

Depression, Internet Addiction and Domestic Violence on Iranian Married Women during the COVID-19 Home Quarantine

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ABSTRACT

Aims The ambiguous nature of COVID-19 disease and its unknownness and the implementation of quarantine actions affect many aspects of people's lives. This study aimed to investigate depression, Internet addiction, and domestic violence during COVID-19 home quarantine in Iranian married women.

Instrument & Methods This descriptive study was carried out on 200 married women in 2021 who used social networks. The sample was selected by a nonrandomized sampling method. Data were collected by the Depression Scale of the Epidemiological Research Center, the standard questionnaire for measuring violence against women by Haj Yahya, and the Kaplan Internet Problematic Scale via Google Form and on the Nini website and social media websites of Instagram and Telegram. Data were analyzed by SPSS 23 software using T and Wilcoxon tests.

Findings The results showed a significant difference in depression, internet addiction, and domestic violence before and after the quarantine ($p > 0.05$), and the variables increased.

Conclusion Given the effects of the COVID-19 disease on depression, Internet addiction, and domestic violence during quarantine, it is suggested that authorities reduce the effects of quarantine on people's lives by designing proper programs.

Keywords Depression; Internet Addiction; Domestic Violence; Quarantine; COVID-19

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Introduction

The COVID-19 epidemic is causing a wide range of reactions in individuals by affecting their physical and mental health [1]. Regional restrictions are imposed to prevent further outbreaks of the disease due to its rapid human-to-human transmission. Isolation, social distancing, and the closure of educational institutions, workplaces, and recreational facilities forced people to stay indoors to help prevent the transfer and removal of the chain [2]. The ambiguous nature of COVID-19 disease and its unknownness, and the implementation of quarantine actions affect many aspects of people's lives [3]. Social distancing, and quarantine, in addition to social and economic consequences, can provoke psychological consequences such as sadness, worry, fear, anger, annoyance, frustration, feelings of guilt, helplessness, and loneliness [4, 5]. The direct and indirect psychological and social effects of the COVID-19 epidemic have created the longest global crisis since World War II [6, 7].

Quarantine during the COVID-19 virus pandemic increases physiological problems. Because it gradually isolates people and lack of communication between people causes depression and anxiety and worsens over time. It also reduces the availability of timely psychological intervention, and psychological counseling is not always possible in the peak conditions of the COVID-19 pandemic. Also, social deprivation of patients and survivors may lead to other negative psychological reactions such as compatibility disorders and depression [8]. In the stressful situation of the COVID-19 pandemic, people try to search for news and related information through various sources, especially social networks [9]. Because the news of the globalization of the COVID-19 virus and the increasing mortality rate by the disease made a rare situation for people [10]. Therefore, people search on the Internet and social networks to be aware of the share news or obtain information in this field. Therefore, Internet usage has grown rapidly and has become one of the most important sources of information sharing [11]. Internet addiction is defined as mismanagement in using this technology and its excessive use, associated with negative consequences [12]. Addictive use of the Internet is associated with psychological problems such as depression and anxiety [13, 14].

Fathi *et al.* [15] revealed a significant relationship between all dimensions of Internet addiction with the degree of computer voyeurism and QOVID-19 stigma. In a study, Li *et al.* [16] showed that the prevalence of Internet addiction during the COVID-19 pandemic increased significantly in the general population. Half of the participants in the study stated an increase in the severity of Internet addiction during the pandemic period [16]. Also, one

of the affective dimensions of stress caused by the COVID-19 virus is marital and family relationships; because it has caused people to quarantine themselves and stay home, so the interaction between them will probably increase in a small space [17]. People's compatibility decreases coping with traumatic and negative life events, their level [18]—violence increases in the face of epidemics. For example, Rose [19] reported the erosion of social norms and the rise of violence in Bologna, Italy, during the plague outbreak and natural disasters. Mitali and Singh [20] showed an alarming increase in incidents of gender-based violence during the COVID-19 pandemic.

The study of depression during the COVID-19 pandemic is essential for treatment planning and depression prevention strategies; no research has been done on the depression rate in Iranian women during the COVID-19 pandemic. This study aimed to investigate the rate of depression, Internet addiction, and domestic violence in Iranian married women during home quarantine caused by COVID-19.

Instrument and Methods

This descriptive research was carried out on 200 Iranian married women in 2021 who used social media. The samples were selected by randomized sampling method. The participants in the study aged from 18 to 55 and had at least a primary education level. Data were collected by four following questionnaires:

Demographic questionnaire: It was used to measure the variables of age, education, occupation status, and the number of children.

Depression Scale of the Epidemiological Research Center (CES-D) [21]: This is an international and reliable scale for measuring depression and is a combination of several valid depression questionnaires (Beck, Welch, Gardner, Zhong, and Ruskin). This scale is available in versions 4, 10, and 20 items. The full 20-item version was used in this study. The items scored by 0-3 range score, and the total score of this scale is between 0 and 60. A higher score means more depression. The scores less than 15, 15-21, and more than 22 revealed no depression, moderate depression, and severe depression, respectively [21]. In a study, the reliability coefficient of the items, total reliability, and validity was reported to be 0.45-0.95, 0.71, and 0.95, respectively [22]. Also, in Iran, the reliability of this tool was calculated to be 0.92 by the test-retest method [23].

Standard questionnaire for measuring violence against women [24]: Haj Yahya created this scale was created in 1999 by Haj Yahya. This scale includes 32 items and structures of violence against women in four psychological, physical, sexual, and

economic violence subscales. In general, the score range of this questionnaire is between 32 and 96, which the score ranges for psychological, physical, sexual, and economic violence are between 16-48, 11-33, 3-9, and 2-6, respectively. Cronbach's alpha coefficient was reported to be 0.86, 0.71, 0.86, 0.93, and 0.92 for the whole scale, psychological, physical, sexual, and economic violence, respectively [24]. In Iran, the reliability of this scale was calculated to be 0.89 using Cronbach's alpha [25].

Kaplan Internet Problematic Scale [26]: This scale was created in 2002 by Kaplan. This scale has 29 items based on clinical and field experiences. The factor analysis of the scale revealed that six factors are related to general problems, and one factor is related to negative consequences. The factors are 1. Changes in mood (including facilitating individual emotional changes); 2. Social benefits (including social benefits derived from the Internet); 3. Mandatory use ((inability to control, stop or reduce Internet use with feel guilty); 4. Time spending; 5. Social withdrawal; 6. Interpersonal control (feeling social, being on the Internet); 7. Feeling social being when using the Internet; 8. Negative consequences (personal, social, and professional problems) [26]. Kaplan reported the reliability of the Cronbach's alpha questionnaire as 0.93 and the Cronbach's alpha coefficient for each of the factors in the 0.78-0.85 range [26]. The validity of this questionnaire in Iran was confirmed 0.61 and 0.55 by two methods of simultaneous and differential validity with correlation coefficient, respectively.

Also, the reliability of this instrument was calculated to be 0.90, by internal consistency with Cronbach's alpha, 0.81 by interpretation of the correlation coefficient, and 0.58-0.79 for seven mentioned factors [27].

The questionnaires were prepared in a Google Forms format and provided to the subjects due to the COVID-19 pandemic and adherence to health protocols. Individuals were assured that personal information would be kept confidential, and they filled out the questionnaires voluntarily. Data were collected from the last week of July until the first week of August 2016 through the Nini site, Instagram, and Telegram. The proper tests of T and Wilkoxon were selected for the study based on the normal distribution of the data. One sample T, two paired T, and Wilcoxon tests measured depression, domestic violence, and Internet addiction. Data were analyzed using SPSS 23 software.

Findings

The results of the participants' demographic information have been shown in Table 1.

The results showed an increase in depression, Violence, and Internet Addiction during quarantine due to COVID-19 compared to before ($p < 0.05$; Table 2).

Table 1) Results of demographic information of the subjects

Variable	Frequency	Frequency percentage
Age range		
18-26	76	38
27-35	80	40
36-44	36	18
45-55	8	4
Education level		
Primary	7	3.5
Diploma	46	23
Bachelor	110	55
Master	30	15
Ph.D.	7	3.5
Having children		
Yes	114	57
No	86	43
Occupation status		
Housekeeper	102	51
Employed	46	23
Student	32	16
Unemployed	20	10

Table 2) Evaluation results of depression, violence and internet addiction in Iranian married women (n=200)

Scale	Result relative to quarantine (mean±Sd)		
	Before quarantine	During quarantine	p-value
Depression Scale of the Epidemiological Research Center	-	2.155±00.00	0.000
Standard measuring violence against women			
Psychological violence	23.99±5.21	22.01±5.54	0.000
Physical violence	12.95±3.11	12.42±3.12	0.003
Sexual violence	3.92±1.48	3.66±1.35	0.009
Economic violence	2.56±0.92	2.54±1.00	0.727
Total	43.43±8.39	40.64±8.98	0.000
Kaplan Internet Problematic Scale			
Mood changes	14.30±4.63	14.22±4.89	0.711
Social benefits	23.29±7.41	24.28±7.88	0.004
Mandatory use	15.24±5.94	16.15±5.48	0.001
Time spending	15.85±5.48	16.37±5.82	0.045
Social withdrawal	21.50±5.72	21.09±6.56	0.140
Negative consequences	14.77±5.37	15.36±6.12	0.018
Total	74.41±20.07	76.47±23.11	0.014

Discussion

This study aimed to investigate the rate of depression, Internet addiction, and domestic violence in Iranian married women in 2021 during home quarantine caused by COVID-19. The results showed that the rate of depression is higher during quarantine caused by COVID-19. The results are in accordance with Bueno *et al.* [28] and Ansari *et al.* [29]. Traumatic events can reduce people's sense of security, remind them of the reality of death, and have adverse effects on their mental health. Unanswered questions about pandemics such as the end of the epidemic and treatment methods, Constant exposure to information about the epidemic and its effects, decreased social relations due to epidemics and recommendations, and prohibitions such as staying at home affect people's mental health [30]. Also, the rapid prevalence of COVID-19, the unfavorable condition of isolated patients in the intensive care unit with acute respiratory problems, lack of effective drug treatment, and ultimately death from the disease are

among the most important factors affecting the mental health of people in viral pandemics [31-33]. Therefore, during the outbreak of COVID-19 disease, people have psychological disorders, and their level of depression increases.

There was a significant difference between Internet addiction before and after quarantine due to the COVID-19 virus, and Internet addiction had increased in the post-quarantine period caused by COVID-19. These results are in accordance with the research of Fathi *et al.* [15] and Li *et al.* [16]. In stressful situations and natural disasters, individuals' psychological and emotional problems increase [34-37]. These trauma-related emotional responses are risk factors for developing addictive behaviors and exacerbating drug addiction [38]. Great disasters such as economic crises have increased the rate of Internet addiction [39, 40]. There was also a significant difference between domestic violence before and after quarantine caused by the COVID-19 virus and domestic violence increased after the quarantine. These results are consistent with the research of Rose [19] and Mittal & Singh [20]. Statistical reports from countries such as China, the United Kingdom, the United States, and other countries show an increase in domestic violence since the prevalence of COVID-19 [41]; so that there has been a 30% increase in reports of domestic violence in France, 40-50% in Brazil, as well as in countries such as Italy, Spain and Iran [42, 43]. According to the literature, current unpredictable conditions increase marital incompatibility and the likelihood of domestic violence [43]. Factors such as social isolation, closure of many schools, travel restrictions, unemployment, and economic pressures lead to significant psychological distress, domestic violence, and in general, a more negative impact on well-being and family relationships [43-45].

Conclusion

Given the effects of the COVID-19 disease on depression, Internet addiction, and domestic violence during quarantine, it is suggested that authorities reduce the negative effects of quarantine on people's lives by designing proper programs. It is also recommended that families reduce injuries by designing a variety of programs for family members' leisure time.

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