Haylee Degrood MHS PA Candidate, Melissa Kumnoonsate MSN Candidate, Audrey LaFraugh MHS PA Candidate, Satpreet Naidu MHS NP Candidate, Thanh Pham MHS PA Candidate, Dylan Scalzo MSN Candidate, Paulina Vyhmeister MSN Candidate

# Evaluating Treatments of Adolescent Major Depressive Disorder

### PICO Question:

UCDAVIS

HEALTH

In adolescents diagnosed with major depressive disorder [P], how does cognitive behavioral therapy [I] compared to SSRI drug therapy, or combination therapy [C], affect treatment outcomes [O]?

#### Introduction

- Major depressive disorder (MDD) is prolonged depression consisting of a loss of interest or pleasure along with four or more MDD diagnosis symptoms for at least 2 weeks.
- MDD affects 12% of men and 25% of women.
- Cognitive behavioral therapy (CBT) and selective serotonin reuptake inhibitors (SSRIs) are the common treatment for MDD.
  - CBT challenges negative thought patterns about the self and the world to create cognitive changes and reframe the mindset in MDD.
  - SSRI is very affective for moderate to severe depression but some studies show limited improvement and low remission rates.

Goal: Determine if CBT or SSRI monotherapy or combined therapy produces better outcomes in the adolescent population.

#### Evidence

- Kennard, et al (2006) found a significantly higher remission rate in the SSRI + CBT group (37%) relative to the other treatment groups (SSRI 23%; CBT 16%; placebo, 17%).
  - Suggests combination therapy (SSRI + CBT) is superior to monotherapy, regardless of whether it is SSRI alone or CBT alone.
- March el. al (2007) reached the same conclusion but found that combination therapy also reduced suicidality
- Riggs et. al was slightly less conclusive, but still indicated combination therapy as superior as it included a reduction in substance abuse.
- Goodyer (2007), and Davey et. al found no difference between SSRI monotherapy and combination therapy.
- Dunlop et. al (2019) found no difference in sequential efficacy but confirmed combination therapy as more efficacious.
- Nakagawa, et. al (2017) found that adding CBT as a supplement to SSRI treatment is successful for pharmaco-resistant depression in relieving symptoms.
- Emslie et al. (2015) found supplemental CBT therapy led to decreased relapse rates in pediatric populations compared to SSRIs (62% vs. 36%).
  - In a follow up study, Kennard, et. al (2008) arrived at the same conclusion, promoting the use of CBT as a complimentary treatment

#### Methods

- Search terms: "CBT", "Depression", "MDD", "antidepressants," "SSRI", "adolescent", "monotherapy", "combination therapy"
- Databases Searched: Pubmed, CINAHL, NCBI, JAMA and PubPsych.
- Publication dates were limited to 1999-2019
- Evidence table was organized using headings of: Conceptual Framework, Design/Method, Sample/Setting, Major Variables, Data Analysis, Findings, and Strengths and Weaknesses.

## Conclusions/Further Study

- Combination therapy proved to be most effective
- There was very little difference between SSRI and CBT monotherapy.
- For individuals who are not finding success with SSRIs, combination therapy is a step that can aid in meeting remission goals
- Integrating CBT can reduce the likelihood of relapse after SSRI therapy.

## Implications

- For adolescents who are reluctant to try SSRI pharmacotherapy, CBT is an equally viable non-pharmacological option.
- Integration of combination therapy can aid in a reduction of suicidality and drug abuse in susceptible populations
- Treatment plans must be specific to patient needs and circumstance and will differ person to person.

## Acknowledgments

Amy Nichols EdD, RN, CSN, CHSE Michaela Davis, MSN, RN, CNS