Implementation of a Depression and Substance Abuse Treatment Algorithm

Hope Honigsberg, CRNP, Dr. Michelle Felix, DNP, Kristen Rose, LCSW-C

Introduction, Background, Purpose

- In 2017, 65% of Americans ≥18 years old were estimated to have received treatment for depression.

- Patients suffering from depression may choose to self-medicate w/ illegal substances & prescription drugs that can change the brain's chemistry, causing worsening depression & lead to substance abuse disorder (SUD) (The Healthline Editorial Team, 2017).

- Within the recovery healthcare setting, patients are typically treated for SUD & depression independently.

Project Purpose & Aims

The project aims to improve PHQ-9 depression scores in co-occurring depression & substance abuse patients by implementing the Life Academy treatment algorithm in an inpatient recovery center.

- **Aim 1.** Implement the life skills and coping algorithm for depression and SUD patients based on the validated Life Academy Algorithm.
- **Aim 2.** Evaluate the effectiveness of the treatment algorithm by comparing the patient pre/post PHQ-9 scores.

Methods

- Design: Pre/post intervention QI project.
    Patient chart review
- Setting: Recovery Center
- Sample: 24 patients w/a dual
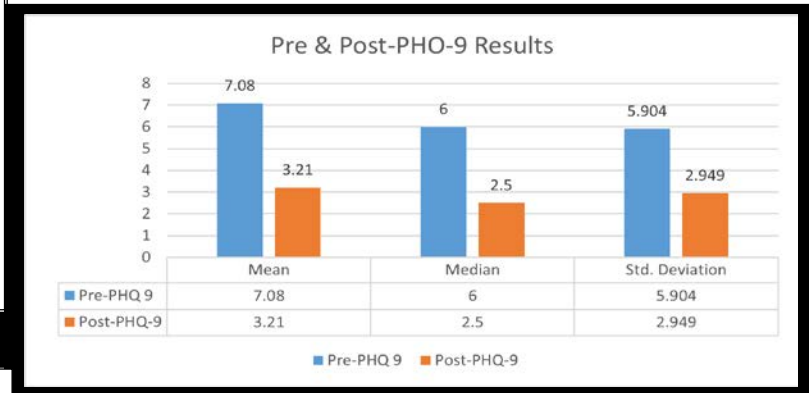 DX of SUD & depression.

Intervention

The Life Academy Treatment Algorithm was implemented during group and personal session each week during the 6 week project period.

Algorithm Topics
- Cognitive behavior therapy (CBT)
- Coping Skills
- Setting & obtaining goals
- Sexual health
- Refusal skills
- Interpersonal skills

Results: Aim 1

- Weekly chart review of patients admitted to recovery center.
- 68 patients were identified as having a dual diagnosis.
- 68 patients were enrolled into the Life Academy treatment algorithm during the 6-week project period.

Week #:	Dual Dx	Enrolled in Life Academy
1	✓	✓
2	✓	✓
3	✓	✓
4	✓	✓
5	✓	✓
6	✓	✓

Results: Aim 2

- Median summary score of the PHQ-9 pre-intervention: 6.00.
- Median summary score of the PHQ-9 post-intervention: 2.50.
- The difference in the results show a statistical median difference of 3.50 highlighting an improvement in patients' depression scores.

Pre & Post-PHQ-9 Results

	Mean	Median	Std. Deviation
Pre-PHQ 9	7.08	6	5.904
Post-PHQ-9	3.21	2.5	2.949

Conclusion

- The implementation of the Life Academy Treatment Algorithm is easily implemented and accepted by mental health providers within the inpatient recovery center.
- The Life Academy Treatment Algorithm may improve depression in patients with co-occurring SUD and depression.
- The 6-week treatment algorithm resulted in a significant improvement in PHQ-9 scores in men and women of varying ages, as evident by a change in the pre and post-PHQ-9 mean result of 3.87. Although the change in PHQ-9 scores was not significantly related to age or the project's identified aim, the results show that the lack of relevance revealed an interconnection because the scarcity of significance suggests that the intervention may be practical for multiple age groups.