

Panic Disorder Treatment among Patients in Saudi Arabia

Mohammed Ahmed Saeed Zirari^{1*}, Adel Ahmed Alshehri², Ibtisam Abdulkarim Alshammari³, Rawan Omar A Halabi⁴, Omar Ahmad Almontasser Al-Khayari⁵, Norah Yahya Algathradi⁶, Mshari Abdulrahman Alabdulwahed⁷, Turki Seran D Alharbi⁸, Saeed Khalil Bin Jabal⁹, Nasser Mansour Khawaji¹, Rakan Awadh Aedh Alhumaidi¹⁰, Hashem Mohamed Alshreef Alkhawaji⁵, Yazeed MUSAAD Alkhuzim¹¹, Mohammad Ahmed Alteraiqi¹² and Mawaddah Abdulgader Tallab¹³

¹Alamal Psychiatric Hospital, Al Aweer, United Arab Emirates

²Umm Al Qura University, Mecca, Saudi Arabia

³Imam Abdulrahman Bin Faisal University (University of Dammam), Dammam, Saudi Arabia

⁴Taif University, Taif, Saudi Arabia

⁵Imam Mohammed Bin Saud University, Riyadh, Saudi Arabia

⁶King Khalid University, Abha, Saudi Arabia

⁷Al Maarefa Colleges, Riyadh, Saudi Arabia

⁸King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

⁹Arabian Gulf University, Manama, Bahrain

¹⁰Mental Health Hospital, Saudi Arabia

¹¹KSU, GP in MOH, Saudi Arabia

¹²College of Medicine, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

¹³King Abdulaziz University, Jeddah, Saudi Arabia

***Corresponding Author:** Mohammed Ahmed Saeed Zirari, Alamal Psychiatric Hospital, Al Aweer, United Arab Emirates.

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Abstract

Panic disorder (PD) is a severe, chronic disorder characterized by one or more unexpected panic attacks followed by worry about additional attacks and the implications of the attacks. If attacks are sufficiently severe or frequent, they can promote marked, sometimes debilitating behavioral changes. Many panic disorder sufferers appear to be incompletely responsive to treatment and are subject to relapse after remission. Patients with panic disorder have a high use of medical services, an impaired social and work life, and an overall reduced quality of life. The good news is that short term, psychological interventions can improve the lives of most patients. Protocols and resources to help general practitioners implement such techniques, with and without drugs, are available.

Keywords: Panic Disorder; Treatment; Cognitive Behavioral; Panic Attacks

Introduction

Panic disorder is a severe, persistent, and potentially disabling anxiety disorder that affects an estimated 2.5 to 5 percent of the general population at some point in their lives [1]. Women are more often affected than men. Panic disorder is characterized by one or more unexpected panic attacks followed by at least one month of concern of additional attacks, the physical implications of these attacks, or changes in behavior (e.g. help-seeking, fearful avoidance) related to these attacks. *Agoraphobia* is a term that describes avoidance situations in which an attack may occur or apprehensive endurance of these situations, which can confer significant limitations in social, work, and

family functioning. Two-thirds of Panic disorder affected individuals will develop major depression at some time and are at increased risk for developing one or more additional psychiatric disorders within a six-month period [2]. A unifying hypothesis theory clarifying why panic attacks happen in a few people and not in others are as yet deficient. In any case, essential and clinical research bolsters the idea that neurobiological modifications (with distorted cognition) in key cerebrum ranges are vital in intervening the appearance and tirelessness of Panic disorder. The logical method of reasoning for pharmacological treatment of PD depends on generous observational confirmation supporting the adequacy of pharmacotherapy for this condition. Notwithstanding our expanded learning of the natural underpinnings of Panic disorder and our growing treatment armamentarium, about 20 percent of those people analyzed as having Panic disorder will remain truly sick five years later [3].

Panic disorder can prompt a huge obstacle in way of life. People with panic disorder likewise may confront issues with business and depression. What's more, people with panic disorder have a substantially higher danger of liquor mishandle or reliance and suicidality than the wide-ranging community [4]. However, a few investigations recommend that panic disorder itself is not a hazard factor for suicide without different dangers, for example, emotional disarranges, substance utilize clutters, dietary issues, and identity issue [5].

Panic Disorder Treatment

Pharmacotherapy, cognitive-behavioral therapy (CBT), and other psychological treatment modalities are used to manage panic disorder. The American Psychiatric Association (APA) endorses treating patients with panic disorder when symptoms cause dysfunction (e.g. work, family, social, leisure activities) or significant distress. Treatment objectives such as tailoring the treatment plan to each individual, Decreasing occurrence and strength of panic attacks, decreasing anticipatory anxiety and agoraphobic prevention, treating co-occurring psychiatric disorders, achieving full symptomatic remission and returning to premorbid level of function [6].

Cognitive-Behavioral Therapy

Psychotherapy is prescribed for patients with panic disorder who incline toward nonpharmacologic administration and who are capable and willing to take the time and push to take an interest in week by week (or at times interchange week after week) sessions and between-session hones. The most grounded accessible confirmation is for CBT [6,7]. CBT, with or without pharmacotherapy, is the treatment of decision for panic disorder, and it ought to be considered for all patients This restorative methodology has higher viability and lower cost, dropout rates, and backslide rates than do pharmacologic medicines. CBT may incorporate countering restless convictions, presentation to fear signals, evolving nervousness looking after practices, and anticipating backslide [8]. It is essential to recognize the recurrence and nature of the panic disorder manifestations and additionally the triggers of panic disorder effects for successful administration. The patient's symptomatic status ought to be observed at every session, for example, with the utilization of rating scales, and patients can likewise self-screen by keeping a day by day record of panic indications [6].

Cognitive-behavioral therapy (CBT) encourages patients to see how programmed musings and false beliefs prompt overstated passionate reactions, for example, anxiety, and how they can prompt optional behavioral results. CBT can be utilized alone or notwithstanding pharmacotherapy. In any case, the blend approach yields predominant outcomes for most patients, contrasted and comes about because of the utilization of either methodology alone [9], by upgrading long haul results through lessening in the probability of backslide when pharmacologic treatment is ceased. Combination treatment ought to be considered for patients in whom standard monotherapies have not been effective [6]. CBT is best when begun ahead of schedule after side effect beginning and in patients with couple of mental comorbidities [10]. Therapy is by and large restricted to 10 - 15 week by week sessions and can be directed either separately or in a gathering. The National Collaborating Center for Mental Health suggests CBT appear as week by week sessions of 1 - 2 hours and be finished inside a greatest of 4 months of beginning [7].

Cognitive restructuring includes substituting positive considerations (e.g. patients can disclose to themselves that they are just feeling a little uneasiness or that their emotions will soon be gone) for the maladaptive contemplations that go with panic (e.g., feeling that they are going to die or are having a heart attack). Behavioral therapy includes sequentially greater exposure of the patient to anxiety-provoking stimuli. Over time, the patient becomes desensitized to the experience. Relaxation methods also help to control patients' levels of anxiety [11]. Information from 3 national epidemiologic studies besides the Cross-National Collaborative Panic Study suggests the existence of 2 subtypes of panic disorder, respiratory and non-respiratory. The non-respiratory subtype was typified by general somatic symptoms, whereas the respiratory subtype was not only thought to be a more severe form of the disorder but also associated with a significantly greater likelihood of lifetime major depression [12]. Respiratory exercise can comfort patients to control hyperventilation for the period of panic attacks and to control anxiety with controlled breathing. Moreover, capnometry feedback-assisted breathing exercise can be used to foil hypocapnia and stabilize the respiratory rate. Interoceptive exposure includes encouraging patients to encourage internal sensations (e.g. dizziness, increased heart rate, lightheadedness) by spinning, exercising, or rapid breathing and to interpret these as normal bodily sensations. Guided imagery and hypnotic recommendation might likewise be useful.

Outpatient care is the general setting for uncomplicated panic disorder. Patients might be hospitalized on the off chance that they show any proof of hazardous conduct, have wellbeing concerns, and additionally report self-destructive or desperate ideation-as may happen in setting of acute anxiety, dread of anxiety, or its outcomes. Contemplations for confirmation incorporate intoxication or withdrawal from narcotic/hypnotics, for example, liquor or alprazolam, which are some of the time ingested or mishandled in patients' endeavors to sedate or deal with the anxiety. Patients may likewise be hospitalized on the off chance that they turn out to be so crippled by their tension that they can't stick to outpatient mind. Inpatient treatment is likewise fundamental in patients when the differential determination incorporates other restorative issue that warrant affirmation (e.g. temperamental angina, intense myocardial ischemia) [13]. The APA prescribes clinicians painstakingly evaluate the hazard for suicide in patients with panic disorder as these people have an expanded danger of self-destructive ideation and conduct, paying little heed to whether comorbid conditions are available (e.g. real sadness). In uncommon instances of serious panic disorder in which outpatient administration is inadequate or unreasonable, hospitalization or incomplete hospitalization might be essential. Transfer to an intense psychiatric office might be essential for self-destructive or murderous patients [6].

Emergency Department Management

Patients with chest torment, dyspnea, palpitations, or close syncope ought to be put on oxygen and in a prostrate or Fowler position. Screen the patients with heartbeat oximetry, electrocardiography (ECG), and regular assurance of indispensable signs (counting one arrangement of orthostatic crucial signs, when conceivable). A noteworthy part of treatment includes teaching the patient that their manifestations are neither from a genuine therapeutic condition nor from a maniacal issue, but instead from a synthetic unevenness in the battle-or-flight reaction. This by itself may represent the noteworthy fake treatment reaction rate noted in clinical trials [14]. Patients with panic disorder may require visit consolation and clarification. Many may profit by social administration mediation, which may give steady exchanges and investigate assets for outpatient mind. The crisis office staff must listen successfully and stay empathic and nonargumentative. Explanations made by human services staff, for example, It's not serious and It's identified with stress are as often as possible confused by the patient as suggesting an absence of comprehension and concern. Organizing treatment for panic disorder in the crisis division is fitting in an extremely constrained subset of patients who are profoundly energetic and agreeable, who have a comprehension of the mental idea of their issue, and whose symptomatology is inspired as a reaction to a brief anxiety. In such cases, pharmacotherapy with an oral benzodiazepine for a short span (around 1 wk) might be fitting. Intravenous (IV) solution (e.g. lorazepam at 0.5 mg IV q20 min) might be essential in patients with panic disorder who, because of ensuing poor drive control, represent a hazard to themselves or to people around them [15]. Be that as it may, patients with panic disorder are presumably best served by referral to a therapist before starting anxiolytic prescriptions. A specialist can build up a useful compatibility with patients and take after their needs on a long haul premise.

Pharmacotherapy

Providing a few doses of a benzodiazepine as needed (prn) can improve patient self-assurance and compliance. Limit the total tablet dispensation to guarantee that patients know that they have a limited supply of the drug and that this medicine represents a temporary or emergency use option. Educate the patient concerning the importance of longer-term administration with selective serotonin reuptake inhibitor (SSRI) medication and psychotherapeutic techniques (e.g. CBT). Avoid prescribing benzodiazepine in patients with a known history of substance misuse or alcoholism [16].

The American Psychiatric Association (APA) discovered lacking confirmation to either prescribe any pharmacologic mediation as better than others for panic disorder or to routinely suggest combination treatment over monotherapy. However, pharmacotherapy is prescribed for patients who like to be dealt with medicine or the individuals who don't have sufficient energy or different assets to take part in psychosocial treatment. Keep at the top of the priority list that patients with panic disorder are twice as likely as the populace to utilize elective treatments. The utilization of dietary supplements (e.g. herbs) ought to be talked about to stay away from medicate associations [6]. It is imperative to educate patients of the potential unfriendly impacts of particular pharmacotherapies, and additionally a sensible time span for expecting comes about and the possible length of treatment [6,7].

Benzodiazepines

Benzodiazepines (e.g. alprazolam, clonazepam, lorazepam) may accomplish long-term control of panic disorder, but these agents must be kept for patients with refractory panic disorder. Patients started on benzodiazepines for panic disorder must get a psychiatric recommendation for review of pharmacologic management and, hypothetically, a psychotherapist for any additional nonpharmacologic treatment options. Benzodiazepines must not be used as monotherapy in panic disorder except there is no co-occurring mood disorder [6,17]. Benzodiazepines act rapidly however convey the risk of physiologic and mental reliance. Benzodiazepines can be sensibly utilized as an underlying aide while SSRIs are titrated to a powerful dosage; that is, these specialists would then be able to be decreased more than 4 - 12 weeks while the SSRI is continued. This approach can enhance here and now decency, in spite of the fact that it might build the danger of sedation and requires notices for the patient to not work engine vehicles in the wake of taking benzodiazepines or in the event that they're feeling calmed. Alprazolam (Xanax) has been generally utilized for panic disorder, however its utilization is right now demoralized in view of its higher manhandle/reliance potential. This operator has a short half-life, which makes it especially inclined to bounce back nervousness and mental reliance. Clonazepam (Klonopin) has turned into a favored substitution, since it has a more extended half-life and exactly inspires less withdrawal responses upon cessation in respect to alprazolam.

Since panic disorder is typically an endless issue, sole dependence on habituating drugs is debilitated. Benzodiazepine reliance can happen in 30% of patients who are on treatment that endures longer than two months. It is more averse to happen in patients without a background marked by synthetic or enthusiastic reliance. Benzodiazepine manhandle is recommended by raising dosage utilization after some time. Note that benzodiazepine withdrawal can hasten panic. The essential doctor ought to slowly decrease dosages more than a little while or months [18].

SSRIs and TCAs

Selective serotonin reuptake inhibitors (SSRIs) (e.g., citalopram, escitalopram, fluoxetine, sertraline, paroxetine and paroxetine controlled release, fluvoxamine) are commonly used as first-line pharmacologic agents in panic disorder, followed slightly by tricyclic antidepressant agents (TCAs) (e.g. imipramine, desipramine, nortriptyline, and clomipramine). The National Collaborating Centre for Mental Health practice guidelines specify that TCAs such as imipramine or clomipramine may be considered for the administration of panic disorder if an SSRI is not appropriate or if there is no improvement after a 12-week course of SSRI treatment. (Prior to the use of SSRIs for panic disorder, the TCAs and the monoamine oxidase inhibitors [MAOIs] were used much more generally for this condition.) Along with

SSRIs, the APA reported that there is strong support from randomized controlled trials for the effective use of serotonin-norepinephrine reuptake inhibitors (SNRIs) (e.g. venlafaxine, duloxetine) as the initial treatment of panic disorder [6,7]. Citalopram (Celexa) and escitalopram (Lexapro) are probably going to cause less hepatic protein connections than different SSRIs and might be suitable starting decisions for patients with confused therapeutic regimens or for the individuals who are worried about medication associations. Be that as it may, the FDA issued a Drug Safety Communication in August 2011 expressing that citalopram (Celexa) ought not be utilized at measurements more noteworthy than 40 mg for every day, inferable from the potential for risky irregularities in heart electrical action. Citalopram 20 mg for every day is the greatest prescribed measurements in patients with hepatic disability, who are more established than 50 years, who are CYP 2C19 poor metabolizers, or who are taking associative cimetidine (Tagamet) or another CYP 2C19 inhibitor. Such people can have higher blood levels of citalopram, driving them to have an expanded danger of delayed QT interim and torsade de pointes. Extra notices as of March 2012 debilitate the utilization of citalopram at any measurement in patients with specific conditions (inborn long QT disorder, bradycardia, hypokalemia, hypomagnesemia, late intense myocardial dead tissue, uncompensated heart disappointment) because of conceivably hazardous prolongation of the QT interval [19]. Escitalopram is by all accounts very much endured in preparatory examinations, however costs more than citalopram and does not seem to offer any critical favorable position. Fluoxetine (Prozac) can be utilized, particularly if panic disorder happens with gloom. Patients may have poor resistance for it toward the start because of the fact that the medication may at first increment uneasiness, aside from at low beginning measurements. Fluoxetine has a long half-life, settling on it a decent decision in possibly consistent patients. Notwithstanding, this operator modifies the digestion of cytochrome P-450 2D6-cleared specialists [20]. Sertraline (Zoloft) speaks to a comparative SSRI choice with a marginally unique pharmacodynamic profile, including sigma-receptor impacts, despite the fact that it has some P450 3A4 cooperations. Paroxetine (Paxil), mirtazapine, and TCAs are typically recommended for use before sleep time to help enhance rest. Caution patients to elude operating a motor vehicle or machinery directly after the dose or if they are feeling sedated [21]. Paroxetine is likewise accessible in a controlled discharge arrangement (Paxil CR), which may enhance decency, however despite everything it restrains P450 2D6. Paroxetine is a class D sedate amid pregnancy (i.e. human examinations have demonstrated a hazard to the hatchling, however the medication's advantages may exceed the hazard in pregnant ladies). Utilization of this medicine requires tolerant guiding and additionally documentation of the potential dangers in ladies of conceptive age [22]. Mirtazapine (Remeron), a noradrenergic and particular serotonergic stimulant (NaSSA), has a significantly more steadying impact, for the most part diminishing its capability to exasperate beginning uneasiness. Mirtazapine acts particularly as an alpha-2 enemy, thus expanding synaptic norepinephrine and serotonin, while it likewise obstructs some postsynaptic serotonergic receptors that theoretically intercede over the top nervousness when fortified with serotonin. Note that mirtazapine may cause leftover morning sedation that frequently enhances with continued treatment, and it might likewise cause an expansion in hunger or weight gain. Most patients are started on long-term (e.g. 6 mo) therapy with SSRIs, TCAs, or MAOIs only after consultation with their primary physician or psychiatrist [21].

Difficulties in Treatment

Patients with panic disorder are unenthusiastic to believe their symptoms are not life-threatening and have a high rate of emergency department use. Furthermore, as a result of a reluctance to use medications (related to a fear of losing control), patients with panic disorder are regularly noncompliant. Psychiatrists need to not only assess and recognize potential barriers to management compliance but also work with the patient to reduce or overcome these roadblocks. Patients with panic disorder also have a 4-fold increase in the risk of adverse medication effects, which can result in noncompliance and temporarily increased anxiety. Psychiatrists should encourage patients to discuss such concerns as well as provide realistic expectations at various points in their treatment [6]. Refer all patients with panic disorder for psychiatric or mental health follow-up care and to support groups. Consult a cardiologist for patients with abnormal electrocardiogram (ECG) findings, ventricular dysrhythmia, abnormal cardiac examination, or risk factors for ischemic heart disease [23,24], and consult an addiction treatment specialist in cases of significant intoxication or withdrawal. Initial follow-up care should occur within 2 weeks, since selective serotonin reuptake inhibitors (SSRIs) can cause an initial exacerbation of panic symptoms. For this reason, begin with the lowest dose—with the understanding that the dose must be increased at the initial follow-up visit. Assess potential suicide risk at all appointments. Ensure continuing treatment of any concurrent substance use disorders. Follow-up care by a chemical dependence

treatment specialist is recommended when indicated. Patients with ventricular dysrhythmias, abnormal findings on electrocardiography (ECG), abnormal findings on cardiac examination, or significant risk factors for heart disease should be referred to a cardiologist [25].

Conclusion

In Conclusion, Panic disorder is a severe, potentially disabling illness categorized by episodic remission and relapse, even in the presence of the best currently available treatments. Most patients can achieve at least modest benefit from a therapeutic trial of one of the empirically proven treatments. The solutions to accomplishment in initial pharmacotherapy contain adequate education, cautious titration, and close follow-up visits early in treatment. The decision to utilize concomitant benzodiazepines or psychotherapy is made on an individual basis. Sign for neurobiological differences between persons with panic disorder and normal persons suggests higher than average doses of medication might be essential to achieve remission of panic symptoms. Apparent treatment failures must be assessed via a differential diagnostic method for adherence, specific panic-related residual symptoms, and the presence of a comorbid anxiety or mood disorder, substance/alcohol abuse, and personality or medical disorders. Concurrent psychosocial stressors must likewise be evaluated. In cases where apparently adequate trials of at least two medications have been unsuccessful, switching or augmentation strategies may be employed based on clinical assessment. In the absence of empirical evidence, the art of medicine remains an important part of the process for optimizing the treatment of panic disorder.

Bibliography

1. Craske MG and Stein MB. "Anxiety". *Lancet* 388.10063 (2016): 3048-3059.
2. Kessler RC., *et al.* "The epidemiology of panic attacks, panic disorder, and agoraphobia in the National Comorbidity Survey Replication". *Archives of General Psychiatry* 63.4 (2006): 415-424.
3. Katschnig H., *et al.* "Predictors of quality of life in a long-term followup study in panic disorder patients after a clinical drug trial". *Psychopharmacology Bulletin* 32.1 (1996): 149-155.
4. Fleet RP., *et al.* "Panic disorder in emergency department chest pain patients: prevalence, comorbidity, suicidal ideation, and physician recognition". *American Journal of Medicine* 101.4 (1996): 371-380.
5. Warshaw MG., *et al.* "Suicidal behavior in patients with current or past panic disorder: five years of prospective data from the Harvard/Brown Anxiety Research Program". *American Journal of Psychiatry* 157.11 (2000): 1876-1878.
6. American Psychiatric Association. "Practice guideline for the treatment of patients with panic disorder". 2nd ed. Washington, DC: American Psychiatric Association (2009).
7. National Collaborating Centre for Mental Health, National Collaborating Centre for Primary Care. "Generalised anxiety disorder and panic disorder (with or without agoraphobia) in adults. Management in primary, secondary and community care". London, UK: National Institute for Health and Clinical Excellence (2011).
8. Cloos JM. "The treatment of panic disorder". *Current Opinion in Psychiatry* 18.1 (2005): 45-50.
9. Furukawa TA., *et al.* "Psychotherapy plus antidepressant for panic disorder with or without agoraphobia: systematic review". *British Journal of Psychiatry* 188 (2006): 305-312.
10. Palatnik A., *et al.* "Double-blind, controlled, crossover trial of inositol versus fluvoxamine for the treatment of panic disorder". *Journal of Clinical Psychopharmacology* 21.3 (2001): 335-339.
11. Sánchez-Meca J., *et al.* "Psychological treatment of panic disorder with or without agoraphobia: a meta-analysis". *Clinical Psychology Review* 30.1 (2010): 37-50.

12. Roberson-Nay R and Kendler KS. "Panic disorder and its subtypes: a comprehensive analysis of panic symptom heterogeneity using epidemiological and treatment seeking samples". *Psychological Medicine* 41.11 (2011): 2411-2421.
13. Asnis GM, et al. "Fluvoxamine in the treatment of panic disorder: a multi-center, double-blind, placebo-controlled study in outpatients". *Psychiatry Research* 103.1 (2001): 1-14.
14. Rosenberg NK, et al. "Characteristics of panic disorder patients responding to placebo". *Acta Psychiatrica Scandinavica. Supplementum* 365 (1991): 33-38.
15. Chouinard G. "Issues in the clinical use of benzodiazepines: potency, withdrawal, and rebound". *Journal of Clinical Psychiatry* 65.5 (2004): 7-12.
16. Heldt E., et al. "One-year follow-up of pharmacotherapy-resistant patients with panic disorder treated with cognitive-behavior therapy: Outcome and predictors of remission". *Behaviour Research and Therapy* 44.5 (2006): 657-665.
17. Soumerai SB, et al. "Lack of relationship between long-term use of benzodiazepines and escalation to high dosages". *Psychiatric Services* 54.7 (2003): 1006-1011.
18. Ashton H. "The diagnosis and management of benzodiazepine dependence". *Current Opinion in Psychiatry* 18.3 (2005): 249-255.
19. US Food and Drug Administration. "Celexa (citalopram hydrobromide) - Drug safety communication: revised recommendations, potential risk of abnormal heart rhythms" (2012).
20. Stahl SM., et al. "Escitalopram in the treatment of panic disorder: a randomized, double-blind, placebo-controlled trial". *Journal of Clinical Psychiatry* 64.11 (2003): 1322-1327.
21. Pollack MH., et al. "A double-blind study of the efficacy of venlafaxine extended-release, paroxetine, and placebo in the treatment of panic disorder". *Depress Anxiety* 24.1 (2007): 1-14.
22. Sheehan DV, et al. "Efficacy and tolerability of controlled-release paroxetine in the treatment of panic disorder". *Journal of Clinical Psychiatry* 66.1 (2005): 34-40.
23. Croom KF, et al. "Mirtazapine: a review of its use in major depression and other psychiatric disorders". *CNS Drugs* 23.5 (2009): 427-452.
24. Schmidt NB, et al. "Effects of heart-rate feedback on estimated cardiovascular fitness in patients with panic disorder". *Depress Anxiety* 12.2 (2000): 59-66.
25. Gomez-Caminero A., et al. "Does panic disorder increase the risk of coronary heart disease? A cohort study of a national managed care database". *Psychosomatic Medicine* 67.5 (2005): 688-691.

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