a convenient sampling method was used and 1167 participants took part in this research. Also, due to the special condition at the society and the restrictions imposed on the transportation and social communications, sampling and implementation of this project were done electronically via internet. Therefore, after participants announced their willingness to cooperate and after they were qualified by the inclusion criteria, they completed Coronavirus questionnaire after receiving the primary explanations. The questionnaire was created online and got distributed via some social media (Telegram, WhatsApp, and Instagram). The online questionnaire consisted of 18 questions which was divided into two major parts: one of which was about the demographic characteristics of the respondents (age, gender, educational background, and marital status) and the second one was dedicated to questions regarding Coronavirus anxiety. The data excluded from these questionnaires was analyzed using the descriptive and inferential statistical tests like frequency, percentile frequency, and Kruskal Wallis using the statistical software SPSS 25.

Instruments included in:

Demographic questionnaire: This questionnaire was appropriate with the demographic features of the statistical population in this research which assessed such variable as marital status, age, and educational level.

Corona disease anxiety scale (CDAS): Alipour et. Al (2020) have prepared and validated this scale to analyze the anxiety level caused by COVID-19 in 2019 in Iran. This instrument consists of 18 questions and is scored in a 4-item Likert scale (from Never to Always). Also, this instrument consists of 2 subscales which are mental symptoms (questions 1-9) and physical symptoms (questions 10-18). In a research, the reliability of this instrument was estimated 0.91 for the whole questionnaire and 0.87 and 0.86 for the mental and physical symptoms items using Chronbach Alpha method.

Results

Table1. Demographic information of participants

factors		frequency	Percentile frequency
Gender	Female	552	47.3
	Male	615	52.7
Age	18 - 30	726	62.2
	31 - 40	307	26.3
	41 - 50	93	8
	51 - 60	33	2.8
	Over 60	7	0.7
Marital status	Single	669	57.3
	Married	498	42.7
Educational background	Diploma	235	20.1
	B.A or B.S	306	26.2

	M.A or M.S.	422	36.2
	PhD	204	17.5

A total number of 1167 participants took part in this research who, according to the table I, were mostly male and bachelor. Also, out of this number, 726 members (62.2%) were between 18 – 30 years old and 422 members (36.2%) had M.A or M.S.

Table 2. A description of research variables

Variables	Mean	Standard Deviation	Variance	Kolmogorov-Smirnov Z	P
Coronavirus anxiety	13.54	10.580	111.949	0.156	0.000
Mental symptoms	9.95	6.090	37.092	0.100	0.000
Physical symptoms	3.6`	3.349	28.616	0.256	0.000

According to table 2, the mean score for coronavirus anxiety in the statistical population of this study was 13.54; therefore, the studied society is at a low level for coronavirus anxiety. On the other hand, according to the results of Kolmogorov–Smirnov test (which is used to test the normality of the data distribution), research variables do not have a normal distribution (P value < 0.05). Therefore, to test research hypotheses, a non-parametric test (Kruskal-Wallis) was used.

Table 3. The results of Kruskal-Wallis test on the demographic factors

factors		Coronavirus anxiety	Mental symptoms	Physical symptoms
Gender	Chi-Square	0.715	3.122	1.154
	Df	1	1	1
	Asymp. Sig	0.398	0.077	0.283
Age	Chi-Square	17.086	13.834	22.502
	df	4	4	4
	Asymp. Sig	0.002	0.012	0.000
Marital status	Chi-Square	41.404	35.432	42.462
	df	1	1	1
	Asymp. Sig	0.000	0.000	0
Educational background	Chi-Square	4.220	4.014	6.742
	Df	3	3	3
	Asymp. Sig	0.239	0.260	0.081

To analyze the effect of demographic factors on Coronavirus anxiety and its related factors, due to not being normally distributed, the non-parametric Kruskal-Wallis test was used.

According to the results shown in table 3, since Sig value for gender and educational background in regard to the coronavirus anxiety and its factors is more than 0.05, we can accept null hypothesis which is the equality of Coronavirus anxiety level and its factors in various gender and educational background groups. In other words, with a confidence level of 95%, we can say that the Coronavirus anxiety level and its factors in various

gender and educational background groups do not differ. Also, since the measured Sig value for age and marital status in regard to the Coronavirus anxiety and its factors is less than 0.05, we can reject the null hypothesis that is the difference in Coronavirus anxiety level and its factors in various age and marital status groups. To analyze the difference in groups, we can refer to the rank means shown in table 3 to see the difference in Coronavirus anxiety level and its related factors in different groups.

Table 4. Ranking of demographic factors of age and marital status

Demographic		Coronavirus anxiety		Mental symptoms		Physical symptoms	
		Number	Rank mean	Number	Number	Rank mean	Number
Age	18 - 30	726	555.22	726	558.91	726	551.39
	31 - 40	307	631.08	307	629.95	307	633.32
	41 - 50	93	602.86	93	589.20	93	619.91
	51 - 60	33	720.95	33	684.65	33	737.61
	Over 60	8	604.56	8	621.38	8	559.06
Marital status	Single	669	529.28	669	533.41	669	522.92
	Married	498	657.51	498	651.96	498	656.64

According to the results shown in table 4, as the age increases, so do coronavirus anxiety and its related factors. It is evident since the lowest coronavirus anxiety level and its related factors were seen in the 18 – 30 age group and its highest level was found among the people around 50 - 60 years old. Also, regarding the marital status, coronavirus anxiety level and its related factors were higher among the married group as compared with the single group.

Discussion

The current study analyzed the epidemiology of coronavirus anxiety among Qazvin citizens. The results showed that 1) the prevalence of coronavirus anxiety among Qazvin citizens was 13.54%. 2) Coronavirus anxiety level and its related factors were not different among different gender groups; or in other words, there was no significant difference between the people at different age groups. 3) There was also no significant different between the people at different educational backgrounds. 4) Still, the results showed that there was a significant difference between the married and single people. 5) There was a significant difference in coronavirus anxiety level between different age groups, so that as the age increases, so do coronavirus anxiety level and its related factors.

The first finding of this research about the prevalence of coronavirus anxiety among Qazvin citizens (which was 13.54%) was in line with the researches which reached the same conclusion at their first phase. They declared that the anxiety and depression related to coronavirus outbreak was 2.79% and 1.82% and the pathological health anxiety mean score was 17.42 (Huang et. al, 2020; Roy et. al, 2020; Ghazanfarpour et. al, 2020).

To expanation interpret these findings, we can say that during this crisis, the social and personal life structures undergo a confusion. Confusion in personal life structures means the personal power for control and the predictability of the course of life events

decline (Rubin &Wessely, 2020). As an example, during home lockup, the current of one's life gets turbulent and consequently, s/he can predict the future less. People feel that the level of their control over life events have declined and as a result, their ability to predict and plan for their future has declined as well. All this will end up in a feeling of insecurity, and insecurity in turn, will lead to anxiety (Tang, Ibrahim &West, 2002). Anxiety is the most fundamental characteristic of the crisis and of all its causes, the unpredictability of the future has played a greater role (Menec, Chipperfield & Perry, 1999). Also, during the outbreak of such a disease as coronavirus, the fear of getting sick, of death, of financial problems and loss of job can add up to the incidence of pathological health anxiety even in healthy individuals (Fischhoff,2020).

The other finding of this study showed that the coronavirus anxiety prevalence did not differ between men and women. In other words, coronavirus anxiety and its related factors do not differ in different age groups. This finding is in line with the researches which did not find any difference in the anxiety between men and women (Hang&Zhao, 2020; Alipour et. al, 2020; Looper & Kirmayer, 2001). Also, it is in contrast with the researches which showed that women had a higher pathological health anxiety than men (Moghanibashi, 2020; Davoudi & Nargesi, 2012), and showed that the prevalence of this condition in women is more than men (Chang, 2018; Macswain, 2009).

For explanation of this finding, it can be said that the thing that potentiates women to anxiety more than men might be related to the sexual roles and the socialization of them in the society (Tamres, Janicki & Helgeson, 2002). It is so, since women because of their gender role, express their feelings and are encouraged to seek social support more than men; while men are encouraged to deny their stressors and be autonomous. This difference might be related to the communication style of women. Women have a wider network of relationships compared to men and this communication characteristics and the internal dependency on one another, encourage them to express their feelings more and to do more of health-seeking behaviors. Also, compared to men, women receive more encouragement because of their higher support and health-seeking behaviors (Taylor & Asmundson, 2004). These researchers have tried to define anxiety according to gender. The noteworthy issue here is that if anxiety is attributed to the gender differences, then we can predict anxiety based on gender. Whereas in some researches like the ones mentioned earlier, the similarity between men and women is not found and this means that we cannot predict anxiety based on gender. Therefore, according to the discrepancies in findings, it is probably the case that the difference between women and men in anxiety is related to the difference between the two groups in some variables other than gender.

Other findings dealt with the comparison of coronavirus anxiety in citizens who have either diploma, B.A or B.S, M.A or M.S, or PhD. The results showed that coronavirus anxiety and its related factors in different groups of various educational backgrounds do not differ from one another. This finding was in line with some other researches (Jahanshahi et. al, 2020; Jarge, Yalfani & Nazem, 2012; Moudi, Bijani, Tayebi & Habibi, 2017). To interpret this findings, we can say that the anxiety related to COVID-19 is prevalent and it seems that this anxiety is more because of COVID-19 unknown nature and because it has caused some cognitive ambiguities in people. Fearing the unknown decrease the perception of immunity in people and this has always been anxiety-

provoking. Also, the shortage of scientific information about COVID-19 exacerbate the anxiety related to it (Bajema, 2020).

In fact, due to the shortage of information people have about this virus, it seems to have caused every person with every level of educational background to be equally anxious about coronavirus.

Another finding of this study was about the relationship of the marital status with the coronavirus. The results showed that the level of coronavirus anxiety and its related factors were higher among the married compared with the single participants. This finding was in line with the researches which found that the anxiety is higher among the married compared to the single participants (Esmaeili, Shahrabadi & Adib, 2017; Bandari et. al, 2012; MORROWATISHARIFABAD et. al,2018). To explain this finding, we can say that Iran Ministry of Cooperation, Labor, and Social Affairs has estimated the unempolyment rate after coronavirus to be around 20% and the government spokesman has warned that over 3 million official employees and 4 million unofficial employees have faced a drastic decrease in their payments or got fired. Also, 1 million and 500 thousand industrial units have got closed. Accordingly, the married people especially the breadwinner men are experiencing a higher level of anxiety due to the joblessness after coronavirus outbreak. Also, according to a Welfare Organization Official, the level of couple struggles during quarantine has tripled. Therefore, marital problems can be another cause for an increase in the level of anxiety among married people as compared to the single ones.

As the final result, the authors dealt with the level of coronavirus anxiety difference in different age groups; which showed that the older the people are, the higher was the level of Coronavirus anxiety and its related factors for them. It was so that the lowest level of Coronavirus anxiety and its related factors was at the 18 – 30 and its highest level was among the people who were 50 – 60 years old. This finding was in line with the researches which found that as the people grow older, so does their anxiety increase (Bandari et. al, 2012). But still, this finding was in contrast with the finding of the study which showed that GAD and depression symptomatology in younger people were significantly higher than in the older ones (Hang & zhai, 2020).

To interpret this finding, we can say that most of the people who are infected with COVID-19 experience a mild to moderate respiratory disease and get healed without any specific medication. The older people and the people with serious medical conditions like cardiovascular diseases, diabetes, chronic respiratory problems, and cancer will most probably experience a serious condition after infection (Who, 2020). There are some reports regarding the mental effects of this pandemic disease on public, the sick, the medical staff, children, and the older people. Accordingly, since older people are exposed to more serious conditions, we can expect the level of Coronavirus anxiety and its related factors to be higher among them than among the younger people (Chan et. al, 2020; Wang, 2020; Liu et. al, 2020).

One of the limitations of this study was the study sample which was only consisted of Qazvin citizens. There is a probability that the prevalence of this disease be higher in a larger population. One of the other limitations of this study was the data collection

method. Since the questionnaire was in the form of self-report and was online, there is a probability that the participants didn't respond realistically.

Conclusion

The results of this research provided some valuable fundamental information about the level of coronavirus prevalence among Qazvin citizens. This epidemiology can be a prelude in the analysis of the causing factors of coronavirus anxiety among the public all around the country. It is suggested that the epidemiology is done in a larger scale throughout all the country. Moreover, this study can be a starting point for the psychological interventions to reduce the symptomatology of anxiety based on the ecological data

Disclosure Statements

The authors of this study declared no conflicts of interest. All the research ethical principles were taken into account at this study.

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References

Alipour, A., Ghadami, A., Alipour, Z., & Abdollahzadeh, H. (2020). Preliminary validation of the Corona Disease Anxiety Scale (CDAS) in the Iranian sample. *Quarterly Journal of Health Psychology*, *8*(4), 163-175.

Bajema, K. L., Oster, A. M., McGovern, O. L., Lindstrom, S., Stenger, M. R., Anderson, T. C., & Oliver, S. E. (2020). Persons evaluated for 2019 novel coronavirus—United States, January 2020. *Morbidity and mortality weekly report*, *69*(6), 166.

Bandari, R., HERAVI, K. M., Rejeh, N., Zayeri, F., Mirmohammadkhani, M., & Montazeri, A. (2012). Anxiety prevalence and its associated demographic factors in family members of patients hospitalized in the intensive care unit: a cross-sectional study in Tehran.

Banerjee, D. (2020). The COVID-19 outbreak: Crucial role the psychiatrists can play. *Asian journal of psychiatry*, *50*, 102014.

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). O impacto psicológico da quarentena e como reduzi-la: revisão rápida das provas. *Lancet*, *395*, 912-20.

Chan, J. F. W., Yuan, S., Kok, K. H., To, K. K. W., Chu, H., Yang, J., ... & Yuen, K. Y. (2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. *The lancet*, *395*(10223), 514-523.

Chang, E. C. (2018). Relationship between loneliness and symptoms of anxiety and depression in African American men and women: Evidence for gender as a moderator. *Personality and Individual Differences*, *120*, 138-143.

Conhecimento, R. D. I. (2020). Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE).

Davoudi, I., Nargesi, F., & MEHRABIZADEH, H. M. (2012). Gender differences in health anxiety and its related dysfunctional beliefs: With control of age.

Duan, L., & Zhu, G. (2020). Psychological interventions for people affected by the COVID-19 epidemic. *The Lancet Psychiatry*, *7*(4), 300-302.

Esmaeili, A., Shahrabadi, M., & Adib, H. (2017). Body dysmorphic disorder and anxiety in patients of in orthodontic clinics of Birjand University of Medical Sciences in 2014-2015. *Journal of Birjand University of Medical Sciences*, *24*(2), 147-153.

Fischhoff, B. (2020). Speaking of Psychology: Coronavirus Anxiety. In: https://www.apa.org/research/action/speaking-of-psychology/coronavirus-anxiety.

Ghazanfarpour, M., Ashrafinia, F., Zolala, S., Ahmadi, A., Jahani, Y., & Hosseininasab, A. (2020). Investigating the Effectiveness of Tele-Counseling on Mental Health of Staff in Coronavirus Reference Clinics and Hospitals. *Available at SSRN 3572898*.

Holshue, M. L., DeBolt, C., Lindquist, S., Lofy, K. H., Wiesman, J., Bruce, H., ... & Pillai, S. K. (2020). First case of 2019 novel coronavirus in the United States. *New England Journal of Medicine*.

Huang Y, Zhao N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. Psychiatry research. 12:112954.

Jahanshahi, A. A., Dinani, M. M., Madavani, A. N., Li, J., & Zhang, S. X. (2020). The distress of Iranian adults during the Covid-19 pandemic–More distressed than the Chinese and with different predictors. *Brain, behavior, and immunity*.

Jarge, M., Yalfani, A., & Nazem, F. (2012). Survey on the efficacy of cardiac rehabilitation programs on anxiety and depression control in coronary artery bypass grafting patients. *Journal of Rafsanjan University of Medical Sciences*, *11*(3), 293-298.

Liu, K., Chen, Y., Wu, D., Lin, R., Wang, Z., & Pan, L. (2020). Effects of progressive muscle relaxation on anxiety and sleep quality in patients with COVID-19. *Complementary Therapies in Clinical Practice*, *39*, 101132.

Looper, K. J., & Kirmayer, L. J. (2001). Hypochondriacal concerns in a community population. *Psychological Medicine*, *31*(4), 577-584.

MacSwain, K. L. H., Sherry, S. B., Stewart, S. H., Watt, M. C., Hadjistavropoulos, H. D., & Graham, A. R. (2009). Gender differences in health anxiety: An investigation of the interpersonal model of health anxiety. *Personality and Individual Differences*, *47*(8), 938-943.

Menec, V. H., Chipperfield, J. G., & Perry, R. P. (1999). Self-perceptions of health: A prospective analysis of mortality, control, and health. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *54*(2), P85-P93.

Moghadasi, A. N. (2020). One aspect of coronavirus disease (COVID-19) outbreak in Iran: high anxiety among MS patients. *Multiple sclerosis and related disorders*.

Moghanibashi-Mansourieh, A. (2020). Assessing the anxiety level of Iranian general population during COVID-19 outbreak. *Asian journal of psychiatry*, *51*, 102076.

MORROWATISHARIFABAD, M. A., SERVAT, F., SOTOUDEH, A., ASSADIAN, A., EISAPAREH, K., GHASEMIE, R., & MIRFAKHRAEE, F. (2018). Prevalence of Depression, Anxiety, and Stress in Workers of Petrochemical Industry: a cross sectional study in Assaluyeh port. *Occupational Hygiene and Health Promotion*.

Moudi, S., Bijani, A., Tayebi, M., & Habibi, S. (2017). Relationship between death anxiety and mental health status among nurses in hospitals affiliated to Babol University of Medical Sciences. *Journal of Babol University of Medical Sciences*, *19*(2), 47-53.

Perlman, S. (2020). Another decade, another coronavirus.

Rothe, C., Schunk, M., Sothmann, P., Bretzel, G., Froeschl, G., Wallrauch, C., ... & Hoelscher, M. (2020). Transmission of 2019-nCoV infection from an asymptomatic contact in Germany. *New England journal of medicine*, *382*(10), 970-971.

Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian journal of psychiatry*, *51*, 102083.

Rubin, G. J., & Wessely, S. (2020). The psychological effects of quarantining a city. *Bmj*, *368*.

Tamres, L., & Janicki, D. veHelgeson, VS (2002). Sex differences in coping behavior: A metaanalytic review. *Personality and Social Psychology Review*, *6*, 2-30.

Tang, T. L. P., Ibrahim, A. H. S., & West, W. B. (2002). Effects of war-related stress on the satisfaction of human needs: The United States and the Middle East. *International Journal of Management Theory and Practices*, *3*(1), 35-53.

Taylor, S., & Asmundson, G. J. (2004). *Treating health anxiety: A cognitive-behavioral approach*. Guilford Press.

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International journal of environmental research and public health*, *17*(5), 1729.

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