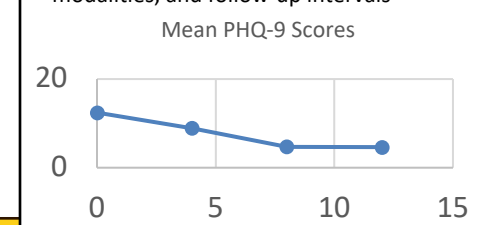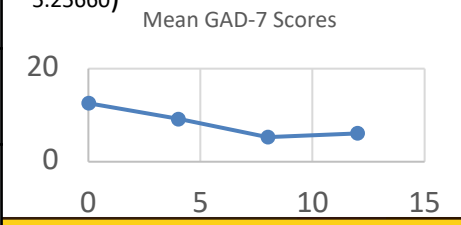# The Effect of Implementing a Generalized Anxiety Disorder Protocol for Anxiety and Depression Symptoms in the Primary Care Setting
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## Significance of the Problem

- 5.7% of Americans diagnosed with GAD (NIMH, 2017) Only 1/3 of patients with GAD seek treatment (Edmund & Sheppard, 2018)
- Patients with GAD 33.7% more likely to commit suicide compared to patients without GAD (Fong, 2018)
- 15-20% of patients in primary care meeting the criteria for GAD (Love & Love, 2019)
- Only one in 10 patients with a psychiatric illness have adequate access to a psychiatric provider (Weiner, 2018)
- 1,809 visits treating patients with GAD at the clinical site from Jan 2018 to September 2020

## PICOT Question

Among adult patients presenting with generalized anxiety disorder (GAD) in the primary care setting (P), does the introduction of a protocol consisting of education, a selective serotonin reuptake inhibitor (SSRI) and digital cognitive behavioral therapy (CBT) via smartphone application (I) compared to current practice of no protocol (C), improve GAD symptoms as measured by scores on the Generalized Anxiety Disorder 7-item (GAD-7) scale and Patient Health Questionnaire-9 (PHQ-9) scale (O) over a 12-week period (T)?

## Search Terms

"generalized anxiety disorder" OR "anxiety disorder"
AND treat* OR intervent* OR manage*
AND "primary health care" OR "primary care" OR "family practice"
AND adult*

## Review of the Literature

| Evidence | Database/Source | LOE*/Quality** |
|---|---|---|
| Andrews et al. (2018) | Trip Database | Level I/High quality |
| Berger et al. (2017) | CINAHL | Level II/Good quality |
| Jayasekara (2016) | JBI | Level I/High quality |
| Lizarondo (2018) | JBI | Level III/High quality |
| Lizarondo (2019) | JBI | Level I/High quality |
| Lizarondo (2020) | JBI | Level I/High quality |
| Ministry of Health (2015) | Trip Database | Level I/Good quality |
| Romano (2019) | JBI | Level I/High quality |
| Slade (2019) | JBI | Level I/High quality |
| Slee et al. (2019) | Psych Info | Level I/High quality |
| Yu et al. (2018) | Medline | Level V/Good Quality |

*Melnyk and Fineout-Overholt
**Johns Hopkins

## Implementation

- Participants: N = 24 adult patients diagnosed with GAD based on the DSM-5 criteria
- Location: rural family practice office in northeast Indiana
- Strategies: Obtain baseline PHQ-9 and GAD-7 scores. Implement protocol: giving education, CBT application and education and prescription for SSRI, obtain PHQ-9 and GAD measurements at week 4, week 8 and week 12 during follow up visits
- Time: 12-week period
- Design: Pre-intervention and repeated measures within group design

## Evaluation

- Primary outcomes: anxiety and depression symptoms measured with GAD-7 and PHQ-9 scales
- A significant effect was found (F (3,39) = 6.992, p < .001). GAD-7 scores decreased significantly from baseline (M = 12.5714, SD = 6.51288) to week 8 (M = 5.2857, SD = 4.26846) and to week 12 (M = 6.1429, SD = 5.88162)
- A significant effect was found (F (3, 39) = 8.867, p < .000). PHQ-9 scores decreased significantly from baseline (M = 12.4286, SD = 7.70329) to week 8 (M = 4.7143, SD = 4.51372) and week 12 (M = 4.6429, SD = 5.25660)



Mean GAD-7 Scores

## Best Practices

- The evidence supports the use of education, CBT, and SSRIs for treatment of patients with GAD.
- Protocol initiated incorporating all these modalities.
- Education regarding disease process, SSRIs, CBT, and lifestyle modifications provided using written and oral methods
- Mindshift application access, education about CBT and use of app given to participants
- SSRIs prescribed for participants
- Education on SSRI prescribing, and a clinical decision tool given out to providers

## Conclusions & Recommendations

- Primary care providers should use GAD protocol that incorporates education, CBT and SSRI pharmacotherapy
- Decreased anxiety and depression symptoms, increased healthy lifestyle habits, increased access to CBT and decreased benzodiazepine use
- Tool to measure qualitative data should have been implemented
- Increase appointment times for initial anxiety visits to allow for protocol implementation
- More research conducted on digital CBT, treatment refractory GAD, education modalities, and follow-up intervals



Mean PHQ-9 Scores

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