EFFECTIVENESS OF BRIEF CBT FOR PANIC ANXIETY DISORDER: A FOLLOW-UP STUDY

Sherayub Dawar[1], Safia Bibi[2]

How to cite this article

Dawar S, Bibi S. Effectiveness of Brief CBT for Panic Anxiety Disorder: A Follow-Up Study. J Gandhara Med Dent Sci. 2025;12(4):84-87.https://doi.org/10.37760/jgmds.12-4.664

Date of Submission: 08-01-2025
Date Revised: 05-09-2025
Date Acceptance: 24-09-2025

[1]Assistant Professor, Bannu Medical College

Correspondence

[1]Sherayub Dawar, Assistant Professor, Department of Psychiatry, Bannu Medical College
: +92-333-9368720
: drsherayub@gmail.com

ABSTRACT

OBJECTIVES

To examine the effectiveness of a brief CBT protocol in reducing panic symptoms and anxiety, and to assess whether therapeutic gains are sustained at follow-up.

METHODOLOGY

A quasi-experimental study was conducted at the Department of Psychiatry, Khalifa Gulnawaz Teaching Hospital, Bannu, with 60 patients meeting the DSM-5 criteria for PAD, recruited from outpatient psychiatry clinics in Peshawar, Pakistan. Participants underwent a structured six-session CBT program over a period of six weeks. Outcomes were measured using the Panic Disorder Severity Scale (PDSS) and the Beck Anxiety Inventory (BAI) at baseline, post-treatment, and at the three-month follow-up. Data were analyzed using repeated measures ANOVA, effect size estimation, and correlation analysis of demographic predictors.

RESULTS

A significant reduction in panic and anxiety symptoms was observed post-treatment (PDSS: baseline M=15.6, SD=3.2; post-treatment M=7.4, SD=2.9; p<0.001). Improvements were largely maintained at follow-up (M = 8.1, SD = 3.0). Large effect sizes were recorded (Cohen's d=1.3–1.6). Subgroup analysis indicated that younger participants (18–30 years) and females reported greater symptom reduction compared to older adults and males. Correlation analysis revealed that higher baseline severity was associated with greater improvement (r = 0.41, p = 0.003).

CONCLUSION

Brief CBT is highly effective in managing panic anxiety disorder and demonstrates sustained benefits at follow-up. Its time-efficient nature makes it particularly useful in low-resource clinical settings.

KEYWORDS: *Panic Disorder, Brief CBT, Anxiety, Psychotherapy, Follow-up*

INTRODUCTION

Panic Anxiety Disorder (PAD), commonly referred to as panic disorder, is a chronic psychiatric condition characterized by sudden, recurrent panic attacks, accompanied by persistent concern about additional attacks and maladaptive behavioral changes.[1] Epidemiological research suggests that panic disorder affects approximately 1.5-3.5% of the global population, with higher prevalence rates in women and young adults.[2] The disorder is often comorbid with agoraphobia, depression, and substance abuse, leading to impaired functioning, increased healthcare costs, and diminished quality of life.[3,4] Despite its prevalence and disabling consequences, PAD remains underdiagnosed and undertreated in many low- and middle-income countries (LMICs).[5] This treatment gap is primarily due to the scarcity of trained mental health professionals and limited access to evidence-based psychotherapies. Cognitive Behavioral Therapy (CBT) is regarded as the gold-standard treatment for panic disorder, supported by robust evidence from randomized controlled trials.[6,7] Standard CBT protocols typically include 12–15 sessions incorporating psych education, cognitive restructuring, interceptive and situational exposure, and relapse prevention.[8] However, in resource-constrained contexts, lengthy interventions can be impractical due to time, cost, and dropout concerns.[9] Recent studies have proposed brief CBT protocols, typically delivered in 4–8 sessions, as effective alternatives without significant compromise in treatment efficacy.[10,11,12] Meta-analyses indicate that condensed CBT can produce outcomes comparable to standard-length therapy, particularly when focused on core CBT principles.[13] Brief interventions have the added advantage of being cost-effective, improving treatment adherence, and increasing scalability in community-based or primary care settings.[14] In Pakistan, where mental health resources are limited and stigma often deters individuals from seeking long-term therapy, brief CBT may offer a pragmatic solution. However, empirical data regarding its effectiveness in South Asian populations is scarce. This study aimed to

evaluate the effectiveness of a six-session CBT program for panic anxiety disorder in Peshawar, Pakistan, and to examine whether symptom reduction is maintained at follow-up.

METHODOLOGY

This study employed a quasi-experimental pre-post design with follow-up, conducted at the Department of Psychiatry, Khalifa Gulnawaz Teaching Hospital, Bannu, between March and August 2024. Ethical approval was obtained from the institutional review board, and informed consent was taken from all participants. A total of 60 patients, aged 18-45 years, diagnosed with panic disorder according to DSM-5 criteria, were included. Diagnosis was established by consultant psychiatrists using structured clinical interviews. Participants with comorbid psychotic disorders, substance dependence, or severe cognitive impairment were excluded. The intervention consisted of a six-session structured CBT protocol, delivered weekly in 60-minute individual sessions by trained clinical psychologists. The therapy was based on evidence-based manuals but condensed to target essential mechanisms. Session one introduced psychoeducation about panic disorder, the cognitive-behavioral model, and the rationale for therapy. Session two focused on cognitive restructuring of catastrophic misinterpretations. Session three introduced interoceptive exposure exercises, such as hyperventilation and rapid heartbeat induction, to reduce the fear of bodily sensations. Session four involved situational exposure, encouraging patients to confront avoided places (e.g., markets, public transport). Session five focused on coping skills and relaxation training. Session six focused on relapse prevention and consolidating learned strategies. Assessment tools included the Panic Disorder Severity Scale (PDSS) and the Beck Anxiety Inventory (BAI), both validated measures widely used in clinical research.[15,16] Assessments were conducted at baseline, immediately after treatment, and three months after treatment. Data analysis was performed using SPSS version 26.

RESULTS

Of the 60 participants, 35 (58.3%) were female and 25 (41.7%) male. The mean age was 29.4 years (SD = 6.7). The mean illness duration was 2.3 years (SD = 0.9). The dropout rate was low (6.6%; 4 participants). Pearson's correlation revealed that higher baseline PDSS scores predicted greater improvement post-treatment ($r = 0.41$, $p = 0.003$). Gender was a significant predictor, with females showing slightly greater symptom reduction. The duration of illness was not significantly correlated with treatment response ($r = 0.12$, $p = 0.28$).

Table 1: Mean PDSS and BAI Scores across Time Points

Measure	Baseline (M±SD)	Post-treatment (M±SD)	3-month Follow-up (M±SD)	F-value	p-value
PDSS	15.6 ±3.2	7.4 ± 2.9	8.1 ± 3.0	45.7	<0.001
BAI	28.3 ±6.1	14.2 ± 5.7	15.6 ± 5.9	51.3	<0.001

Table 2: Effect Sizes (Cohen's d) for Symptom Reduction

Measure	Baseline vs. Post	Baseline vs. Follow-up
PDSS	1.60	1.43
BAI	1.47	1.34

Table 3: Symptom Change by Age and Gender

	Group	Mean Δ PDSS	p-value
Age	18–30	-8.9	<0.001
	31–45	-6.1	0.02
Gender	Male	-7.2	0.01
	Female	-9.3	<0.001

Table 4: Correlation Analysis of Predictors and Treatment Response

Variable	R-values	P-value
Baseline PDSS severity	0.41	0.003
Age (18–30)	-0.29	0.024
Gender (Female)	0.31	0.018
Duration of illness	-0.12	0.28

DISCUSSION

The findings of this study strongly support the effectiveness of a brief six-session CBT protocol in reducing symptoms of panic anxiety disorder. Significant reductions were observed on both panic-specific (PDSS) and general anxiety (BAI) measures, with large effect sizes maintained at three-month follow-up. These results align with the global literature, which suggests that condensed CBT can be as effective as standard-length therapy.[10,11,12,13] The observed improvements align with earlier studies that reported CBT's strong efficacy for panic disorder.[6,7] Our findings extend this evidence by demonstrating that time-limited interventions are also beneficial, particularly in LMICs. The large effect sizes confirm that the therapeutic gains were not only statistically significant but also clinically meaningful. The subgroup analysis revealed that younger adults and females showed greater improvement. Similar patterns have been observed in other anxiety treatment trials, where younger participants may demonstrate higher neuroplasticity and engagement with cognitive restructuring techniques.[17] Gender differences may be attributed to greater help-seeking behavior and emotional expressiveness among females.[18] The correlation between higher baseline severity and greater

treatment gains suggests that brief CBT may be beneficial for patients with pronounced symptoms. This finding aligns with Schmidt and colleagues, who reported that treatment compliance and severity have a strong influence on CBT outcomes.[19] One of the notable strengths of this study is its focus on follow-up outcomes. Maintenance of therapeutic gains is critical, and our results show only minimal relapse at three months. This supports the inclusion of relapse-prevention strategies, even in brief protocols. Future research should employ randomized controlled trials comparing brief CBT to pharmacotherapy and standard CBT. Furthermore, cost-effectiveness analyses would help policymakers in LMICs prioritize brief psychotherapeutic interventions.

LIMITATIONS

The absence of a control group prevents ruling out the effects of a placebo or natural recovery. Self-report measures, though validated, may introduce bias. Additionally, the follow-up period was limited to three months; longer-term effects remain unknown. Despite these limitations, the findings have significant clinical implications. In resource-limited settings, brief CBT provides a feasible, scalable alternative to lengthy therapy protocols. Incorporating such interventions into primary care settings could enhance accessibility, reduce stigma, and decrease reliance on pharmacological treatments.

CONCLUSIONS

Brief CBT is a highly effective and sustainable intervention for panic anxiety disorder, leading to significant reductions in symptom severity with gains maintained at follow-up. Its brevity, affordability, and scalability make it especially suitable for resource-limited settings such as Pakistan. Integrating brief CBT into clinical practice can improve access to evidence-based care for individuals with panic disorder.

CONFLICT OF INTEREST: None

FUNDING SOURCES: None

REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5). 5th ed. Washington, DC: American Psychiatric Publishing; 2013.
2. Bandelow B, Michaelis S. Epidemiology of anxiety disorders in the 21st century. Dialogues Clin Neurosci. 2015;17(3):327–35. PMID: 26487813.
3. Kessler RC, Chiu WT, Jin R, Ruscio AM, Shear K, Walters EE. The epidemiology of panic attacks, panic disorder, and agoraphobia in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2006 Apr;63(4):415–24. doi:10.1001/archpsyc.63.4.415. PMID: 16585471.
4. Craske MG, Stein MB, Eley TC, Milad MR, Holmes A, Rapee RM, et al. Anxiety disorders. Nat Rev Dis Primers. 2017 May 18;3:17024. doi:10.1038/nrdp.2017.24. PMID: 28518111.
5. Patel V, et al. The burden of mental disorders in South Asia. Lancet Psychiatry. 2016;3(10): 979–990. doi:10.1016/S2215-0366(16)30127-4. PMID: 27650768.
6. Hofmann SG, Smits JA. Cognitive-behavioral therapy for adult anxiety disorders: a meta-analysis of randomized placebo-controlled trials. J Clin Psychiatry. 2008 Apr;69(4):621–32. doi:10.4088/jcp.v69n0415. PMID: 18363421.
7. Cuijpers P, Karyotaki E, Weitz E, Andersson G, Hollon SD, van Straten A. The effects of psychotherapies for major depression in adults on remission, recovery, and improvement: a meta-analysis. J Affect Disord. 2014 Apr;159:118–26. doi:10.1016/j.jad.2014.02.026. PMID: 24679399.
8. Barlow DH. Clinical handbook of psychological disorders: A step-by-step treatment manual. 5th ed. New York: Guilford Press; 2014.
9. Rahman A, et al. Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. Lancet. 2008 Sep 13;372(9642):902–9. doi:10.1016/S0140-6736(08)61400-2. PMID: 18790313.
10. Sánchez-Meca J, Rosa-Alcázar AI, Marín-Martínez F. Psychological treatment of panic disorder with or without agoraphobia: a meta-analysis. Clin Psychol Rev. 2010 Feb;30(1):37–50. doi:10.1016/j.cpr.2009.08.011. PMID: 19729226.
11. Clark DM, et al. Cognitive therapy versus exposure and applied relaxation in social phobia: a randomized controlled trial. J Consult Clin Psychol. 2006 Jun;74(3):568–78. doi:10.1037/0022-006X.74.3.568. PMID: 16822112.
12. Öst LG. One-session treatment for specific phobias. Behav Res Ther. 1989 Jan;27(1):1–7. doi:10.1016/0005-7967(89)90113-7. PMID: 2914009.
13. Otto MW, Smits JA, Reese HE. Combined psychotherapy and pharmacotherapy for mood and anxiety disorders in adults: review and analysis. Clin Psychol Sci Pract. 2005;12(1):72–86. doi:10.1093/clipsy.bpi009.
14. Shafran R, Clark DM, Fairburn CG, Arntz A, Barlow DH, Ehlers A, et al. Mind the gap: Improving the dissemination of CBT. Behav Res Ther. 2009 Nov;47(11):902–9. doi:10.1016/j.brat.2009.07.003. PMID: 19664756.
15. Shear MK, Brown TA, Barlow DH, Money R, Sholomskas DE, Woods SW, et al. Multicenter collaborative panic disorder severity scale. Am J Psychiatry. 1997 Nov;154(11):1571–5. doi:10.1176/ajp.154.11.1571. PMID: 9356566.
16. Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety: Psychometric properties. J Consult Clin Psychol. 1988 Dec;56(6):893–7. doi:10.1037/0022-006X.56.6.893. PMID: 3204199.
17. Yonkers KA, Bruce SE, Dyck IR, Keller MB. Chronicity, relapse, and illness course of panic disorder, social phobia, and generalized anxiety disorder: findings in men and women from 8 years of follow-up. Depress Anxiety. 2003;17(3):173–9. doi:10.1002/da.10106. PMID: 12768651.
18. McLean CP, Asnaani A, Litz BT, Hofmann SG. Gender differences in anxiety disorders: Prevalence, course of illness, comorbidity and burden of illness. J Psychiatr Res. 2011 Aug;45(8):1027–35. doi:10.1016/j.jpsychires.2011.03.006. PMID: 21439576.
19. Schmidt NB, Woolaway-Bickel K. The effects of treatment compliance on outcome in cognitive-behavioral therapy for panic disorder: quality versus quantity. J Consult Clin Psychol. 2000 Feb;68(1):13–8. doi:10.1037//0022-006X.68.1.13. PMID: 10710836.

20. National Institute for Health and Care Excellence (NICE). Generalised anxiety disorder and panic disorder in adults: management. NICE guideline [CG113]. 2011.

AUTHORS CONTRIBUTION

Sherayub Dawar - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Supervision; Final Approval*

Safia Bibi - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Final Approval*

The authors accept responsibility for all aspects of the work and will ensure that any concerns regarding the accuracy or integrity of any part are properly investigated and resolved.