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Constructing and Validating Iranians' COVID-19-related Stressors (ICRS) and Its Relation with Mental Health

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Abstract

Background: The outbreak of coronavirus disease 2019 (COVID-19) has caused stress and anxiety for various parts of society all over the world. This concern and stress are not limited to being affected by COVID-19 because this condition has also caused changes in people's lifestyles.
Objectives: The purpose of this study was to design and evaluate the validity and reliability of the COVID-19-related stressors questionnaire and determine the contribution of each of the stressors to the prediction of mental health in the Iranian population.
Methods: This descriptive-analytical and correlational study was performed on 301 volunteers living in Tehran, Iran. Due to the prevalence of COVID-19, questionnaires were distributed by convenience sampling method and online conduction. The instruments used in the present study were the researcher-made questionnaire on Iranians' COVID-19-related stressors (ICRS) and the general health questionnaire (GHQ-12). Content validity (qualitative and quantitative), face validity, structural validity (exploratory factor analysis), Cronbach's alpha, and logistic regression were used to analyze the data. Statistical analysis was performed by SPSS version 24 and AMOS24 software.
Results: In exploratory factor analysis, the final 25 items were obtained in seven factors with an explanation of 66.25% variance. The results of logistic regression analysis showed that worrying about changing economic status, getting COVID-19 and change in lifestyle increased the chance of developing mental health disorder up to 1.29 (OR = 1.29), 1.28 (OR = 1.28), and 1.18 times (OR = 1.18), respectively. The variable of changing family interactions reduces the chance of developing a mental health disorder by 0.85 times (OR = 0.85).
Conclusions: The COVID-19-related stressors questionnaire is valid and can be used in future research. Identifying the most important stressors associated with the COVID-19 pandemic and determining each contribution to mental health prediction will help health policymakers to make better decisions.

Keywords: COVID-19 Stressors, Mental Health, Reliability, Validity

1. Background

At the beginning of 2020, the outbreak of a new and unknown viral infectious disease was reported in Wuhan, China. The disease was caused by a new, genetically modified virus called severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), which belongs to the family of Coronaviruses. The disease caused by this virus was officially registered by the World Health Organization (WHO) as coronavirus disease 2019 (COVID-19). An emergency arose in most world countries after a few months due to features such as rapid virus transmission (1).

Dangers threatening human life, including COVID-19, stimulate the areas of anxiety processing in the brain, namely the amygdala, more severely than other common threats. These conditions cause more severe anxiety responses and symptoms in people responding to these stressful conditions (2). Functionally, anxiety in human life is somewhat desirable and has positive and beneficial effects on advancing people's life goals. However, increasing the duration and severity of anxiety may disrupt a person's normal function and threaten their health (3, 4).

Severe anxiety and stress change the activity of the immune system, which may be one of the early effects of psychological disorders. According to the literature, disorders such as stress and anxiety increase the blood levels of cortisol. Weakening of the immune system due to anxiety caused by the COVID-19 outbreak might considerably raise the vulnerability and the risk of becoming infected

with COVID-19 in anxious people (2). It should be noted that in the COVID-19 pandemic, stress and anxiety are not only related to the disease. Stress also results from the WHO recommending social distancing, home quarantine, and reduced attendance in public places because of the high rate of virus transmission. Therefore, many people have adopted distance education and online shopping. Schools and universities are closed, and teenagers and young people are forced to use online classes. Many people have suffered from job and financial problems, reduced social relationships, and changes in enjoyable activities (5, 6). This trend has added new stressors to people's lives, and it is necessary to recognize them.

In this regard, Ahuja (7) designed the COVID-19 stress scale, examined it on 1,009 people aged 17 - 83 in India, and performed several psychometric tests to investigate its validity. The results showed a five-factor structure: vexation with others, immediate concerns mainly related to COVID-19 and its treatment, routine disruption, uncertainty about the future, and systematic stressors that address economic issues. Vexation with others was the highest stressor, and these five factors accounted for 55.26% of the total variance of the scale. The authors mentioned some limitations and suggested complementary studies. In Chinese samples, some instruments were constructed based on cultural considerations. Consequently, in this study, cultural consideration had an important role in determining the psychological state of participants and their reports (8, 9). In another research, Tambling et al. (10) evaluated a 23-item scale of stressors related to COVID-19 for 437 individuals with a mean age of 35 years in the United States. The items on this scale were infection-related stressors, daily routine-related stressors, as well as resource-related stressors and health resources in three areas. The results demonstrated a one-factor structure that explained 21.76% of the variance of the COVID-19-related stressors questionnaire. Taylor et al. (11) also designed the COVID-19 Stress Scale with 36 items to measure stressors related to COVID-19 in 3479 Canadians and 3375 Americans. The results of these authors showed a 5-factor structure with acceptable validity and reliability. The factors included fear of becoming infected, fear of coming into contact with possibly contaminated, fear of the socio-economic consequences of the pandemic, Xenophobia (fear of foreigners who might be carrying infection), compulsive checking and reassurance-seeking regarding possible pandemic-related threats, and traumatic stress symptoms about the pandemic (9, 12). Stressors and the level of stress vary from culture to culture, which can be attributed to different factors, such as race, ethnicity, cognitive appraisals of people, as well as the social and economic status of that culture. Therefore, it is essential to construct a questionnaire on stressors related to COVID-19 in the Iranian population and examine its validity. Adding such a questionnaire with Iranian characteristics to the research treasury of the COVID-19 field gives more detailed specifications of this pandemic. In addition, the SEM method was not used in previous studies, and some probable factors have not been reported. Although cultural differences are important, they were not considered in previous studies. For example, the Chinese COVID-19-related stressors survey was developed only for Chinese examples and had limited applicability to the Iranian sample (8, 13). In these two studies, the prosper methodology was applied to a limited extent and only for specific populations and age groups of Chinese. Moreover, the novelty of our work is considering cultural differences and extracting some new factors.

2. Objectives

The first goal of our study was to construct and validate Iranians' COVID-19-related stressors. Moreover, determining the contribution of each of the stressors to predicting mental health is another aim of the present study because recognizing the most important stressors that play a role in mental health is a way to provide appropriate services.

3. Methods

3.1. Design and Determination of Sample Size

This descriptive-analytical cross-sectional study was conducted during November-January 2021, simultaneous with the third peak of COVID-19 in Iran. The study population was all people over 20 years living in Tehran. The minimum sample size required to perform factor analysis is 5 - 10 samples per tool item (14). The questionnaire for factor analysis had 29 questions, and ten samples were considered per item, making a sample size of 290. Considering the 10% probability of not completing the questionnaire, the sample size increased to 319 people. The questionnaire of 18 subjects was rejected due to incompleteness, and 301 people participated in the study. This sample size is also sufficient for logistic regression.

3.2. Procedure and Study Setting

Due to the need to reduce social contact to prevent the spread of COVID-19, the convenience sampling by implementation-based on internet were used. Two psychology students designed the questionnaire and made the link available to users living in Tehran, Iran, on WhatsApp and Telegram social networks and asked each person to provide the questionnaire link to other people living in Tehran (snowball sampling) and volunteered to participate in the research.

3.2.1. Inclusion and Exclusion Criteria

Inclusion criteria entailed literacy, being a cyberspace user, having an age range of 20 - 65 years, and having at least a high school diploma. The exclusion criteria were dissatisfaction with participating in the research and incomplete completion of the questionnaire.

3.3. Data Analysis

Descriptive statistics were used to analyze the demographic characteristics and to calculate frequencies, means, and standard deviations. In addition, Cronbach's alpha was applied to assess the coefficient for reliability, the sampling adequacy index and Bartlett's Test of sphericity were used to calculate sample size and factor separation, and heuristic factor analysis was utilized to determine the validity of the tool structure. Mental health in participants was predicted by the logistic regression. Data were analyzed using SPSS and Amos software version 24.

3.4. Ethical Consideration

The current study was approved by the Ethics Committee of Baqiyatallah University of Medical Sciences (ID: IR.BUMS.REC.1399.128).

3.5. Instruments

3.5.1. General Health Questionnaire

This questionnaire was developed by Goldberg and Williams (15) and examined a person's mental state in the previous four weeks. The questionnaire contains 12 items, including six positive items (3, 3, 4, 6, 10, and 12) and six negative items (11, 9, 8, 7, 5, and 1). Four options were considered for each positive item, including better than ever, as always, less than always, and much less than always (0 to 3). Four options of never, no more than ever, more than ever, and much more than ever (0 up to 3) were intended for each negative item. The instrument score was calculated based on the total score of the items, with the range of scores being 0 - 36 and higher scores indicating poorer mental health (16). Montazeri et al. (17) showed that the questionnaire was standard for evaluating mental health in the Iranian population, and its reliability coefficient was reported to be 0.87 by Cronbach's alpha method. The cut-off point of this questionnaire in the Iranian population was 14.5 (18). In the present study, the reliability of Cronbach's alpha method was calculated as 0.87.

3.5.2. Iranians' COVID-19-related Stressors

After reviewing the texts and searching various Persian and Latin sites, the initial questionnaire, which included 40 items, was provided to nine mental health professors and an epidemiologist, who were asked to comment on the questionnaire and its physical characteristics. After correcting the items, the initial questionnaire with 35 items was prepared for validation and psychometric steps. Items in the Likert scale were scored as not worried = 0 to very worried = 3. Following designing the questionnaire of COVID-19-related stressors, for qualitative evaluation of the face validity, the items of the questionnaire were examined in terms of difficulty, appropriateness, and ambiguity. In this stage, 12 students and specialists in the field of psychology participated and presented their corrective opinions. The "impact score" method was used to quantitatively calculate the face validity of the questionnaire.

For this purpose, the importance of each item was examined based on a 5-point Likert scale with quite important (5 points), somewhat important (4 points), medium important (3 points), slightly important (2 points), and not important (1 point). If the effect score of each item was higher than 1.5, the item was identified as suitable for further analysis (19) and was retained.

Moreover, to evaluate the questionnaire's content validity ratio (CVR) and content validity index (CVI) were calculated. For this purpose, in the first stage, 12 mental health professionals were given a questionnaire, and they were asked about the necessity of each item on a triple Likert scale (1: Necessary, 2: Helpful but not necessary, 3: Not necessary) to calculate CVR. In the Lawshe method, the minimum acceptable CVR is determined based on the number of panel members. For 12 people, the acceptable CVR is 0.56 (20). Therefore, items with a CVR above 0.56 were retained, and the rest were deleted or modified. In the next step, based on the CVI of Waltz and Bausell (21), each available expression's degree of relevance, clarity, and simplicity was determined by presenting a questionnaire to psychology students. Consequently, students were asked to answer based on a four-point Likert, including simplicity (1: Incomprehensible, 2: Needs much change, 3: Needs a minor change, 4: Completely understandable), clarity (1: Vague, 2: Needs much change, 3: Needs a minor change, 4: Clear), and relevance (1: Irrelevant, 2: Needs much change, 3: Needs a minor change, 4: Completely relevant). Twelve students responded at this stage, and CVI was calculated for each item based on students' responses. The CVI was calculated as the ratio of respondents who chose scores 3 and 4 for each component of relevance, clarity, and simplicity to the total number of people who commented on that item. According to the Waltz and Bausell method (21), items higher than 0.79 are suitable. Therefore, items with CVI $<$ 0.79 were removed or corrected.

3.6. Pilot Reliability

In order to evaluate the reliability of the preliminary questionnaire, which consisted of 29 items, Cronbach's al-

pha was used. To this aim, the questionnaire was provided to 30 psychology students. Cronbach's alpha was obtained for the whole scale of 0.94, which showed that the initial questionnaire had very good reliability. Therefore, the questionnaire was delivered to 301 people to check the validity of the structure.

4. Results

In this study, 301 people (229 women and 72 men) participated. The frequency distribution of participants in terms of gender, age, marital status, employment status, parenting status, and level of education is shown in Table 1. Most of the participants in the study were women (76.1%) in the age group of 20-35 years (52.8%), married (60.8%), employed (67.8%), childless (58.1%), and with a Master's degree or higher (52.8%).

Table 1. Demographic Characteristics of the Participants in the Study

Variables	No. (%)
Gender	
Female	229 (76.1)
Male	72 (23.9)
Age	
20 - 35	159 (52.8)
33 - 55	125 (41.5)
55 and above	17 (5.6)
Marriage status	
Single	118 (39.2)
Married	183 (60.8)
Occupation	
Employed	204 (67.8)
Unemployed	97 (32.2)
Parenting	
Having child	126 (41.9)
No child	175 (58.1)
Education	
Under diploma	2 (7)
Diploma	19 (6.3)
Associate degree	30 (10)
Bachelor	91 (30.2)
Bachelor and above	159 (52.8)

4.1. Exploratory Factor Analysis

To determine the validity of the structure, exploratory factor analysis was used. Before factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used, and a value above 0.8 was considered an acceptable index. Bartlett's test of sphericity was utilized to determine the appropriateness of the correlation between items by considering factor coefficients higher than 0.5 in the definition of factors.

Chi-squared was calculated as an indicator of Bartlett sphericity (χ^2 = 4399.11, P < 0), indicating that the sample and correlation matrix were suitable for this analysis. To determine the most relevant factors, considering the scree plot, eigenvalues, and the percentage of variance explained by each factor, the factors were analyzed by the principal component method and varimax rotation. Finally, seven factors were extracted with 25 items. In total, these factors explained 66.25% of the variance of the COVID-19-related stressors questionnaire. Items 7, 13, 14, and 26 with a factor of less than 0.5 were removed. Table 2 shows the factor loadings of the seven factors of the COVID-19-related stressors questionnaire, along with the percentage of variance and the cumulative percentage of the variance.

4.2. Reliability

In order to evaluate the reliability of the final 25-item questionnaire, internal consistency was used. Table 3 presents Cronbach's alpha for all seven factors and the questionnaire. The results showed that Cronbach's alpha coefficients for all seven factors are satisfactory and desirable in terms of the number of items. However, this coefficient is smaller for the seventh factor than for the other six factors. It should be noted that if any of the items in the questionnaire were removed, Cronbach's alpha coefficient did not increase significantly. Therefore, it was unnecessary to delete any of the items in the questionnaire.

4.3. Logistic Regression

Logistic regression (enter method) was used to evaluate the simultaneous effect of stressors related to COVID-19 on the possibility of mental health problems (greater score equal to 14.5). A total of 301 people were included in the analysis. The results of the omnibus test show the evaluation of the overall logistic regression model and address the extent to which the model is explanatory and efficient. According to the results of this test, the general model, which included all predictor variables, was statistically significant (df = 4, chi-squared = 32.99, and P < 0). This model correctly predicts 57.3% of the probability of mental health problems based on predictor variables, and the overall prediction accuracy was 75.7%. Cox and Snell R squared and Nagelkerke's R squared values also showed that independent study variables could explain

Table 2. Exploratory Factors Extracted from the Persian Version of the Questionnaire on Stressors Related to COVID-19

Factor and Item Number	Factor Load	Title of the Item	Variance of %	% Cumulative
Factor 1: I am worried about being in public places and interacting with high-risk people			10.86	10.86
4	0.74	I am worried about going to a treatment center because of the possibility of getting COVID-19		
5	0.73	I am worried about being in public because of the possibility of getting COVID-19		
6	0.77	I am worried about using public transportation during the COVID-19 outbreak		
9	0.60	I am worried about dealing with someone who does not follow the health instructions associated with COVID-19		
Factor 2: I am worried about changes in family interacts			10.36	21.25
10	0.86	I am worried about how my interactions with my children will change during the outbreak of COVID-19		
11	0.85	I am worried about changing the way my children are cared for during working hours during the outbreak of COVID-19		
12	0.72	I am worried about changing the way I interact with my spouse during the outbreak of COVID-19		
20	0.66	I am worried about my children's educational status during the outbreak of COVID-19		
Factor 3: I am worried about changes in individual lifestyle			10.28	31.53
21	0.64	I am worried about changing my sleep patterns during the outbreak of COVID-19		
22	0.72	I am worried about changes in our eating habits during the outbreak of COVID-19		
23	0.74	I am worried about losing my physical activity and sports during the outbreak of COVID-19		
24	0.59	Concerned about following the health guidelines associated with COVID-19 (hand washing, surface disinfection, mask use, social spacing)		
25	0.67	I am worried about a change in my hobby during the COVID-19 outbreak		
Factor 4: I am worried about myself and my family getting COVID-19			10.05	41.59
1	0.67	I am worried about getting COVID-19		
2	0.78	I am worried about being a carrier of COVID-19		
3	0.72	I am worried about my relatives getting infected with COVID-19		
8	0.57	I am worried about hearing or seeing news about COVID-19		
Factor 5: I am worried about participating in celebrations and mourning and attending religious places			9.92	51.52
27	0.87	I am worried about attending religious places during the outbreak of COVID-19		
28	0.9	I am worried about attending the funeral during the outbreak of COVID-19		
29	0.89	I am worried about participating in celebrations (weddings, birthdays, friendly parties) during the outbreak of COVID-19		
Factor 6: I am worried about changes in economic status			8.47	59.98
15	0.84	I am worried about my financial situation during the COVID-19 outbreak		
16	0.75	I am worried about the increase in the price of the goods I need during the outbreak of COVID-19		
17	0.82	I am worried about my future career during the outbreak of COVID-19		
Factor 7: I am worried about changes in educational status			6.28	66.25
18	0.77	I am worried about my education during the outbreak of COVID-19		
19	0.72	Concerned about online education of schools and universities (whether quality education or online exams) during the outbreak of COVID-19		

29% - 39% of the variance in mental health problems. Table 4 shows the regression coefficients, Wald statistics, significance level, related degrees of freedom, and probability values for each of the predictor variables. These results showed that the variables of worry about changes in economic status, worry about self and family getting COVID-19, worry about changes in individual lifestyle, and worry about changes in family interactions can predict the likelihood of developing -the mental health problem with probability ratios of 1.29, 1.28, 1.18, and 0.85, respectively. This indicates that increasing the score of each of the variables of worry about changes in economic status, worry of self and family getting COVID-19, worry about changing individual lifestyle, and the chance of mental health problem increase 1.28, 1.18, and 0.85 times, respectively. On the other hand, increasing the variable score of changing family interactions reduces the participants' chance of mental health problems by 0.85 times.

5. Discussion

Due to the prolongation of the COVID-19 pandemic and the increase in stress and anxiety about the consequences of the disease, it is necessary to develop a comprehensive questionnaire to measure the stressors associated with the pandemic. The first purpose of the present study was to construct and evaluate the validity and reliability of the COVID-19-related stressors questionnaire. In the present research, the "item effect" method was used to evaluate the face validity. If the effect score of each item was higher than

Table 3. Internal Consistency of All Areas in Stressors Related to the COVID-19 Questionnaire

Cronbach's Alpha Coefficient	Factors
Worry about being in public places and interacting with high-risk people	0.8
Worry about changes in family interacts	0.84
Worry about changes in individual lifestyle	0.78
Worry about self and family getting COVID-19	0.78
Worry about participating in celebrations and mourning and attending religious places	0.9
Worry about changes in economic status	0.82
Worry about changes in educational status	0.68
Total	0.89

1.5, the item was found suitable for the subsequent analysis, and the item was retained. Content validity index and CVR were applied to evaluate the validity of the questionnaire content. According to the Lawshe's table (20), as well as Waltz and Bausell's (21) opinion, items with CVR > 0.56 and CVI > 0.79 were kept, and the rest were deleted or modified.

In the next step, the exploratory factor analysis method was used to evaluate the validity of the structure. Before performing the factor analysis, its assumptions were examined. Principal component analysis and varimax rotation were used to extract the factors. Exploratory factor analysis led to the identification of seven factors. These factors explained 66.25% of the variance of the COVID-19-related stressors questionnaire. The factors extracted from the COVID-19-related stressors questionnaire differ from similar surveys developed in other countries (7, 10, 11). This difference can be attributed to cultural differences, previous pandemics, management, organization, and economic conditions in distinct countries. In this study, the total reliability of the questionnaire using Cronbach's alpha was 0.89, which indicates that the questionnaire had high reliability. The lowest reliability was related to worrying about changes in educational status, and the highest was related to worrying about participating in celebrations and mourning and attending religious places. Overall, the results showed that the COVID-19-related stressors questionnaire has acceptable validity and reliability. As a result, this questionnaire can be used as a valid and reliable tool in mental health studies because no similar Persian survey is available.

To examine the second goal of the study, which was to predict mental health with stressors related to COVID-19, logistic regression was utilized. Our findings demonstrated that the factors had the highest probability of predicting mental health. The variables of worry about changes in economic status, worry about self and family getting COVID-19, and worry about changing individual lifestyle increase the chance of mental health disorders in participants and raise the score of variables about changing family interactions while reducing the chance of mental health problems. The most predictive factor for mental health issues in the current study was the concern about changes in economic status. Undoubtedly, the most considerable disruption that COVID-19 has caused in the world is the disruption of world economics. Business closures in large countries have virtually stopped the global economic cycle. However, Iranians, whose country has been embroiled in international sanctions for years, naturally experience far more difficult situations than others. Many studies have shown that worry about self and family getting COVID-19 and mental health issues (22, 23) has relationships with pandemic prolongation and increased peak of COVID-19 prevalence in the community. The mentioned relationship was not unexpected. Anxiety about changing one's lifestyle is a factor that refers to concern about changes in factors, such as sleep, food, exercise, entertainment, and personal hygiene instructions. Various investigations have confirmed the relationship between the role of nutrition (24), sleep quality (25), exercise (26), entertainment (27), and personal health (28) with mental health. Due to quarantine and social alienation, people's life routines may be disrupted during the COVID-19 pandemic. People may be unable to continue in pre-pandemic hobbies because of reduced physical activity, sleep, and food. Studies that have emphasized the maintenance of life routines in mental health during a pandemic confirm this finding (29, 30).

Some studies suggested that increased concern about changes in family interactions inversely predicts that mental health problems may result from people concerned about family interaction changes being more concerned with interactions than those indifferent to the change (24). However, this is an assumption and needs further assessment. Giving importance to the family is a sign of higher mental health.

One of the limitations of the present study was its cross-sectional nature, which makes it challenging to conclude its long-term effect. This study was conducted in absentia and through virtual networks due to the epidemic conditions. Therefore, people who did not have the ability or access to virtual networks did not participate in this study. The current research was conducted in Tehran. The generalization of the results to other cities in Iran should be performed with caution. In the research sample, only 5.6% of participants are over 55 years old, which limits the generalization of results to these people. Despite these limitations, providing a tool for a comprehensive assessment

Table 4. Results of Logistic Regression for Predicting the Likelihood of Afflicting Mental Health Disorders Based on Stressors Related to the COVID-19 Questionnaire

Predictor Variables	B	SE	Wald	df	P-Value	Exp (B) = OR	95% C.I.for EXP (B)	
							Lower	Upper
Worry about being in public places and interacting with high-risk people	-0.008	0.076	0.011	1	0.915	0.992	0.855	1.151
Worry about changes in family interacts	-0.157	0.047	11.067	1	0.001	0.854	0.779	0.937
Worry about changes in individual lifestyle	0.169	0.047	12.843	1	0	1.185	1.080	1.300
Worry about self and family getting COVID-19	0.252	0.071	12.669	1	0	1.286	1.120	1.477
Worry about participating in celebrations and mourning and attending religious places	0.085	0.053	2.529	1	0.112	1.088	0.980	1.208
Worry about changes in economic status	0.255	0.066	14.872	1	0	1.291	1.134	1.470
Worry about changes in educational status	0.015	0.082	0.032	1	0.857	1.015	0.864	1.192
Constant	-5.145	0.808	40.560	1	0	0.006		

of stressors related to COVID-19 and examining the role of stressors related to COVID-19 in mental health during a pandemic outbreak is one of the strengths of the present study.

5.1. Conclusions

The COVID-19-related stressors questionnaire has good validity and reliability. For better planning, it can be used in future research to identify stressors involved in various psychological variables, such as mental fatigue caused by the pandemic or the quality of life in pandemic conditions. Concerns about the economic situation were the most important predictors of mental health during the outbreak of COVID-19, which can be explained by the quarantine and closure of some businesses and economic sanctions in Iran. With the outbreak of COVID-19 and the change in people's lifestyles, identifying pandemic-related stressors and identifying the most important stressors in predicting mental health will help health policymakers to provide better intervention programs.

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Footnotes

Authors' Contribution: Study concept and design: N. A. and S. H.; analysis and interpretation of data: H. S. and Sh. Sh.; drafting of the manuscript: H. S.; critical revision of the manuscript for important intellectual content: N. A., H. S., and Sh. Sh.; statistical analysis: Sh. Sh.

Conflict of Interests: All authors have actively participated in the presentation of the idea, searching for sources, writing and reviewing the paper, the final approval of this paper, and accepted responsibility for the accuracy of the content presented.

Ethical Approval: All activities of this study from the beginning to the end were approved by the Ethics Committee of Baqiyatallah University of Medical Sciences (BUMS) (approval ID: IR.BUMS.REC.1399.128).

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