

Cannabis, Alcohol, & Cigarette Smoking in Youth with First- Episode Psychosis.

Oladunni Oluwoye, PhD

Sterling McPherson, PhD

Michael G. McDonell, PhD

And colleagues



Elson S. Floyd
College of Medicine

WASHINGTON STATE UNIVERSITY



FIRST-EPIISODE PSYCHOSIS

- **3 out of 100 people experience psychosis**
- **A first episode usually occurs in the teen or early adult years**
- **People with first generation relatives are at highest risk**



PSYCHOSIS AND CANNABIS USE

- **Cannabis use is a risk factor for psychosis** (Schizophrenia Commission, 2012).
- One study found an **association between marijuana use and schizophrenia in which marijuana use precedes psychosis**. (Arseneault et al., 2002).
- In patients with schizophrenia, **high doses of THC are associated with acute, transient, and dose-dependent psychosis** (D'Souze et al., 2004).
- Early screening and intervention models have been developed.



RECOVERY AFTER AN INITIAL SCHIZOPHRENIA EPISODE

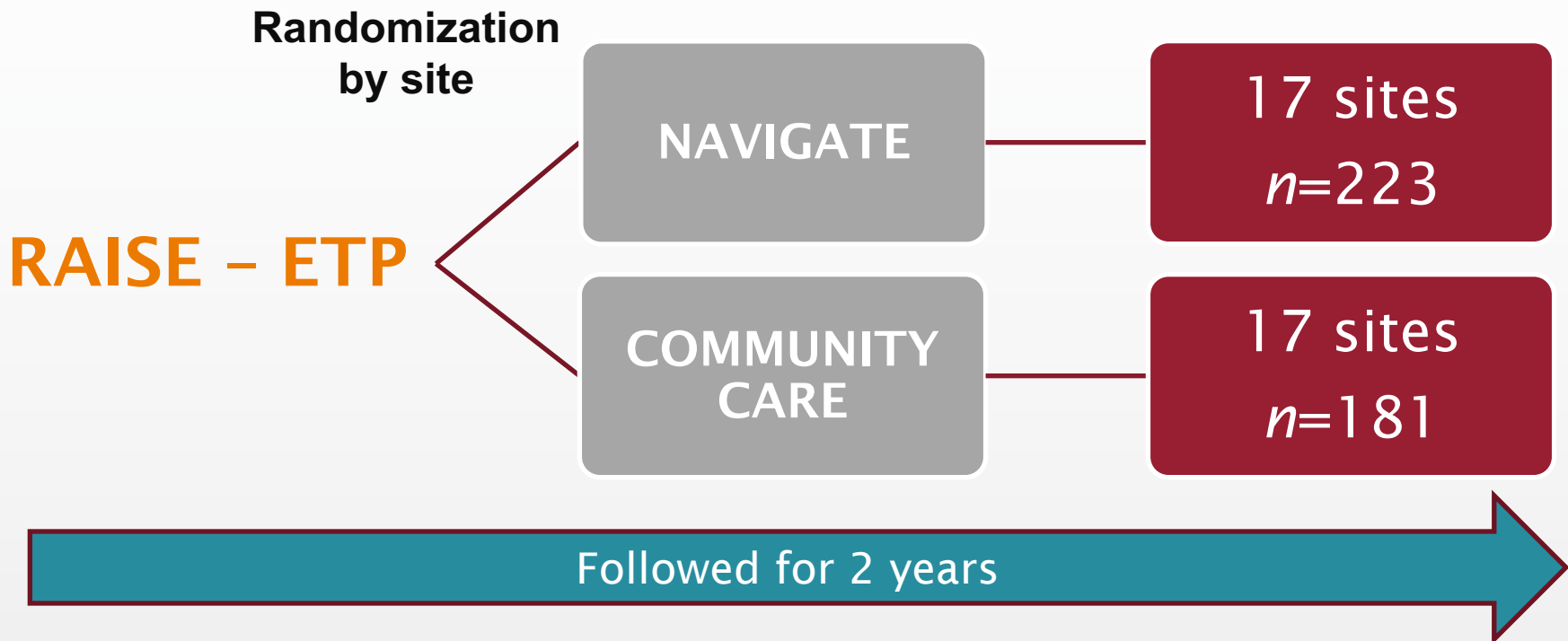
- **NIMH-funded research initiative in 2009**
- **Funded two research teams:**
 - **Connections Program** - *PI, Lisa Dixon (OnTrack)*
 - Quasi-experimental and qualitative study
 - **Early Treatment Program (ETP)** - *PI, John Kane (NAVIGATE)*
 - Randomized clinical trial

RA1SE

Recovery After an Initial
Schizophrenia Episode



RAISE- ETP Study ($n=404$)





NAVIGATE

Coordinated Speciality Care (CSC) Model, is a recovery-oriented treatment program for people with first-episode psychosis. CSC promotes shared decision-making and uses a multidisciplinary team who work with the client to create a personal treatment plan.

- **Components of NAVIAGTE**

- Family psychoeducation
- Individual placement and support/Supported Employment
- Medication management
- Case management

DATA ANALYSIS

- **Secondary data analysis**
- **Generalized estimating equations (GEE)** were utilized among the intent-to-treat sample
- **Independent Variables:** Tobacco smoking, and current alcohol and cannabis use at baseline
- **Dependent Variables:** Positive and Negative Syndrome Scale (PANSS) subscales, Clinical Global Impressions (CGI), Quality of Life (QOL) total and subscales, and Number of prescribed antipsychotic pills missed during the 24-month treatment period.
- Control variables (duration of untreated psychosis (DUP) and treatment group) are both associated with dependent variables.
- *Unstandardized regression coefficients and 95% confidence intervals (CI) are presented for continuous outcomes with alpha set at $p < 0.05$. Analyses were performed using SPSS 24.0.*



RESULTS – Baseline Substance Use Last 30 days

- 51% ($n=207$) smoked **cigarettes**
- 28% ($n=113$) used **alcohol use**
- 24% ($n=95$) used **cannabis**
- 11% ($n=44$) used **both alcohol and cannabis**



RESULTS

Cannabis Use

- Cannabis users (3.68 vs. 3.45) had significantly lower overall functioning than non-cannabis users ($\beta=0.18$; 95% CI=0.01–0.36, $p<0.05$)
- Cannabis users (21.97 vs. 20.41) had significantly higher scores on the psychotic symptoms treatment relative to non-cannabis users ($\beta=1.56$; 95% CI=0.31–2.81, $p<0.05$)

Alcohol Use

- Alcohol users (11.05 vs. 7.89) had a significantly higher number of missed pills during treatment compared to non-alcohol users ($\beta=3.16$; 95% CI=0.31–6.01, $p<0.05$).



RESULTS

Tobacco Smoking

Clinical Characteristics	Tobacco Use	
	Smokers	Non-smokers (REF)
PANSS Total Score	70.44 (1.11)**	66.01 (1.16)
PANSS Negative	18.22 (0.44)*	16.91 (0.47)
PANSS Positive	21.82 (0.43)**	20.28 (0.46)
PANSS Disorganized Thought		NS
PANSS Uncontrolled Hostility	6.63 (0.19)**	6.04 (0.18)
PANSS Anxiety Depression		NS
QLS Total Mean Score	2.84 (0.08)**	3.15 (0.09)
QLS Interpersonal Relations		NS
QLS Instrumental	1.96 (0.13)**	2.52 (0.16)
QLS Intrapsychic	3.13 (0.08)**	3.47 (0.08)
QLS Common Objects	3.54 (0.08)*	3.79 (0.10)
Missed Medications	10.92 (1.13)*	8.02 (0.96)
CGI Severity	3.66 (0.06)**	3.42 (0.07)



Future Collaborations and Projects

- Development of novel interventions to treat substance use in this population
- Understand the pathway whereby cigarette smoking is associated with poor psychiatric functioning



THANK YOU!

Questions?

Contact Information

Email: mmcdonell@wsu.edu

Office Phone: 509 368-6967



References

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