ISSN-e [2675-5602]

Global Academic Nursing Journal

REVIEW ARTICLE

Panic syndrome in the field of psychology: a review

El síndrome de pánico en el campo de la psicología: una revisión

Síndrome do pânico na área da psicologia: uma revisão

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How to cite this article:
Paulino RA, Mascarenhas ACF, Anselmo BA, Oliveira IR, Rosa Neto JS, Paulino LF, Reis SM, Melo SCO, Carvalho NSC, Paulino AR. Panic syndrome in the field of psychology: a review. Glob Acad Nurs. 2023;4(Spe.1):e368. https://dx.doi.org/10.5935/2675-5602.20200368

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Submission: 07-08-2022
Approval: 03-02-2023

Abstract

The aim was to carry out research regarding panic disorder (PD) and its association with anxiety attacks and other factors, related to the increased occurrence of disorders that are associated with stress today. Integrative bibliographic review, in which the selection was made in an integrative and systematic way, for analysis and writing. The diagnosis of PD is essentially clinical and, advantageously, it is made early so that treatment can be started as soon as possible. Through bibliographic research, three types of treatment for PD were identified: psychopharmacological, psychotherapeutic, and combined, which combines the two isolated types. Therefore, when comparing the isolated treatments with the associated treatment between them, it was observed that the combined treatment demonstrated greater effectiveness. This literary review sought to characterize panic disorder and its attacks, in addition to demonstrating the effectiveness of treatment for a better patient prognosis. In this sense, non-pharmacological treatment associated with pharmacological treatment demonstrated greater benefits when compared to its isolated types of clinical management.

Descriptors: Psychotherapy; Panic; Anxiety; Post-Traumatic Stress Disorders; Psychopharmacology.

Resumén

El objetivo fue realizar investigaciones sobre el Trastorno de Pánico (TP) y su asociación con ataques de ansiedad y otros factores, relacionados con la mayor aparición de trastornos asociados al estrés en la sociedad actual. Revisión bibliográfica integrativa, en la que la selección se realizó de forma integradora y sistemática, para su análisis y redacción. El diagnóstico de la EP es esencialmente clínico y es ventajoso que se realice precozmente, para poder iniciar el tratamiento lo antes posible. A través de la investigación bibliográfica se identificaron tres tipos de tratamiento para la EP: psicofarmacológico, psicoterapéutico y combinado, que combina los dos tipos aislados. Por lo tanto, al comparar los tratamientos aislados con el tratamiento asociado entre ellos, se observó que el tratamiento combinado demostró mayor efectividad. Esta revisión literaria buscó caracterizar el trastorno de pánico y sus ataques, además de demostrar la efectividad del tratamiento para un mejor pronóstico del paciente. En este sentido, el tratamiento no farmacológico asociado al tratamiento farmacológico demostró mayores beneficios en comparación con sus tipos aislados de manejo clínico.

Descriptores: Psicoterapia; Pánico; Ansiedad; Trastornos de Estrés Postraumático; Psicofarmacología.

Resumo

Objetivou-se realizar uma pesquisa a respeito do Transtorno do Pânico (TP) e sua associação com crises de ansiedade e outros fatores, relacionados ao aumento da ocorrência de transtornos que possuem associação com o estresse na sociedade atual. Revisão bibliográfica integrativa, na qual a seleção foi feita de maneira integrativa e sistemática, para análise e escrita. O diagnóstico do TP é essencialmente clínico e é vantajoso que ele seja feito de forma precoce, para que o tratamento seja iniciado o mais brevemente possível. Através das pesquisas bibliográficas foram identificados três tipos de tratamento para o TP: o psicofarmacológico, o psicoterapêutico e o combinado, que associa os dois tipos isolados. Dessa forma, ao se comparar os tratamentos isolados com o tratamento associado entre eles, foi observado que o tratamento combinado demonstrou uma maior eficácia. Essa revisão literária buscou caracterizar o transtorno do pânico e seus ataques, além de demonstrar a eficácia do tratamento para o melhor prognóstico do paciente. Nesse sentido, o tratamento não farmacológico associado ao farmacológico demonstrou maiores benefícios, quando comparado a seus tipos isolados de manejo clínico.

Descritores: Psicoterapia; Pânico; Ansiedade; Transtornos de Estresse Pós-Traumáticos; Psicofarmacologia.

Introduction

Post-modernity has brought countless changes in the different aspects of social relations, on the one hand, it has brought the benefits of plurality, and diversity and made a large amount of information available, on the other it has also resulted in conditions that lead to a faster daily life, in which people They face difficulties in keeping up with this countless information and in establishing consolidated relationships in their family environments or at work/school. All these transformations result in a common feeling of impotence and excessive worry, factors that have become part of the daily lives of a large part of the world's population. Therefore, the increase in demand from patients with anxious symptoms in psychology and psychiatry offices is notable[1,2].

Currently, there is a greater demand for professionals who help in the management of dysfunctional psychic signs and symptoms, which have always existed and are inherent to the human condition, and their investigations can be observed by countless researchers throughout history. In 1921, Freud described panic as a neurotic anguish caused by the breaking of emotional ties, which generates a release of gigantic and senseless fear. Approximately 60 years later, the American Psychiatric Association created the psychiatric category called "panic disorder" or "panic syndrome". In 1994, the Association announced how it is possible to diagnose panic disorder (PD), enabling a better understanding of this pathology that causes psychological distress and functional impairment[1,3].

For health, the interest in assessing quality of life (QOL) is the result of the perception of the health-disease process. It is known that this process involves multifactorial and complex aspects, and it is important to evaluate individuals in their economic, and sociocultural contexts and their particularities related to lifestyle. Health-related QoL involves aspects more directly associated with illnesses or health interventions. Scientific evidence indicates that depressive symptoms, anxiety, panic, and personality characteristics, such as neuroticism, negatively impact the QOL of PD patients. The main factors of this influence are related to depressive symptoms[4,5].

It is estimated that the prevalence of PD in the population is between 1 and 4%. Studies from 2005 showed a prevalence of 2.7 in the United States of America and 1.8% on the European continent. Furthermore, PD has an important heredity component, which among first-degree relatives varies around 11% and between monozygotic twins around 30 to 40%[6].

Since this is a serious health problem, related to associated comorbidities and secondary disorders with significant prevalence, it is important to observe the social implications associated with this manifestation, such as absenteeism and greater use of public health services. It is valid that due attention is given to PT within the scope of psychiatric health care and due planning in the public health sector.

In this context, the objective of the study was to research panic syndrome, its association with anxiety, and other factors due to the growth of disorders associated with stress in society.

Methodology

This article is a bibliographical review and for this purpose, articles that addressed the topic of "Panic Disorder" were searched on the SciELO, PubMed and LILACS platforms. The research of the literary base was carried out using the keywords: "Panic Syndrome", "Psychology", "Cognitive Behavioral Therapy", "Stress", "Anxiety", as shown in Chart 1.

Chart 1. Result obtained from searches in databases. Paracatu, MG, Brazil, 2022

Keywords	Data source	Number of articles found in the research	Number of articles with title as IC	Number of articles with abstract as IC	Number of articles with complete reading as IC	Number of articles selected
Panic Syndrome	SciELO	134	25	17	5	3
Psychology	SciELO	126	13	8	2	2
Cognitive behavioral therapy	PubMed	82	21	3	1	1
Stress	LILACS	74	14	9	3	1
Anxiety	PubMed	61	7	4	2	1

Note: IC = inclusion criteria.

From this investigation, several articles were found and used as a basis for study and research regarding the proposed topic, the total number of works found is described in the table above. Next, the research was delimited and the criteria for inclusion (IC) and exclusion (EC) were applied to select the material of interest. The purpose

of this filtering was to select articles fundamentally aimed at studying the etiology, pathogenesis, treatments, and clinical approach to PD. The IC for selecting the bibliography were the following directions: free access to articles; the titles associated with the theme of the work; the abstracts related to them and complete reading as the last mechanism of choice. The exclusion criteria (EC) applied involved touching on the topic to which the CIs were not applied.

At the end of the process, sources were chosen that demonstrated a direct link with the subject to be discussed, thus eight articles were selected. There was also conceptual complementation with data from classic books in the field of psychiatry and psychology. Thus, the sources that most corresponded to the research objective were obtained. The analysis of this study was carried out in an integrative way, aiming at the main outcomes related to the subjects, and those that suited the study were added, with the function of qualifying the outcomes observed.

Results and Discussion

Panic disorder (PD) is characterized by the presence of recurrent panic attacks. These attacks consist of a feeling of fear or intense discomfort accompanied by physical and cognitive symptoms that begin suddenly, reaching maximum intensity within 10 minutes. These phenomena lead to persistent concerns or important changes in behavior regarding the possibility of new anxiety attacks[3].

According to the research, a syndrome is defined as an antecedent, in a comorbidity, if its age of onset precedes the age of onset of the other comorbid disorder by more than one year. Therefore, understanding the chronology of manifestations is an important step toward identifying risk factors[7].

Another important concept associated with PD is agoraphobia. The term “agoraphobia” means fear of open places, it refers to fear of leaving home or situations in which immediate help is not possible[8].

Therefore, it refers to an interrelated and often overlapping group of phobias that encompass the fear of leaving home; from entering closed places - such as planes, elevators, cinemas, etc. - in addition to the fear of going to places where there are crowds, public places; phobia of standing in line; traveling by bus, train or car; of moving away from home and being alone in one of these situations[8].

Agoraphobia is a common complication in PD, in which all feared situations have in common the fear of feeling ill, needing help, and not getting it easily or immediately. It is understood that this is a very close relationship, but although the patient may have panic disorder without presenting agoraphobia, isolated agoraphobia conditions, that is, without manifestations of panic, are rare. Some researchers even claim that agoraphobia does not exist in isolation. Records indicate that between 1/3 and 1/2 of patients with panic have agoraphobia. Regarding the implications of these phenomena, panic attacks are quite unpleasant, but they do not affect individuals' daily lives as much as agoraphobia does[9].

Patients with PD follow a pattern of manifestations that lasts, being considered long, as it can last up to a decade, between visits to medical emergencies until a precise and definitive diagnosis is reached, generally, the patient persists in searching for a cause. organic for your symptoms. Therefore, it is concluded that not only psychiatrists but also other doctors, especially those who deal directly with primary care and urgent and emergency services, must be familiar with the PD identification criteria[3].

Etiology

Regarding the etiology of the condition, several factors are currently identified related to the etiology of PD. Its causes involve both genetic and environmental aspects. Some studies of families with manifestations of the disorder in question have indicated a significant pattern of hereditary involvement. The risk of developing this pathology in first-degree relatives of patients with this condition is approximately eight times higher than in the control group[3,4].

Previous studies have associated traumatic experiences in childhood with the development of PD in adulthood, just as the origin of this psychic disorder has been observed in stressful events in adulthood, role transitions, and even family losses. On the other hand, socioeconomic factors, which are mainly: ethnicity, marital status, level of education, and income, do not seem to be factors of greater importance in the association with this disorder[3,5,6].

Chart 2. Temporal relationship between social phobia and panic disorder and dependence on psychoactive substances[11]. Paracatu, MG, Brazil, 2022

Author/year	Sample (n)	Chronological relationship
Mullaney e Trippett (1976)	102 (hospitalized alcoholics)	Phobic disorders precede the onset of alcohol use – 82%
Stravinski e cols (1986)	96 (alcoholics)	Agoraphobia preceded alcohol abuse – 64%
Breier e cols (1986)	55 (panic and agoraphobia)	First panic attack after the start of alcohol abuse – 80%
Lotufo Neto e Andrade (1986)	35 (alcoholics)	Agoraphobia began before the onset of alcoholism – 81.8%
Maciel e Gentil Filho (1988)	119 (panic)	Panic disorder started before alcohol abuse – 75%
Johannessen e cols (1989)	154 (hospitalized alcoholics)	Panic attacks started after the alcohol problem – 50%

		Panic attacks preceded alcohol use – 39%
Schneier e cols (1989)	98 (social phobics)	Social phobia precedes the onset of alcohol abuse – 93.7%
Schneier e cols (1992)	361 (social phobics)	Social phobia precedes alcohol use – 85%
Krystal e cols (1992)	63 (panic)	Panic attacks started after alcoholism – 60% Panic attacks preceded alcoholism – 33% Both disorders appeared at the same time – 6%
Otto e cols (1992)	100 (panic)	Panic disorder started after alcohol dependence – 83.3%
Chignon e Lépine 91993)	155 (panic with or without agoraphobia)	Panic disorder started before alcohol abuse – 60.7% Panic disorder started after alcohol abuse – 39.3%
Starcevic e cols (1993)	54 (panic)	Panic disorder started after drug use – 82.3% Panic disorder started before drug use – 11.8%

Other habits related to individual lifestyles, such as alcoholism, smoking, and nicotine dependence in adolescence - which are commonly described as a factor in the aggravation of various pathological conditions - when evaluated in this context were also shown to be risk factors for PD in adult life. However, the causality of this association is still questionable because there is a need to improve the chronological assessment between events[3,8,9].

In Chart 2 there is a compilation of some studies from different periods with alcoholic populations that have expressed some phobia, the study of which aimed to establish a chronological pattern between the facts. However, it is noticeable that each author can establish different correlations between facts, thus the description of this relationship is uncertain[3,8].

Diagnosis

The diagnosis was established in 1980, and the psychiatric category "panic syndrome" or "panic disorder" was created, according to the American Psychiatric Association (APA) and the International Statistical Classification of Diseases and Related Health Problems – ICD-10. In 1994, the APA then announced that PD is diagnosed in cases of recurrent panic attacks that are not expected, followed by at least a month of continuous worry, in addition to a significant change in behavior[1,2].

This disorder consists of the presence of sudden attacks of dysfunctional anxiety, accompanied by physical and affective symptoms, fear of having a new attack, and hesitation in places or situations in which the attacks have already occurred[2].

Patients with panic disorder, before being diagnosed with this syndrome, look for an organic cause for their symptoms and therefore visit doctors and health units several times. Due to this persistent search, it is up to health professionals to seek greater preparation concerning the diagnosis and management, in general, of panic syndrome[1]. Currently, it is known that the diagnosis of panic disorder is essentially clinical. The diagnostic criteria according to the Diagnostic and Statistical Manual of Mental Disorders are presented in Chart 3.

Chart 3. Diagnostic criteria for panic disorder according to the Diagnostic and Statistical Manual of Mental Disorders. Paracatu, MG, Brazil, 2022

A. Criteria 1 and 2 are required

1. Recurrent and unexpected panic attacks.
2. At least one attack was accompanied for a month or more by the following characteristics:
    a. At least one attack was accompanied for a month or more by the following characteristics.
    b. Worry about the implications of the attack or its consequences such as losing control, "going crazy" and having a heart attack.
    c. Significant change in behavior related to panic attacks.

B. It must be specified whether there is associated agoraphobia.

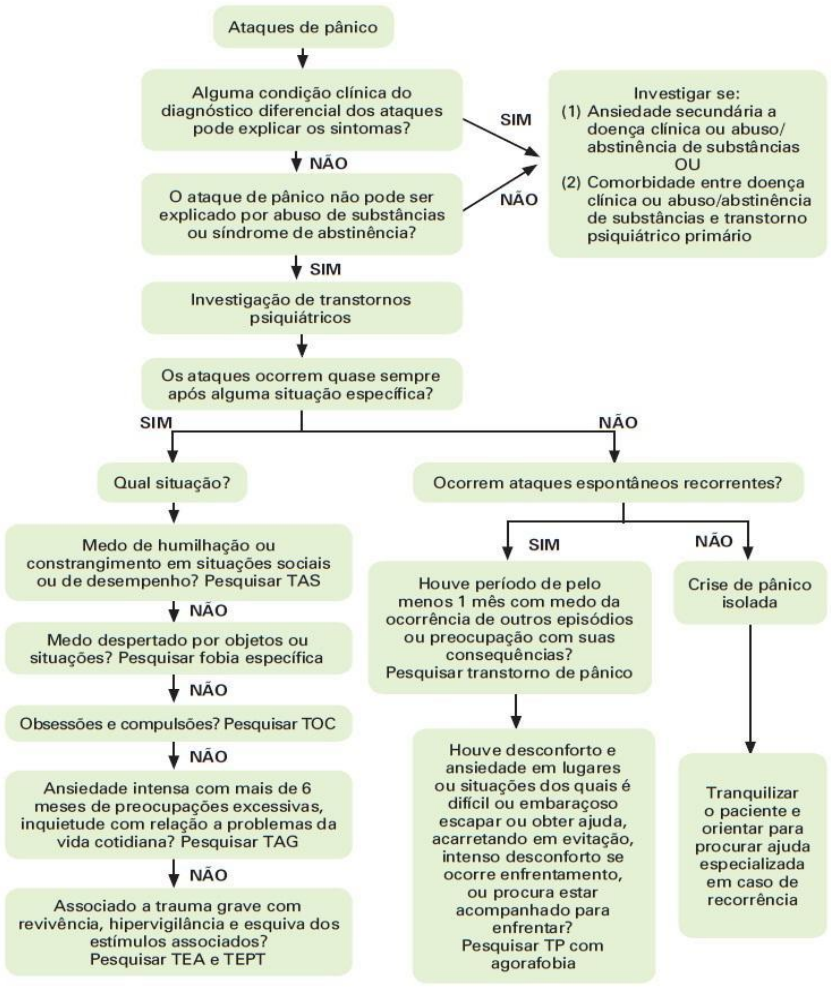
C. Panic attacks are not due to the direct physiological effects of a substance (e.g., drug or medication abuse) or a general medical condition (e.g., hyperthyroidism).

D. Panic attacks are not better explained by other mental disorders such as social phobia, specific phobia, obsessive-compulsive disorder, post-traumatic stress disorder, or separation anxiety disorder.

Source: Diagnostic and Statistical Manual of Mental Disorders, 1994.

It should also be noted that one of the key points for diagnosing PD involves attention to differential diagnoses and their due investigation. Because of this, a strict evaluation is important, using the algorithm for evaluating the PD, as shown in Figure 1[3].

Figure 1. Algorithm for diagnostic assessment of panic attacks. Paracatu, MG, Brazil, 2022



Source: Salum et al., 2009.
Note: TAS/SAD = social anxiety disorder; TOC/OCD = obsessive-compulsive disorder; TAG/GAD = generalized anxiety disorder; TEA/ASD = acute stress disorder; TEPT/PTSD = post-traumatic stress disorder; TP/PD = panic disorder.

Furthermore, during clinical evaluation, patients may present specific signs and symptoms that must be taken into consideration to make the diagnosis, which are described below.

Figure 2. Panic attack diagnostic criteria. Paracatu, MG, Brazil, 2022

Criteria
Palpitations
Sweating
Tremor or concussions
Dyspnea or feeling of suffocation
Abdominal pain or discomfort
Dizziness, imbalance, or syncope
Derealization or depersonalization
Fear of losing control or going crazy
Fear to die
Paresthesias
Chills or hot flashes
Feeling of strangulation

Source: Diagnostic and Statistical Manual of Mental Disorders, 1994.

Treatment

Considering that panic disorder is a chronic disease, that is, it persists throughout the lives of patients who are affected, the treatment must be also long-lasting and planned over the long term[2].

The earliest possible treatment after PD diagnosis is essential to reduce suffering and harm associated with this pathology and to avoid the emergence of complications and comorbidities. The prevention of new crises and the reduction of associated complications, such as anticipatory anxiety and phobic avoidance, are the key points in the appropriate control of this psychiatric disorder condition[3].

In general, there are three types of treatment: psychopharmacological treatment, psychotherapeutic treatment, and combined treatment. The treatment carried out by professionals in the field of psychology consists, in principle, of clarifying the patient's possible doubts, as well as providing information about anxiety and the disorder itself. It has been observed that these discussions can become a significant tool to change the negative consequences of emotions triggered by panic syndrome, therefore favoring greater comfort and QoL for patients who live with them[1,3,12].

Studies prove that cognitive behavioral therapy (CBT) is the therapy with the most consistent results for PD, being superior to psychosocial attention control therapies. This type of treatment consists of psychoeducation about the disorder. During the first sessions, the client is instructed to perform Progressive Muscle Relaxation to gradually obtain muscle discrimination between contraction and relaxation. It is agreed with the client that this relaxation should be practiced twice a day and that he will record the initial and final tension level with each exercise. Only with practice will he develop the ability to sense muscular tension in his body and relax whenever necessary[1,9].

Regarding drug treatment, its objective is to block panic attacks, reduce anxiety, reverse phobic avoidance, as well as recognize and treat comorbidities. The spectrum of anxiety encompasses a variety of disorders, including PD, and, in general, the treatment of anxiety symptoms with drugs occurs when they significantly interfere with the patient's normal function, as is the case with acute panic attacks[3,13].

Among psychotropic drugs, selective serotonin reuptake inhibitors (SSRIs) are the first pharmacological choice for PD. The mechanism of action of these drugs involves altering the synaptic availability of serotonin (5-HT) and inhibiting the pre-synaptic reaccumulation of serotonin released by the neuron. In general, SSRIs enhance and prolong the action of 5-HT released in neuronal activity, that is, they promote prolonged serotonergic transmission. Paroxetine was the first SSRI approved by the Food and Drug Administration (FDA) for the treatment of PD, in 1996. Sertraline was approved in 1997, and its effectiveness has been demonstrated in several studies. In addition to these medications, it is possible to use fluoxetine, citalopram, and escitalopram[1,3,13].

Tricyclic antidepressants (TCAs) inhibit the uptake of norepinephrine and 5-HT, with a pharmacological action of antagonizing serotonin and serotonin and norepinephrine transporters. These TCAs, although equally effective, are less tolerable than SSRIs and can be lethal in higher doses, which is why they are considered a second choice for the treatment of PD due to the safety margin[1,13].

Regarding combined therapies, a meta-analysis involving around 21 randomized clinical trials that included more than 1,700 PD patients with or without agoraphobia, demonstrated that the combined treatment of antidepressants and psychotherapy was more effective when compared to the two alternative therapeutics applied alone as monotherapy in the acute phase of the disorder[1].

After the effects of acute management are fully effective, maintenance treatment should be monitored for one year. After this proposed period, the medication must be gradually withdrawn, according to the specificities of the drug, and CBT can be maintained to guarantee quality of life and avoid acute attacks of panic syndrome, since the patient may still have relapses[2].

Conclusion

This literary review sought to characterize panic disorder and its recurrent attacks, with an abrupt onset that leads the patient to experience a feeling of fear or discomfort and may present physical and cognitive symptoms.

Furthermore, it is concluded that because PD is a chronic disease, continued treatment is required, in which priority should be given to starting treatment immediately. Therapeutic conduct must be primarily individualized and based on dialogue between professional and client so that the patient is aware of their clinical condition and the importance of continued treatment. Furthermore, the association between the non-pharmacological approach and the application of drugs, with the use of antidepressants demonstrates great benefits in the acute treatment of PD and its crises.

However, this study has limitations, as it requires further studies with a longer time window and current studies with new techniques so that the interference of psychology in the panic crisis and the best ways of approaching it can be analyzed with greater care.

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