The Efficacy of MDMA-Assisted Psychotherapy Compared to the Efficacy of Traditional Psychotherapy in Treating Anxiety-Related Symptoms in 18–40-Year-Old Adults Diagnosed With Post-Traumatic Stress Disorder (PTSD)

Blake Beasley, MMS
Elizabeth Masten, MS, PA-C, Principal Faculty, Clinical Coordinator
Department of Medical Science

Abstract

Post-Traumatic Stress Disorder is a mental health condition brought on by witnessing or experiencing distressing or terrifying events. Both MDMA and SSRIs like Fluoxetine have been shown to aid in fear extinction and clinical recovery from PTSD. However, recent studies have shown that MDMA used alongside therapy may have longer lasting effects on the anxiety symptoms of PTSD and can result in quicker fear extinction responses compared to current therapeutic methods using SSRIs. This review analyzes the knowledge and studies available comparing the efficacy of MDMA-Assisted Psychotherapy to traditional psychotherapy in treating anxiety-related symptoms of PTSD in adults aged 18 to 40.

Introduction

- PTSD
  - A mental health condition brought on by witnessing or experiencing distressing or terrifying events
  - Symptoms of PTSD can be devastating and contribute to increased suicidality
  - Even with treatment, relapse is uncommon
  - Those who continued traditional psychotherapy, 16.4% had relapsed after 24-28 weeks of treatment

- MDMA-Assisted Psychotherapy
  - MDMA, or 3,4-methyleneoxydioxymethamphetamine, is a psychoactive chemical which stimulates the release of serotonin, oxytocin, prolactin, and cortisol
  - Up until it became a Schedule I drug in 1985, MDMA was used as
    - In therapeutic settings
      - Assisted psychotherapy to traditional psychotherapy in treating symptoms of PTSD

- The effects of MDMA
  - MDMA has a stronger, longer lasting effect on reducing these symptoms of PTSD than traditional therapies used today

Methods

- Performed November 2019
  - EBSCO, Google Scholar, and Google

- Scrutin Terms: “mdma-assisted psychotherapy” or “mdma assisted psychotherapy for ptsd” or “MDMA assisted psychotherapy randomized controlled trial” or “How does the efficacy of MDMA-Assisted Psychotherapy compare to the efficacy of traditional psychotherapy in treating 18-40 year old adults diagnosed with Post-Traumatic Stress Disorder?”

- Inclusion criteria
  - Full reviewed and/or Scholarly
  - Published in 2013 or later

- Exclusion criteria
  - Discusses at least one of the following:
    - The effects of MDMA-assisted psychotherapy on PTSD
    - The effects of MDMA-assisted psychotherapy on anxiety
    - The pharmacodynamics of MDMA and how it can be used in treatment for mental illness
    - Comparing MDMA-assisted psychotherapy to traditional psychotherapy

Strengths

- Articles which were not peer reviewed or scholarly
- Articles which simply support or critique a previously chosen article without providing new information relevant to the PICQ question
- Articles which were written before 2013
- Articles that did not fit any of the inclusion criteria listed above

Results

5. Meta-analysis of RCTs with 712 total participants comparing the efficacy of prolonged exposure therapy to MDMA-Assisted Psychotherapy at treating symptoms of PTSD

- RCT of 26 participants followed by open label crossover after 2 months comparing the efficacy of placebo to active placebo condition comparing the efficacy of placebo to MDMA-Assisted Psychotherapy in treating PTSD

Conclusion

Clinically speaking, these studies could support MDMA-Assisted psychotherapy being a suitable option in reducing the anxiety symptoms of PTSD which may be refractory to traditional psychotherapy. However there are several gaps in the research and studies available.

With such small patient populations, interpretation of these results simply cannot be generalized to a larger patient population and studies involving larger sample sizes are necessary to support the evidence of efficacy. Also, the differences in population demographics in these studies make it difficult to support the generalization of evidence and recommending MDMA-Assisted Psychotherapy when working with a diverse patient population.

There is also a lack of evidence in these studies supporting the long term effects of MDMA-assisted psychotherapy. Finally, MDMA also remains a Schedule 1 substance in the United States, possessing and prescribing the substance to patients can lead to criminal charges, making large scale, longitudinal randomized controlled studies incredibly difficult to perform and fund legally.

MDMA-Assisted psychotherapy has been showing promise as an alternative breakthrough therapy for patients with refractory anxiety symptoms of PTSD. However, an increase in larger longitudinal studies with more diverse sample populations would be necessary before current practices can be changed and the therapy can be recommended for clinical use.