



Prediction of corona anxiety based on self-diagnosis in vaccinated people

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ABSTRACT

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Background and Aim: The aim of the current research is to predict corona anxiety based on self-reported illness in vaccinated people at the vaccination center. **Methods:** The method of the current research is quantitative and has been implemented in a descriptive-correlational way, and it is practical in terms of the purpose of this research. The study population of this research is all the people who visited the vaccination center of the Holy Prophet (PBUH) Complex of West Tehran Azad University in the fall of 1400. Among these people, 400 vaccinated people who received the second dose were selected as a sample based on the amount calculated by Gpower software in a simple random manner. Self-diagnosis and Corona anxiety tests were taken from the subject. The data were analyzed using the statistical method of multivariate analysis of covariance. **Results:** The results show that corona anxiety is predicted based on self-diagnosis. There is a positive and significant effect of the path coefficient of self-care on corona anxiety ($p < 0.001$, $\beta = 0.290$). **Conclusion:** In explaining this finding, it can also be said that since during the corona virus epidemic, the media play an active role in informing the news and incidents caused by this epidemic, and these informations cause high physiological stimulation and as a result, negative emotions. It will follow people, which leads to people not being successful in regulating their emotions and increases self-diagnosis. As a result, self-diagnosis is also associated with an increase in corona anxiety. Therefore, it is not far from the expectation that self-diagnosis predicts corona anxiety in vaccinated people. One of the most important limitations of the research is the lack of access to a wider community of people in other vaccination centers, and it seems that conducting other research on people who were present in other vaccination centers can complete and generalize the results of this research.



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Introduction

One of the cases that are of special importance and urgency is conducting research on mental health and the occurrence of mental disorders caused by Covid-19; Because the high contagion and deaths caused by this virus and even the implementation of quarantine plans have increased the number of mental disorders, especially stress, and anxiety in people. The results of some research conducted in this field have shown the negative effects of the spread of this disease on mental health, including increased symptoms of depression and anxiety, stress disorders, insomnia, anger and fear.

Self-diagnostic disorder or hypochondria does not mean worrying about the symptoms of the disease itself. Rather, it is about the possibility that the disease is serious. In addition to experiencing anxiety about their illness, people suffering from hypochondria are also preoccupied with their mistaken beliefs about the seriousness of their symptoms (Halgin, Whitburn, 2019). This disorder is characterized by great anxiety and fears about having a serious illness; Therefore, the main problem is anxiety, which is different from other anxiety disorders. Health is a continuum concept first proposed by Salkovskis and Warwick. Health anxiety goes beyond normal concerns about health and can seriously affect job performance, education and interpersonal relationships (Shehamtinejad, 2021). On one side of the continuum, there are mild concerns about health and illness. On the other side, narcissistic disorder, which is concerned with extreme fears and sometimes delusions about their health, does not have all the diagnostic features of narcissism.

One of the global challenges in facing the coronavirus is the discussion of prevention and treatment. Since the experts believe prevention is better than treatment and entails lower costs for the individual and society, they conducted tests to produce a vaccine, which was ultimately successful. They were the first to make a covid vaccine less than a year after being infected and began vaccinating people worldwide. These vaccines are designed, manufactured, or produced to create acquired immunity against the coronavirus disease. The measures taken in the past to prepare vaccines against coronavirus diseases such as acute respiratory syndrome and Middle East respiratory syndrome have increased the knowledge about the structure and function of coronaviruses. One of the most

stressful issues is the unpredictability of the disease crisis because in this case no reliable time for the end of the crisis was predicted. During the days of the Covid-19 pandemic, although the media around the world were providing information to the people to inform them about the spread of this virus, in some cases it was also observed that they presented wrong analyzes without scientific documentation. These cases caused the feeling of worry and anxiety among people more than before (Nuraei, Etziri, Hoshmandi, Ra'i, 2020). Also, the bombardment of information about the corona disease, its signs and symptoms has caused many people to suffer from a disorder called self-diagnosis, who are constantly searching for these symptoms or feeling these symptoms in themselves.

The vaccine injection may be associated with symptoms, although the extent of these symptoms differs in different vaccines. Vaccination symptoms in healthy and normal people usually do not cause problems. However, in people who suffer from anxiety disorders such as self-harm, it may cause serious psychological problems and endanger their mental health even more. Corona anxiety is treated based on self-infection in vaccinated people.

Method

The current research is small, and it is carried out in a descriptive-correlational way. It is practical in terms of the type of purpose of this research because the issue of the corona pandemic and the injection of vaccines and its consequences has become a global issue today. Our country is not exempt from this international problem. Therefore, conducting research in this field has made us more aware of this issue, and covering the dimensions of this issue as fully as possible will improve our performance in dealing with the spread of Covid-19. The research community is all the people who visited the Pasteur Vaccination Center in the fall of 1400 and injected the second dose of corona vaccine, which is reported to be more than 500 people. G*power software was used to determine the minimum required sample size. The sample size at a confidence level of 95% with a test power of 0.8 and according to the effect size at the level of 0.02 based on Cohen's classification, considering that the number of predictor variables was 6 variables, 400 people were calculated from among all the people who referred to the center. Vaccination of Islamic Azad University, West

Tehran Branch, 400 people who met the criteria for entering the study was selected randomly through a lottery of names registered in the system, and the questionnaires were provided to them.

Tools

1. Corona anxiety questionnaire. This tool was prepared and validated by Alipour, Gadami, Alipour, and Abdulzadeh to measure the anxiety caused by the spread of the Coronavirus in Iran. The final version of this tool has 18 items and 2 components (factors). Items 1 to 9 measure psychological symptoms, and items 10 to 18 measure physical symptoms. This tool is scored on a 4-point Likert scale (never = 0, sometimes = 1, most of the time = 2, and always = 3); Therefore, the highest and lowest scores obtained by respondents in this questionnaire are between 0 and 54. High scores in this questionnaire indicate a higher level of anxiety in people.

2. Self-diagnosis questionnaire. This questionnaire has 36 questions and is graded on a Likert scale from 0 to 5. Based on the score obtained, people are placed in healthy (0-20), borderline (21-30), mild (31-40), moderate (41-60) and severe (above 60) groups.

Results

In order to better understand the society studied in the research, it is necessary to describe these data before analyzing the statistical data. Also, the statistical description of the data is a step towards identifying the pattern governing them and a basis for explaining the relationships of the variables used in the research. Therefore, in this study, 400 people from all the people referred to the vaccination center of Islamic Azad University, West Tehran branch, with an average age of 28.41 ± 2.57 years and in the age range of 20 to 63 years, were examined. In terms of gender, 280 people (70 percent) of the studied subjects are women, in terms of occupation, 169 people (42.3 percent) are unemployed, in terms of education level, 243 people (60.8 percent) are postgraduates and bachelors, in terms of type of vaccination, 296 people are vaccinated. (74%) was from Sinopharm.

The reliability value of each of self-sickness and corona anxiety has been calculated using Cronbach's alpha test. The value of Cronbach's alpha of all research questionnaires is above 0.70 (Tawakal et al., 2011), so the questionnaires have a high level of reliability and internal consistency to measure their indicators.

The coefficient of the path of the effect of self-illness on corona anxiety showed that there is a positive and significant effect of self-illness on corona anxiety ($p < 0.001$, $\beta = 0.290$).

Conclusion

The present study aimed to predict corona anxiety based on self-diagnosis in vaccinated people. Therefore, based on the theoretical foundations and the background of the studies related to the topic of the current research and in order to improve the level of mental health in human forces as the main assets of various industries and organizations, the current research aims to predict the anxiety of Corona based on self-diagnosis in vaccinated people were carried out in the vaccination center so that the current research is a step towards reducing the anxiety caused by Corona and improving their psychological level. The results of the research findings confirmed all the hypotheses. Therefore, treatment and educational programs can consider these variables in order to reduce the anxiety of Corona.

According to the indicators estimated in the findings section, the results show that Corona anxiety is predicted based on self-diagnosis. The findings showed that self-care positively and significantly affects corona anxiety.

Since anxiety and health concerns, and self-infection occur when physical sensations and changes are understandable, therefore, corona anxiety may lead to misinterpretation of physical sensations (symptoms similar to corona disease, fever, cough and muscle pain) and these misinterpretations lead to increased self-diagnosis (Murphy et al., 2021). Also, in the cognitive-behavioral models of self-diagnosis, it was assumed that during such epidemics, physical feelings or harmless symptoms are interpreted as threats and signs of a serious disease, leading to anxiety increasing and, subsequently, physical feelings increasing (Smundsen et al., 2010).

In explaining this finding, it can also be said that during the coronavirus epidemic, the media play an active role in informing about the news and events caused by this epidemic, and these notifications provoke led to physiological high and, as a result, negative emotions of people, which leads to people not being successful in regulating their emotions and increases self-morbidity. As a result, self-diagnosis is also associated with increased corona anxiety.

Therefore, it is not far from the expectation that self-diagnosis predicts corona anxiety in vaccinated people. One of the most important limitations of the research is the lack of access to a wider community of people in other vaccination centers, and conducting other research on people who were present in other vaccination centers can complete and generalize the results of this research.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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