

# Substance Use Outcomes Among Individuals with Severe Mental Illnesses Receiving Assertive Community Treatment: A Systematic Review



**Bassema Abufarsakh, PhD candidate, MSN**

**Amani Kappi, PhD candidate, MSN**

**Kylie Pemberton, BS**

**Lovoria B. Williams, PhD, FNP-C, FAANP, FAAN**

**Chizimuzo Okoli, PhD, MPH, PMHNP-BC**

The speaker has no  
conflict of interest  
to disclose



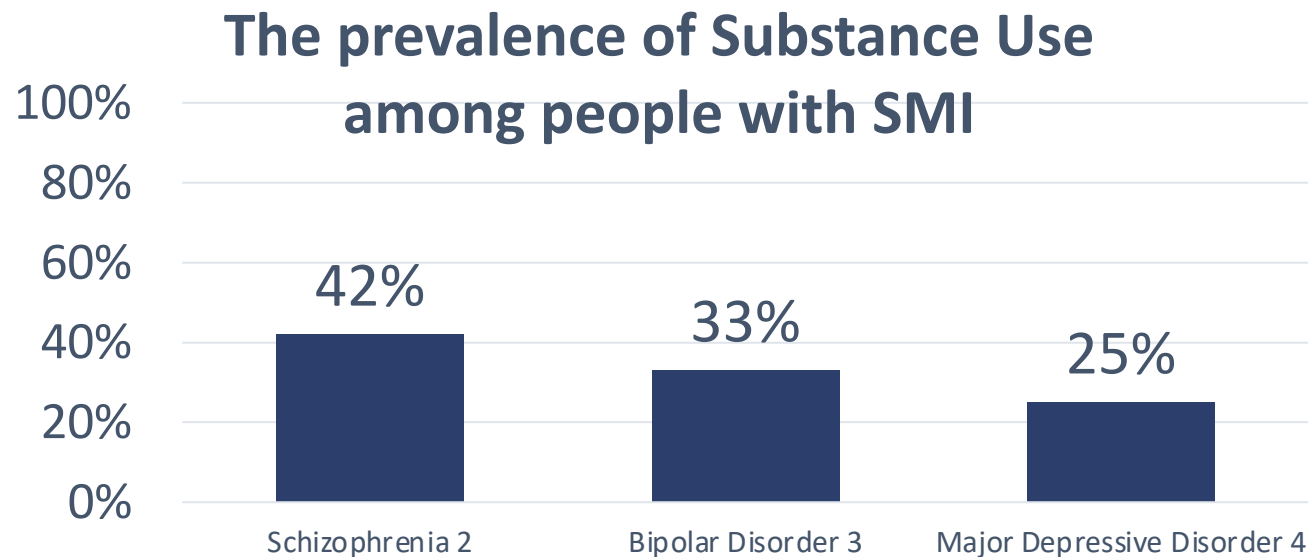
# Learning Outcomes

Upon completion of this presentation, participants will be able to:

1. Describe Assertive Community Treatment (ACT) programs
2. Discuss the substance use disorder (SUD) outcomes of ACT programs

# Introduction

- Substance use is prevalent among individuals diagnosed with severe mental illnesses (SMI) .<sup>1</sup>



Concurrent substance use is positively associated with:<sup>5</sup>

- Greater mental illness symptoms
- Higher treatment resistance
- Poor medication adherence
- Frequent hospitalizations
- Patient mortality

1- Parks et al., (2006); 2- Hunt et al., (2018); 3- Hunt et al., (2016a); 4- Hunt et al., (2020)

5- Cuffel, (1996); Hunt et al., (2016b); Najt et al., (2011)

# Cont.

- Individuals with SMI and substance use problems required higher care intensity than those with no comorbid substance use
- One of the community-based interventions available for this group of patients is the “assertive community treatment” (ACT)
- Originally developed by Stein and Test in the 1970s for people with SMI

# Assertive Community Treatment

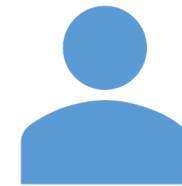


Team-based approach to support people with SMI achieve recovery<sup>1</sup>



Described as a “hospital without walls”<sup>1</sup>

It is evidence-based practices



ACT team member roles<sup>2</sup>

- Rehabilitation services to individuals with SMI
- Flexible and tailored substance use treatment



Provide services to individuals with SMI 24/7



Cost effective



Goal

To ensure that patient with SMI received all service needed <sup>7</sup>

# How do ACT clients compare with those receiving traditional treatment

1

Spend significantly less time in hospitals

2

Spend more time in independent living situations

3

Have less time unemployed and earn more income from competitive employment

4

Experience more positive social relationships

5

Have less symptoms severity

6

Express greater satisfaction with life



# Background: ACT Services and Substance Use

- Prior reviews have demonstrated that ACT services may:
  - Enhance patients' engagement in substance use treatment
  - Reduce substance use severity.
  - Decrease hospitalization rates

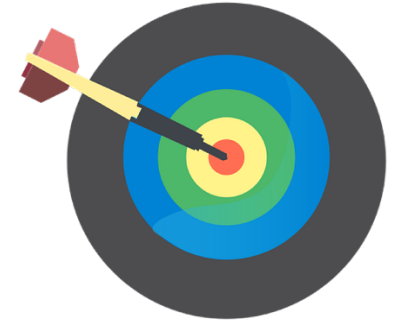
These reviews were limited:

One review only examined four randomized controlled trials (RCT).<sup>1</sup>

Another had only eleven publications (six of them are sub studies).<sup>2</sup>

**Both reviews used strict search strategies, which limit their abilities to include the full spectrum of research in this field.**

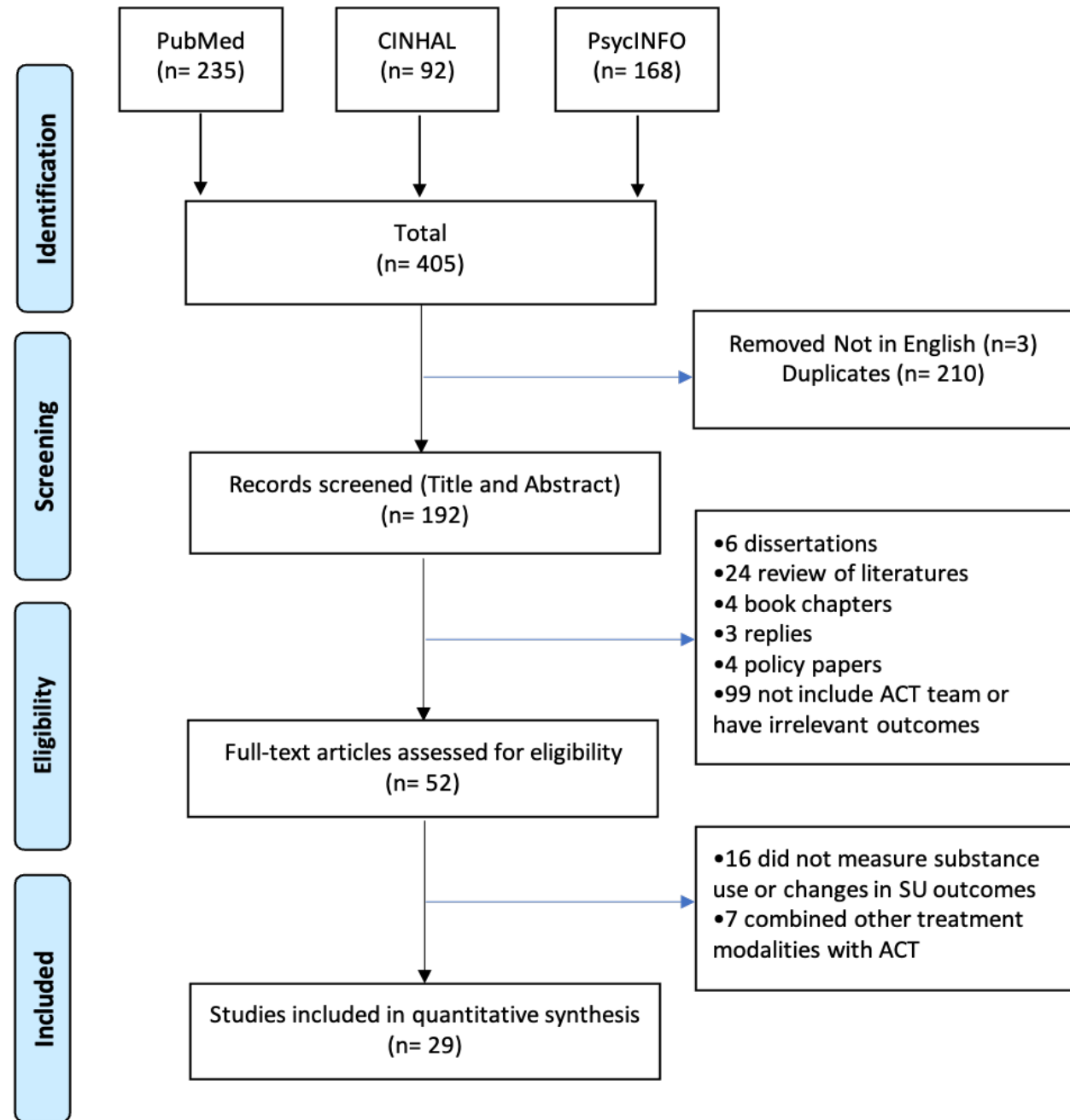
# Purpose



- Provide an updated review of ACT services contributions to substance use outcomes among those with SMI.
- Address the research gaps regarding the incorporation of substance use treatment within ACT services.

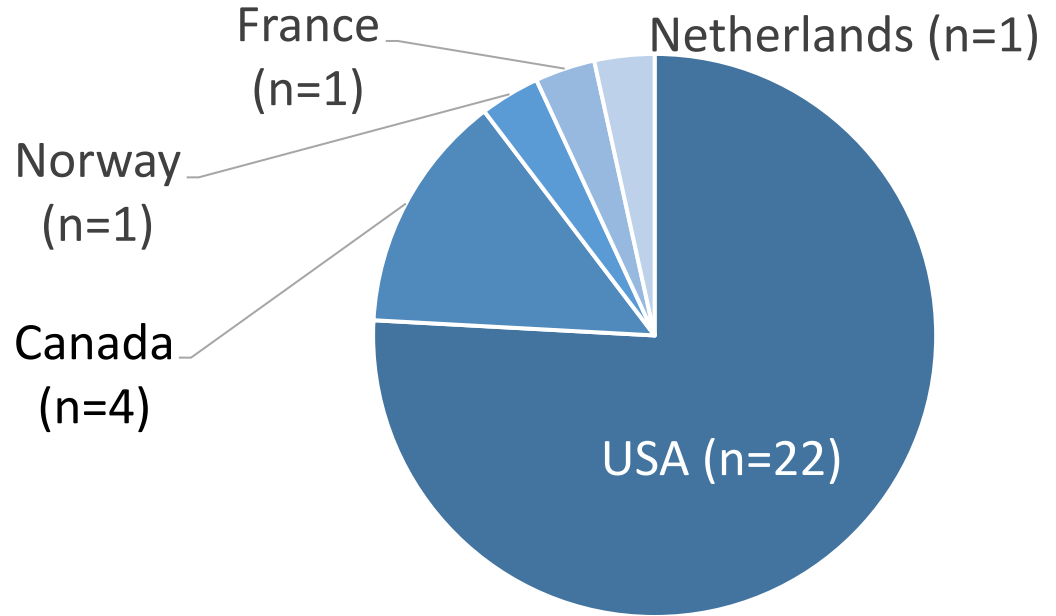
# Method

- Inclusion criteria:
  - English language
  - Enrolled patients diagnosed with SMI and receiving ACT services
  - Measured substance use outcomes over time.
- Exclusion criteria:
  - Literature reviews
  - Qualitative studies
  - Articles addressing practitioners' perspectives on patients' substance use

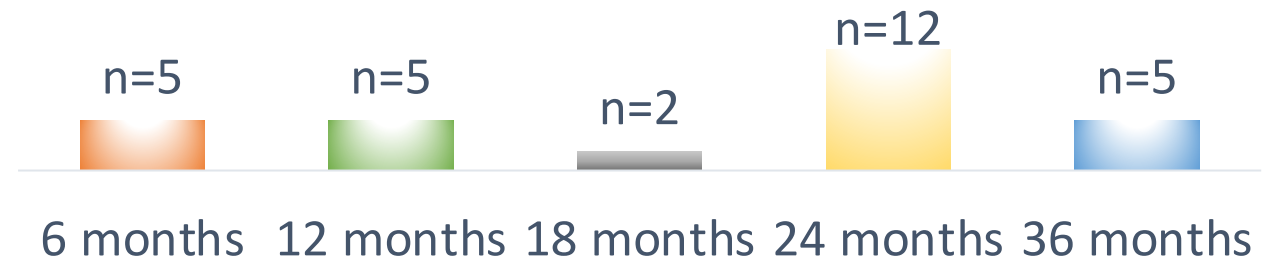


# Results

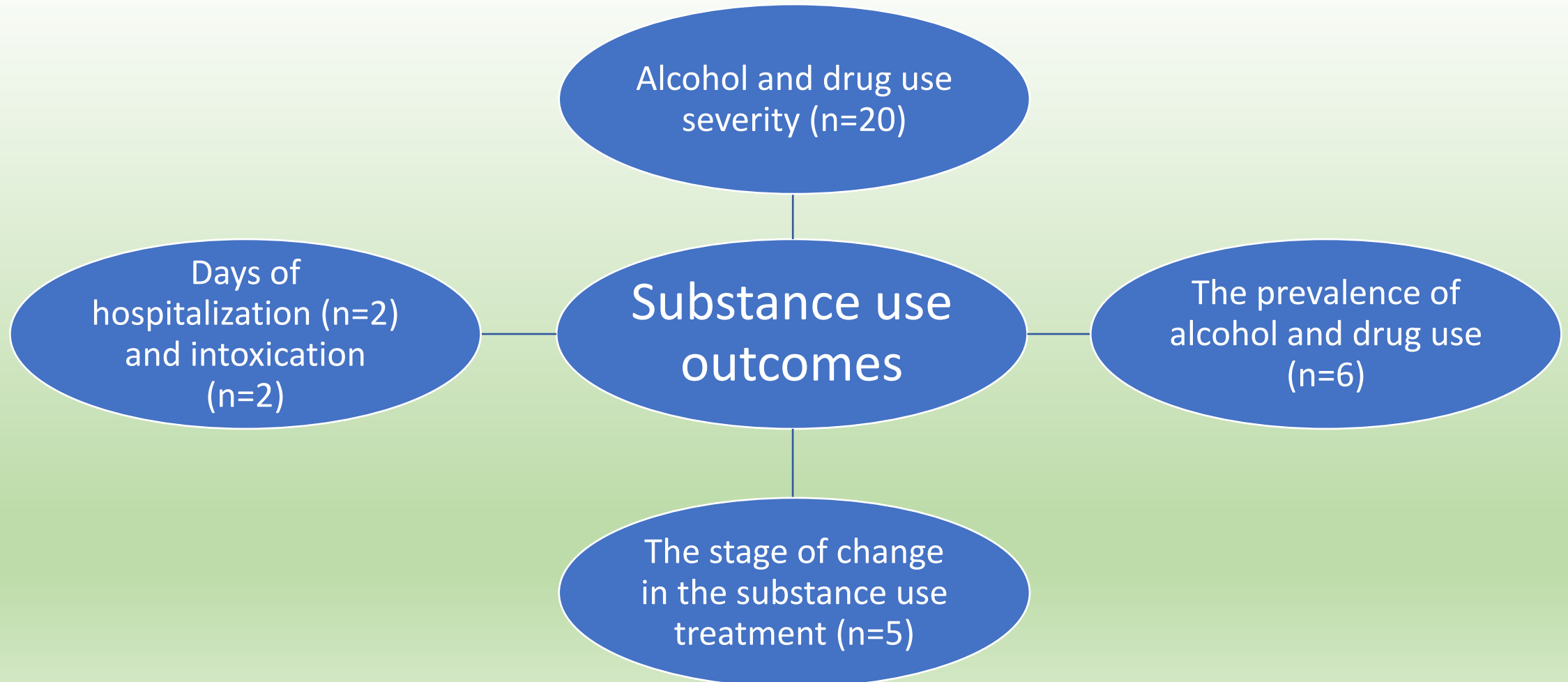
- Study Characteristics:
  - 29 articles included:
    - 8 Cohort studies
    - 21 Controlled Studies (including 6 secondary data analyses)



Address substance use outcomes at different time-point



# Outcomes from Substance Use Treatment Services among ACT Services recipients



# Cohort Studies Results

## *Substance use severity (n=8)*

- Decreased rates of alcohol and drug use in the past month
- Reduction in alcohol and drug difficulties
- Reduction in problematic substance use

## *Prevalence of substance use (n=3)*

- Inconsistent findings regarding changes in the proportion of alcohol & other drug use

## *Stage of change, hospitalization, and days of intoxication (n=4)*

- No significant improvement in the stage of change from pre-engagement to engagement or achievement stage
- Decreased hospitalization days due to substance use problems
- Reduction in the number days of intoxication

# RCT and CT Studies Results

## *Substance use severity (n=12)*

- Decreased rates of alcohol and drug use in the past month and the past 6 months
- Reduction in alcohol and cocaine dependence scores
- Inconsistent findings regarding changes in problematic substance use

## *Prevalence of substance use (n=2)*

- Inconsistent findings regarding changes in the proportion of alcohol and other drug use

## *Stage of change, hospitalization and remission rates (n=6)*

- Significant increases in the Substance Abuse Treatment Scale scores
- Decreased hospitalization days due to substance use
- Slight improvements in alcohol and other drug remission rates

## Cont.

- Fidelity to ACT model was not systematically reported
- There were no significant differences in the the substance use outcomes between groups
- Staff often lacked the requisite skills to treat substance use problems and depended on community providers to deliver substance use treatment



## Study Limitations

## Impact of these limitations

Small sample sizes or non-representative samples

Limits generalizability

Differences in participant characteristics

Affects main outcomes

Extraneous factors affecting outcomes in comparison groups

It is unknown how these factors may have affected the outcomes

Variability in the duration of the ACT interventions

Increases threats to internal validity

Unspecific about type of substance used for main outcome

Different substances may require different types of treatment

No studies examined tobacco use outcomes as a result of receiving ACT services

Tobacco use is a primary disorder among people with SMI.



# Conclusions

- Results indicate that enrollment in ACT services can improve substance use outcomes among those with SMI
- Findings may provide a basis for future research on ways to integrate substance use treatment programs within ACT services

# Implication

- We recommend using ACT services as a vehicle to support specialized substance use treatment
- Given the lack of studies addressing tobacco treatment in ACT services, we recommend a focus be given to integrating tobacco treatment within ACT services

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Thank you!

