

A Multimodal Intervention Treatment Plan For Adults With Generalized Anxiety Disorder in Primary Care

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Significance of Problem

- Generalized anxiety disorder (GAD) is one of the most common mental illnesses and affects 6.8 million Americans, or 3.1% of the U.S. population each year. (ADAA, 2022).
- Women are twice as likely to be diagnosed with GAD than men. (ADAA; 2022).
- Highest prevalence in adults ages 18-29. (CDC, 2021).
- GAD is twice as common as dementia and 4 to 6 times more common than depression among the elderly. (Papadakis & McPhee, 2020).
- Untreated anxiety has been associated with high societal costs (\$48 billion annually), loss of productivity, burden of disease, and significant morbidity (Sapra, et al., 2020; Smit, et al., 2006; Shirneshan, et al., 2013).
- The global prevalence of anxiety increased by 25% during the first year of the COVID-19 pandemic. (WHO, 2022).

PICOT

In adults, over the age of 18, who have been diagnosed with generalized anxiety disorder (GAD), does the combination of digital cognitive behavioral therapy through a smartphone application, lifestyle modification education, and pharmacotherapy improve patient's GAD-7 scores over an 8-week period in the primary care setting?

Review of Literature

Evidence	Database	LOE/Quality
Andrews, et al. (2018).	TRIP	I ^D /I ^a
Andrews, Basu, & Cuijpers, et al. (2018).	TRIP	I ^A /I ^c
Aylett et al. (2018).	MEDLINE	I ^E /I ^b
Carpenter, et al. (2018).	Citation Chase	I ^D /I ^a
Firth, et al. (2017).	Citation Chase	I ^D /I ^a
Graham, et al. (2020).	CINAHL	II ^F /I ^b
Henriksson, et al. (2022).	CINAHL	II ^F /I ^b
Lizarondo & Magtoto (2021).	JBI	I ^B /I ^b
Mathew, et. al. (2021).	JBI	I ^B /I ^b
NICE (2021).	TRIP	I ^A /I ^c
Pamaiahgari, et. al. (2021).	JBI	I ^B /I ^b
Parker, et al. (2021).	MEDLINE	I ^E /I ^b
Slade (2021).	JBI	I ^B /I ^b
Slee, et al. (2019).	PsychInfo	I ^E /I ^b

^aMelnik & Fineout-Overholt; ^bCASP; ^cAgree II
^Aclinical practice guideline; ^BEvidence Summary; ^CSystematic Review; ^DMeta-Analysis; ^ESystematic Review/Meta-Analysis; ^FRandomized Controlled Trial

Best Practice

- Digital cognitive behavioral therapy at least once per week (dCBT) (Andrews, et al., 2018; Carpenter, et al., 2018; Graham, et al., 2020; Mathew, et al., 2018; NICE, 2021; Pamaiahgari, 2020; Parker, et al., 2017)
- Lifestyle modifications including exercise for 30 minutes at least 3 times per week, dietary changes, adequate sleep, smoking cessation, and decreasing alcohol and caffeine consumption. (Andrews, et al., 2018; Aylett, et al., 2018; Lizarondo, 2021; Henriksson, 2022; NICE, 2021)
- Pharmacotherapy using selective serotonin reuptake inhibitors (SSRI) or selective norepinephrine reuptake inhibitors (SNRI). (Andrews, et al., 2018; Slade, 2021; Slee, et al., 2019)

Implementation

EBP Model: Iowa Model Revised (2017)

Setting: Large primary care clinic in Northwest Indiana.

Participants: 23 patients recruited, 18 and older, had a diagnosis of GAD or met criteria using the GAD-7 screening tool.

Intervention:

- Participants were screened using the GAD-7 screening tool during initial visits in the primary care office.
- Participants educated on lifestyle modifications during baseline screening and provided with education brochure.
- Participants utilized the internet-based dCBT application MyCompass© through smartphone or computer and instructed to complete at least one nodule per week.
- Pharmacotherapy (SSRI or SNRI) prescribed by providers.
- Follow up occurred through phone calls or text messaging to reassess GAD-7 scores, reinforce lifestyle modifications, and to determine adherence to interventions.

Comparison:

- Mean GAD-7 scores at baseline compared to mean GAD-7 scores at 8-weeks using paired *t* test.
- Repeated measures ANOVA comparing mean GAD-7 scores at baseline, 2-week, 4-week, and 8-week intervals.

Timeframe: 8 weeks (October 2022-January 2023).

Evaluation

Primary Outcomes

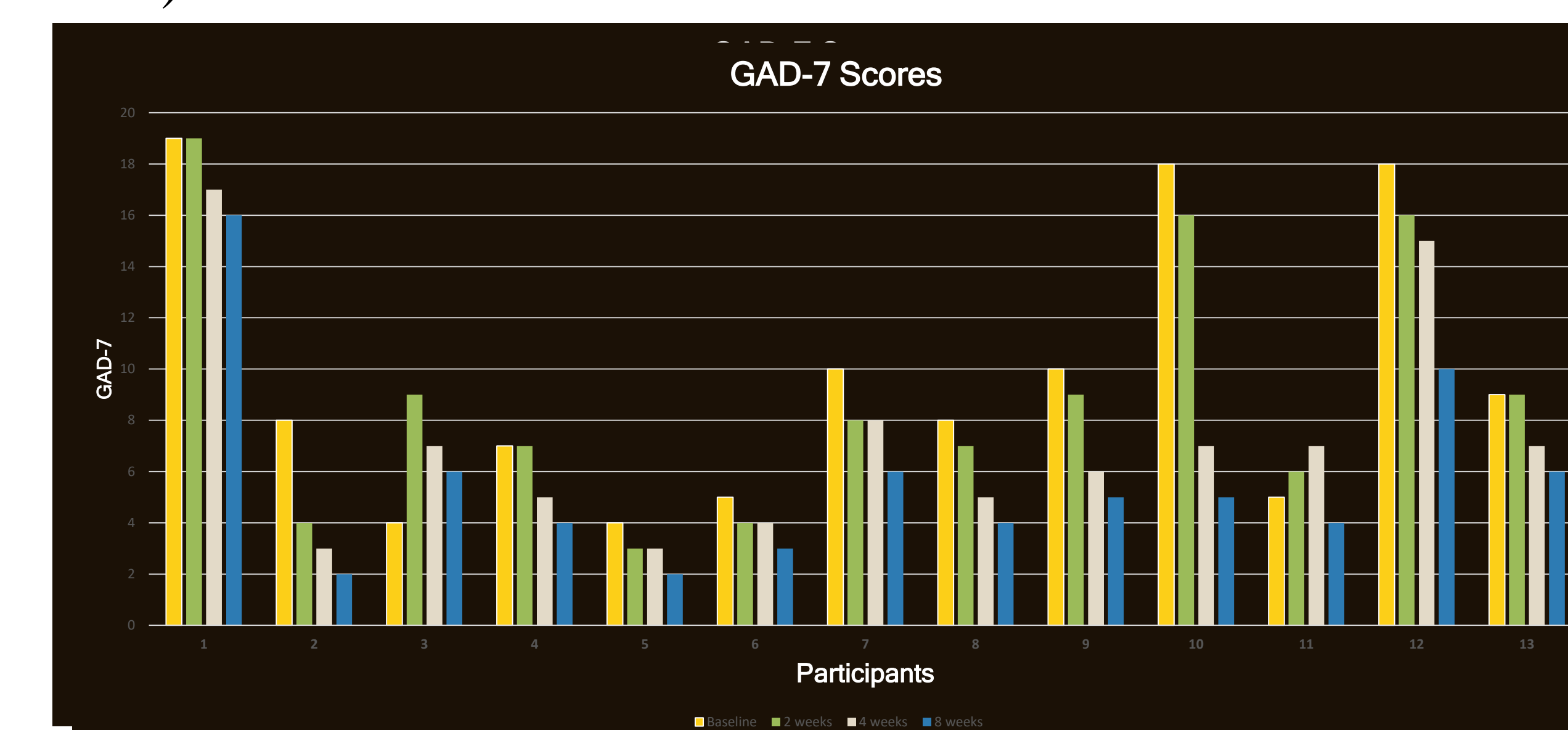
Primary Outcome: Change in mean GAD-7 scores of participants that completed the 8-week multimodal intervention.

Data analysis: A significant decrease from baseline to eight weeks was found ($t(13) = -3.975, p < 0.05$).

Secondary Outcomes

Secondary Outcome: Amount of time it takes for the intervention to become effective

Data Analysis: The effect of the intervention did not become statistically significant until 4 weeks after the interventions were implemented ($F(1,12) = 42.783, p < 0.01$).



Conclusion & Recommendation

An 8-week multimodal approach to treating GAD in the primary care setting reduced GAD-7 scores.

Recommendations for Practice:

- Primary care providers should include multiple intervention strategies to manage GAD.
- Patients diagnosed with GAD should have more scheduled follow-up appointments every 2-4 weeks for the first 3 months.

Implications for Future Research:

- Future research should aim to compare dCBT to face-to-face CBT
- Research should be conducted to identify barriers to implementing psychological interventions in primary care and evaluate their effectiveness in comparison to pharmacological interventions.

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