

Research Paper

Prevalence of Depression and its Related Factors during the COVID-19 Quarantine Among the Elderly in Iran



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ABSTRACT

Objectives The outbreak of Coronavirus Disease 2019 (COVID-19) due to its rapid transmission has created an emergency situation in global health in less than a few months around the world. This disease not only causes public health concerns but also causes a number of psychological illnesses including depression. The present study aims to investigate the prevalence of depression during the COVID-19 quarantine among the elderly in Iran.

Methods & Materials This is a descriptive cross-sectional study conducted on 432 eligible older adults living in Gonabad city who were selected by cluster random sampling method. Data were collected by a demographic checklist and the Geriatric Depression Scale (GDS) which were completed via phone. Collected data were analyzed in SPSS software using descriptive and inferential statistics, considering a significance level of P<0.05.

Results The prevalence of depression was 55.8% which had a statistically significant relationship with marital status (P<0.001), living status (P<0.001), economic status (P<0.001), family history of depression (P<0.001), history of chronic disease (P<0.003), level of education (P<0.001), and sleep quality (P<0.001).

Conclusion Depression has a high prevalence among the elderly in Gonabad city during the COVID-19 quarantine. In this regard, related interventions for this group should be considered in the plans of health care providers.

Extended Abstract

1. Introduction

The outbreak of COVID-19 due to its rapid transmission has created an emergency situation in global health in less than a few months around the world. Given that no drugs and vaccines have been developed for this disease, the best way to deal with and control this

virus is to plan and take appropriate control and preventive measures such as ban on social gathering and lockdown. People in quarantine may experience anxiety, boredom, loneliness, and depression; therefore, mental health support should be provided for them, especially children and the elderly. Since older people are more likely to be depressed than other people, and considering that limited studies have examined the effect of COVID-19 on the prevalence of depression in the elderly living in Iran, the present study aims

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to determine the prevalence of depression during the COVID-19 quarantine in the elderly of Gonabad city in Iran.

2. Materials and Methods

This is a descriptive cross-sectional study conducted in 2020. The study population consists of all older people aged ≥ 60 years under the auspices of Gonabad community health centers. Inclusion criteria were: Membership in the national SIB system, living in Gonabad city, age 60 and over, willingness to participate in the study, observance of quarantine rules (based on self-report), not suffering from depressive illnesses, mental and physical disabilities, Alzheimer's based on the medical records. After selecting participants, the researcher checked the mental conditions of the elderly by referring to the SIB system, and if they had no history of mental illness, they would be entered into the study. Exclusion criterion was the return of incomplete questionnaires. The sample size was estimated 381 using the formula and based on similar studies. By considering 10% sample drop, the sample size was set 430. Cluster sampling method was used for sampling. In this regard, we first considered all the health centers of Gonabad city as clusters. Then, one center was selected randomly. Based on the number of older people covered by the center, we randomly selected the eligible older adults. After selecting samples, the researcher made a phone call to each of them and after giving the necessary explanations about the study objectives and assuring them of the confidentiality of their information, obtained their verbal consent. Data collection tool was a two-part questionnaire. The first part was a demographic checklist of and the second part included the Geriatric Depression Scale (GDS) which were completed via phone.

3. Results

Of 432 participants, 176 (40.7%) were men and 256 (59.3%) were women. Their mean age was 67.84 ± 7.64 years. Most of them ($n=335$, 77.5%) were married. Their mean duration of using mass media was 2.61 ± 2.25 hours per day and the most common used mass media was TV

($n=146$, 33.8%). The prevalence of depression among them was 55.8% (Table 1). Prevalence of depression had a statistically significant relationship with marital status ($P < 0.001$), living status ($P < 0.001$), economic status ($P < 0.001$), family history of depression ($P < 0.001$), history of chronic disease ($P < 0.003$), educational level ($P < 0.001$) and sleep quality ($P < 0.001$) such that the prevalence of depression was higher in married people with low level of education and low economic status living with their spouse. The prevalence of depression was also higher in those with poor sleep quality and history of chronic disease compared to other participants. The prevalence of depression was also higher those whose family relatives had no COVID-19.

4. Discussion and Conclusion

Depression has a high prevalence among the elderly in Gonabad city during COVID-19 quarantine. Due to the impact of depression on the elderly, including decreased quality of life and sleep quality, changes in nutritional status, and despair leading to weakened immune system, as well as decreased physical resistance, it can increase the incidence of COVID-19 or the severity of the disease in them.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of Gonabad University of Medical Sciences (Code: IR.GMU.REC.1399.069). All ethical principles are considered in this article. The participants were informed about the purpose of the research and its implementation stages. They were also assured about the confidentiality of their information and were free to leave the study whenever they wished, and if desired, the research results would be available to them.

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Table 1. Prevalence of different levels of depression among participants

Depression	No. (%)
No depression	191 (44.2)
Mild depression	152 (35.2)
Moderate depression	65 (15)
Severe depression	24 (5.6)

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Authors' contributions

Conceptualization: Maryam Moradi, Fatemeh Hosseini Moghaddam, Masumeh Amiri Delui, Leila Sadegh Moghaddam; Methodology: All authors; Investigation: Fatemeh Hosseini Moghaddam, Maryam Moradi, Fatemeh Kameli, Ata Jabbari, Reza Ghorbani; Analysis: Maryam Moradi, Fatemeh Hosseini Moghaddam, Nasim Khajavian; Writing, Editing and Review: All authors.

Conflicts of interest

The authors declare no conflict of interest

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