

Epidemic Disease Phobia and its Association with Psychological Vulnerability in Patients with Chronic Diseases

Received date:08/01/2026 Accepted date:03/04/2026 Published date:30/04/2026

Chawki Bougoffa¹, Hamid Oumelili²

¹ *Research Laboratory in Growth Disorders and Autism, University of Setif2, Algeria, Email: ch.bougoffa@univ-setif2.dz*

² *Research Laboratory in Growth Disorders and Autism, University of Setif2, Algeria, Email: h.oumelili@univ-stif2.dz*

Abstract:

The study aims to identify the relationship between epidemic disease phobia and psychological vulnerability. so phobia is a psychological disorder that contributes to psychological vulnerability and reduces individuals' ability to adapt to external changes, particularly epidemic diseases, which pose a direct threat to both mental and physical health, especially among patients with chronic illnesses. This study adopts a descriptive correlational approach studies the relationship between variables. and involves a sample of 50 patients. Aged between (27.60) years. consisting of (37 males) and (13 females). suffering from chronic conditions such as asthma, diabetes, and hypertension, using a questionnaire consisting of two dimensions and 20 items. The study aims to examine the relation between epidemic disease phobia and psychological vulnerability. To peoples with chronic diseases. The findings indicate a relationship between the two variables, highlighting the importance of addressing psychological factors alongside medical care.

Keywords: Chronic diseases, epidemic diseases, mental health, phobia, psychological vulnerability

Corresponding Author: Chawki Bougoffa, Email: ch.bougoffa@univ-setif2.dz

1. INTRODUCTION

Since the existence of humankind and from the very beginning of creation, numerous types of epidemics and diseases have existed and have long been a cause of human destruction. In early eras, humans suffered from a lack of methods, means, and strategies for confrontation and prevention. Among the examples is the epidemic that spread during the era of ‘Umar ibn al-Khaṭṭāb, when he uttered his famous saying: “I flee from the decree of God to the decree of God.” We should also not forget the epidemic that spread in Spain and claimed the lives of thousands of Spaniards, and most recently the Coronavirus epidemic in the last millennium. From here, the alarm bell was sounded, and governments and states expressed concern and interest due to the repercussions and material and human losses they experienced, which exceeded all expectations. Since human beings constantly seek ways and means for comfort, safety, and psychological stability, they always engage in persistent efforts to preserve their psychological and physical health through the development of psychological resilience, which is considered the protective wall and faithful guardian of the individual in confronting shocks and various incidents. However, the situation is different for individuals with chronic diseases, as these individuals suffer from impaired performance and feelings of weakness as a result of a chronic illness, whatever that illness may be. This makes them highly alert and cautious compared to normal and healthy individuals, which in many cases results in psychological fragility in the face of the spread of dangerous epidemics. This diminishes and reduces their psychological



immunity and their capacity for confrontation and resilience, as the mind becomes submissive, compliant, and incapable of protection. Accordingly, the following question can be raised:

Is there a statistically significant relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals with chronic diseases?

Hypotheses:

To answer the main question, it was necessary to formulate or propose the following hypothesis:

-There is a correlational relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals with chronic diseases.

Importance of the Study:

Studies of a social and particularly psychological nature are of great importance compared to other studies, as they are concerned with individuals' safety and psychological stability. Accordingly, the importance of the topic can be outlined as follows:

-Assisting psychologists in identifying the relationship and making a diagnosis. leading to assessment and treatment.

-Highlighting the widespread phenomenon, especially if it threatens individuals' stability, security, and psychological and physical health.

-Shedding light on epidemics, their degree of danger, and their repercussions at the national and international levels.

-Considering the study as an academic reference that researchers may rely on as a previous study for other dimensions.

-Addressing some of the basic concepts of the study, such as psychological fragility, in an attempt to interpret them and determine their relationship with other variables.

-Identifying the relationship between phobia and the formation of psychological fragility among individuals with chronic diseases.

Objectives of the Study:

. These can be summarized as follows:

-measuring the level of psychological vulnerability in people with chronic diseases

-Uncovering the link between phobia of infectious diseases and the development of psychological fragility in those with chronic illnesses

-Determining the level of phobia in individuals with chronic illnesses increases the likelihood of them developing fragility

2. Study Terminology

2.1Phobia

It is defined as “a negative emotional response caused by a specific stimulus” (Shukri, 2005, p. 39).



Zainab Shaqir (2000) also defines it as: “an exaggerated fear that may reach the level of terror and involves a response accompanied by tension and panic toward stimuli, topics, or objects that do not provoke fear (ordinary and familiar objects or topics). This response is accompanied by a set of symptoms such as pallor of the face, sweating, trembling of the teeth or muscles, rapid heartbeat, anxiety, tension, dizziness, etc.” (Aghiyat, 2018, p. 23).

2.2 Epidemic Diseases

Disease in general is the affliction of living organisms by something, and this affliction causes certain changes in bodily functions and structure, which may lead to death. These afflictions may also result in physical, psychological, or mental diseases. Whatever the disease and its type, it creates a state of disruption or dysfunction in the body’s systems. Although all body systems are harmonious and integrated, they are affected when one of them is affected (Al-Duwaikat, 2019, p. 6).

An epidemic is also defined as the spread of a disease over a wide area affecting a large number of people. The science concerned with such studies is epidemiology. An epidemic can be measured by two main factors: the size of the population exposed to infection and the pace and speed of the epidemic’s spread, or what is known as the reproduction rate. People may confuse the concepts of pandemic and epidemic; a pandemic has a broader and more comprehensive geographical scope than an epidemic and affects a large segment of people. An epidemic

may turn into a pandemic if it is not controlled and contained (Torrey, 2020).

2.3 Psychological Fragility

Terminologically, it derives from the Latin term VULNUS, meaning “wound,” and in its general sense it is translated as weakness or deficiency. Through this weakness, individuals’ unity is under the threat of destruction. When individuals are afflicted by a particular disease, their physical structure may weaken, thereby making them susceptible to any physiological assault (Al-Manhal, p. 1281).

Irlonmeier sees that “future studies on fragility aim at two fundamental issues: the causal study of disease or illness, as well as preventive intervention.”

Anna Freud defines psychological fragility as follows: “We cannot interpret fragility solely through the individual characteristics of the child (...); rather, it must be understood in more comprehensive terms and in relation to personality (...). I now consider that what the child achieves throughout the stages of growth toward maturity depends on interaction with several favorable external influences, along with favorable inherited predispositions and favorable development of internal structures” (Zawad, 2013, p. 89).

3. Operational Concepts of the Study

3.1 Phobia

Fobia is a psychological disorder. It is a state of psychological panic and intense fear experienced by the



individual when confronting or encountering situations or variables that cause maladjustment to the situation or variable faced. The individual finds great difficulty in adaptation and integration, as well as instability at the emotional and affective levels.

3.2 Epidemic Diseases

They are diseases characterized by frightening and rapid spread and are often associated with the surrounding context or environment, and they also pose serious public health risks, causing widespread fear, high morbidity and mortality rates, and significant social, economic, and psychological consequences.

3.3 Psychological Fragility

It is a state of inability to confront and withstand psychological crises and shocks, whereby the individual lacks psychological immunity that facilitates adaptation and integration. The individual also lacks psychological defense mechanisms and strategies, which makes them vulnerable to incidents and crises.

4. Limits of the Study

4.1. Temporal Limits

The time period for conducting the research and the actual application of the study instrument extended from November 22, 2025, until December 10 of the same year, i.e., approximately 18 days. This period was sufficient for the processes of selection, distribution, and collection of the questionnaire.

4.2. Spatial Limits

The study was largely confined to the University Hospital – Ben Flis El-Tehami in Batna, specifically in the Emergency Department, as well as some departments related to the nature of chronic diseases, such as the Asthma and Respiratory Diseases Department.

The study s human limitations:

The study is limited to a sample of 50 individuals. 37 men and 13 women . ranging in age from 27 to 60 years

Methodological limitations:

The descriptive correlational approach was used to measure and define the relationship between the variables . the measurement tool was a questionnaire where we have an independent variable (epidemic disease phobia) .and the dependent variable (psychological screening)

5. Previous Studies

5.1. Study by Fares Zine El-Abidine and Fellah Ahmed (2021)

It is entitled *Measuring Corona Phobia: Fear of COVID-19*. The study aimed to develop and verify a Corona Phobia Scale to measure the level of fear of COVID-19. The results showed good reliability coefficients in terms of internal consistency and split-half reliability. The study demonstrated the effectiveness and validity of the scale in assessing fear of COVID-19 in Algeria as well as in all infected regions.

5.2 Study by Fattal Saliha



Entitled *Psychological Resilience and Fear of Coronavirus among Patients with Heart Diseases*. The study aimed to identify differences among patients with heart diseases in terms of psychological resilience and fear of the Coronavirus. The study relied on two scales: a Psychological Resilience Scale and a Fear of Coronavirus Scale. The sample consisted of 45 patients with heart diseases (20 males and 25 females) at Mustapha Pacha Hospital in Algeria. The study concluded that male patients with heart diseases demonstrated strong and high psychological resilience compared to females, whereas female patients exhibited greater fear of the Coronavirus than males. The study also concluded that there was no statistically significant correlational relationship between the variables (psychological resilience and fear of the virus) among patients with heart diseases.

5.3 Study by Tahraoui Yassin

Entitled *Corona Phobia: The Other Face of the COVID Pandemic*. The study aimed to determine the psychological state experienced by individuals, in which phobia and fear were the most prominent aspects, coinciding with the rise in mortality rates worldwide. The study showed that concurrent stress and anxiety negatively affected lifestyle patterns, thereby increasing levels of tension. It also confirmed the existence of a relationship between the spread of the deadly Coronavirus and the states of panic, fear, and anxiety resulting from this spread in the absence of strategies for prevention, safety, and psychological and physical health

6. Description of the Questionnaire

The questionnaire or form is among the most important tools used by the researcher in the study, with the aim of

collecting information and data that serve the research and lend credibility to the results, similar to other research instruments. The questionnaire consists of two axes: the axis related to the psychological dimension, which includes 10 items or statements whose factorial validity has been established and which are far removed from prediction and suggestion; and the second axis concerning preventive precautions among individuals suffering from chronic diseases, comprising 10 items that measure what they were designed to measure. The table above presents the sample items after compiling and coding the questionnaire content using SPSS, where a clear variation in choices is evident. Below is the statistical analysis of the arithmetic means of the items.

Table 1. showing sample characteristics

Sample	gendre	Chronic diseases
37	male	diabetes
13	female	Asthma
		Hypertension

Table 2. Distribution of Responses by Dimension

First: Psychological Dimension	Always (3)	Sometimes (2)	Never (1)
1. I feel intense anxiety merely upon hearing about the spread of epidemics.	42	02	06
2. I lack immunity to confront any epidemic.	39	01	10
3. I am certain that I will meet	43	02	05

my demise when epidemics spread.

4. I always seek to avoid unpleasant and disturbing news.	46	00	04
---	----	----	----

5. I experience a feeling of tension when I suffer a health setback.	37	04	09
--	----	----	----

6. I am completely unable to resist my fears regarding illness.	40	01	09
---	----	----	----

7. I suffer from sleep disturbances.	11	08	31
--------------------------------------	----	----	----

8. I suffer from eating disturbances.	09	02	39
---------------------------------------	----	----	----

9. I experience psychological instability accompanied by rapid heartbeats.	35	04	11
--	----	----	----

10 I suffer from attention dispersion resulting from excessive thinking.	12	04	34
---	----	----	----

Second: Preventive Precautions

11. I wash my hands several times when touching objects.	41	00	09
--	----	----	----

12. I refuse to shake hands with people for fear of infection.	38	05	07
--	----	----	----

13. I refrain from sitting in confined places.	31	01	18
--	----	----	----

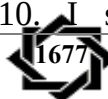
14. I refrain from sitting in crowded places.	32	00	18
---	----	----	----

15. I closely monitor the activities I engage in that may affect my health.	36	01	13
---	----	----	----

16. I perceive others as a source of threat to my health.	38	04	08
17. I refuse to leave the house without medication, even if the distance is short.	43	00	07
18. I undergo periodic check-ups to reassure myself about my health.	49	00	01
19. I pay great attention to medication schedules and their details.	48	00	02
20. Every activity I undertake is done under consultation with my attending physician, even if the activity is simple.	47	01	02

Table 3. Psychological Dimension

Item	Mean
1. I feel intense anxiety merely upon hearing about the spread of epidemics.	2.72
2. I lack immunity to confront any epidemic.	2.58
3. I am certain that I will meet my demise when epidemics spread.	2.76
4. I always seek to avoid unpleasant and disturbing news.	2.84
5. I experience feelings of tension when I suffer a health setback.	2.40
6. I am completely unable to resist my fears regarding illness.	2.62
7. I suffer from sleep disturbances.	1.60
8. I suffer from eating disturbances.	1.40
9. I experience psychological instability accompanied by rapid heartbeats.	2.48
10. I suffer from attention dispersion resulting from	1.64



excessive thinking.

Table 4. Preventive Precautions

Item	Mean
11. I wash my hands several times when touching objects.	2.72
12. I refuse to shake hands with people for fear of infection.	2.62
13. I refrain from sitting in confined places.	2.26
14. I refrain from sitting in crowded places.	2.28
15. I closely monitor the activities I engage in that may affect my health.	2.46
16. I perceive others as a source of threat to my health.	2.60
17. I refuse to leave the house without medication, even if the distance is short.	2.72
18. I undergo periodic check-ups to reassure myself about my health.	2.96
19. I pay great attention to medication schedules and their details.	2.92
20. Every activity I undertake is done under consultation with my attending physician, even if the activity is simple.	2.90

Tables 2 and 3 present the arithmetic means for each statement included in the questionnaire across two main axes. The arithmetic mean for each item was calculated individually prior to reaching the final result, namely the overall mean for each axis.

Calculation of the Overall Mean for Axis 1:

The overall mean of all items is approximately 2.30 out of a total of 3. This indicates a tendency toward option 3. This signifies the presence of a considerable degree of relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals suffering from chronic diseases.

Overall Mean for Axis 2:

The overall mean for the second axis is 2.46. The mean of 2.46 falls within the upper limit of the medium range, i.e., close to a high level.

7. Discussion of Results in Light of Previous Studies

By examining the relevant literature and previous studies conducted within the same context, the following findings emerged: Our study is consistent with the study by *Fares Zine El-Abidine and Fellah Ahmed (2021)* in addressing the phobia variable resulting from epidemic diseases, which the researchers identified and limited to COVID-19, while differing in methodology and instruments.

The current study also agrees with the study by *Fattal Saliha* regarding the nature of the variables, as the researcher addressed psychological resilience and the extent to which patients with heart disease are affected by fear as an independent and influential variable, as well as the study instrument, which relied on scales. There is also agreement in the sample, represented by cardiac patients as one category of chronic diseases on which the current study focused. However, a clear discrepancy appears between the two studies in terms of results, as the researcher's study concluded that there is no statistically significant correlational relationship between the aforementioned variables, whereas the current study concluded that there is a

relationship between phobia of epidemic diseases among individuals with chronic diseases and the formation of psychological fragility.

8. Discussion of Results in Light of the Study Hypothesis

- The results indicate that the overall mean of the phobia scale reached 2.30, which clearly reflects a moderate level of the effect of phobia on the formation of psychological fragility among individuals suffering from chronic diseases. This yields a relationship of moderate effect between the study variables, without reaching a strong level.

- This study was based on the hypothesis that there is a strong relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals with chronic diseases. Based on the results of the statistical analysis, the overall mean of the phobia scale was found to be (2.30 out of 3), which definitively reflects a moderate level of the correlational relationship of epidemic disease phobia on psychological fragility among the sample members.

Accordingly, the obtained result indicates that the hypothesis was partially confirmed, as it affirms the existence of a relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals suffering from chronic diseases; however, this relationship was of a moderate degree and did not reach a high or strong level. This is explained by the fact that phobia of epidemic diseases contributes to increasing certain feelings of anxiety and tension, as well as a lack of psychological stability among chronic patients, yet its effect may be influenced by other activating or inhibiting psychological and social variables.

- The results of the second axis (preventive precautions) also indicate a high overall mean, represented by (2.64 out of 3), which clearly reflects a high level of preventive and avoidance behaviors associated with phobia of epidemic diseases among individuals with chronic diseases. Most items and statements of the second axis related to preventive precautions showed a clear and explicit tendency toward the option “always,” especially those statements involving avoidance behaviors toward public places that may affect them, as well as fear of infection and excessive preventive measures and procedures. This indicates the formation of psychological fragility at high levels, which coincides with persistent fear and anxiety, thereby negatively affecting the routine and daily activities of individuals with chronic diseases. Based on the foregoing, it can be stated that the study emphasizes the adoption of a dual preventive–precautionary and psychological approach for individuals suffering from chronic diseases, taking into account their health conditions without neglecting the psychological dimension. This contributes to reducing accompanying anxiety, tension, and psychological fragility.

Accordingly, there is a relationship between phobia of epidemic diseases and the formation of psychological fragility among individuals suffering from chronic diseases.

9. CONCLUSION

Based on the finding of the present study, it is evident that there is a correlational relationship between epidemic disease phobia and the development of psychological fragility among individuals suffering from chronic illnesses such as diabetes, asthma, and hypertension. The study further indicates that these patients tend to exhibit a high level of vulnerability to developing psychological fragility in conjunction with the



persistent and accompanying fear they experience. Persistent anxiety and continuous tension place them in a constant state of anticipation, vigilance, and expectation, which intensifies psychological and internal conflict. The study, through the use of the descriptive method, demonstrated that phobia of epidemic diseases affects the mental health of individuals suffering from chronic diseases, as confirmed by the results obtained from the questionnaire.

Recommendations and Suggestions :

1. The necessity of psychological and social support for individuals suffering from chronic diseases.
2. The role of awareness and guidance institutions through workshops and awareness days addressing prevention methods.
3. The effective role of the family in motivating and psychologically supporting the patient, which facilitates the patient's ability to find ways and means of confrontation and coping.
4. The establishment of mechanisms and strategies for early diagnosis prior to intervention, confrontation, and evaluation.
5. Avoiding exaggeration in the assessment of crises and emergency situations, in which the media plays a significant role that affects the recipient.
6. Creating effective strategies through comprehensive surveying of dangerous phenomena and sudden crises.

10. Bibliography List

Aghiyat, Salima, 2018–2019, « المخاوف المدرسية الشائعة لدى تلاميذ المرحلة الابتدائية وعلاقتها بالتحصيل الدراسي، دراسة وصفية على تلاميذ المرحلة الابتدائية »، Doctoral thesis, University of Oran 2.

Al-Duwaikat, Baraa, « ما المقصود بمرض معدي ومرض وبائي », last updated
03 June 2019 at 4:31 p.m.,

Available at [<https://www.verywellhealth.com>] (consulted on 08/08/2025 at 19:23).

Choukri, Mohamed Adel Karim, 2005, « المخاوف المرضية: قياسها وتصنيفها وتخليصها », Alexandria, Dar Al-Ma'rifat Al-Jami'ia.

Fares, Zine El Abidine, Fallah, Ahmed, 2021, « قياس كورونا فوبيا: الخوف », مجلة دراسات نفسية وتربوية, Vol. 14, No. 02, Sidi Bel Abbès, Algeria.

Fettal, Salima, 2022, « الصمود النفسي والخوف من فيروس كورونا لدى المصابين », Vol. 06, No. 01, Tizi Ouzou, Algeria. مجلة القلب.

Tahraoui, Yassine, 2021, « المجلة », Algerian Simplified Encyclopedia Laboratory, Vol. 03, No. 02, University of Batna.

Torrey, Trisha, 2020, “Difference Between an Epidemic and a Pandemic”,

Available at [<https://www.verywellhealth.com/difference-between-epidemic-and-pandemic-2615168>] (consulted on 18/07/2020).

Zouad, Dalila, 2013–2014, « الهشاشة النفسية والسير الانتحارية لدى المراهق », Doctoral dissertation in Clinical Psychology, Part 1, University of Algiers.

