

Physical and Mental Health Status of Clients in a Mental Health Jail Diversion Program

Robin P. Telford¹, Sarah L. Desmarais², Richard A. Van Dorn³,
Candelyn B. Rade², Evan M. Lowder², & John Petrila¹

¹University of South Florida, ²North Carolina State University, ³RTI
International

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Rates of Physical Illness

- Justice-involved adults with serious mental illness (SMI) are at risk for poor physical health and lack appropriate physical healthcare.
- Increased risk of:
 - diabetes
 - metabolic syndrome
 - heart disease
 - obesity
 - hepatitis
- Shorter life span than adults without SMI (Oud & Meyboom-de Jong, 2009; Viron & Stern, 2010).

Justice-Involvement and Physical Illness

- Adults with SMI with criminal justice history:
 - 40% more likely to have a physical illness
 - 30% more likely to have multiple physical illnesses (Cuddeback et al., 2010).
- 75% have a co-occurring substance abuse disorder (Abram & Teplin, 1991; Abram et al., 2003).
- Less is known about physical health histories of adults with SMI in jail diversion programs.
 - How are substance use and mental health symptom severity related?

Present Study

1. Are jail diversion program participants' mental and physical health status lower than general population norms?
2. Are jail diversion program participants' mental and physical health status different than a sample of adults with SMI with and without an arrest in the past year?
3. Are drug and alcohol use and psychiatric symptom severity significantly related to mental and physical health status?

Jail Diversion Participants

- 11th Judicial Circuit of Florida Criminal Mental Health Project (CMHP)
- N=91
 - Diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, or psychotic disorder NOS.
 - 3 or more jail bookings in the past 3 years, or 7 or more lifetime jail bookings.
 - Rated as moderate or high risk for violence, suicide, self-harm, self-neglect, or general offending on the Short-Term Assessment of Risk and Treatability (START).

Comparison Participants

- 5 Site Health and Risk Study (Rosenberg et al., 2001)
- N=969
 - Diagnosis of schizophrenia or other psychotic disorder, or a major mood disorder.
 - Multi-site investigation of risk behaviors and sexually transmitted diseases in patients with SMI.
 - Outpatient (NH, MD, CT)
 - Inpatient (NC, NH)
 - Involuntary Outpatient (NC)
 - No arrest in past year vs. arrest in past year

Participant Characteristics

	No Arrest in Past Year		Arrest in Past Year		Jail Diversion	
	n (%)		n (%)		n (%)	
Male	313 (68.5%)		166 (68.9%)		74 (81.3%)	
Graduated High School	287 (62.9%)		161 (67.1%)		47 (51.7%)	
Never Married	238 (52.2%)		145 (61.0%)		62 (68.9%)	
Substance Use Disorder	199 (43.5%)		137 (57.1%)		78 (88.6%)	
	<i>M</i>	<i>Range</i>	<i>M</i>	<i>Range</i>	<i>M</i>	<i>Range</i>
Age in Years	42.76	(20 - 71)	38.47	(19 - 66)	36.26	(18 - 68)
Lifetime Arrests	0.17	(0 - 5)	1.28	(0 - 40)	13.19	(1 - 140)

Measures

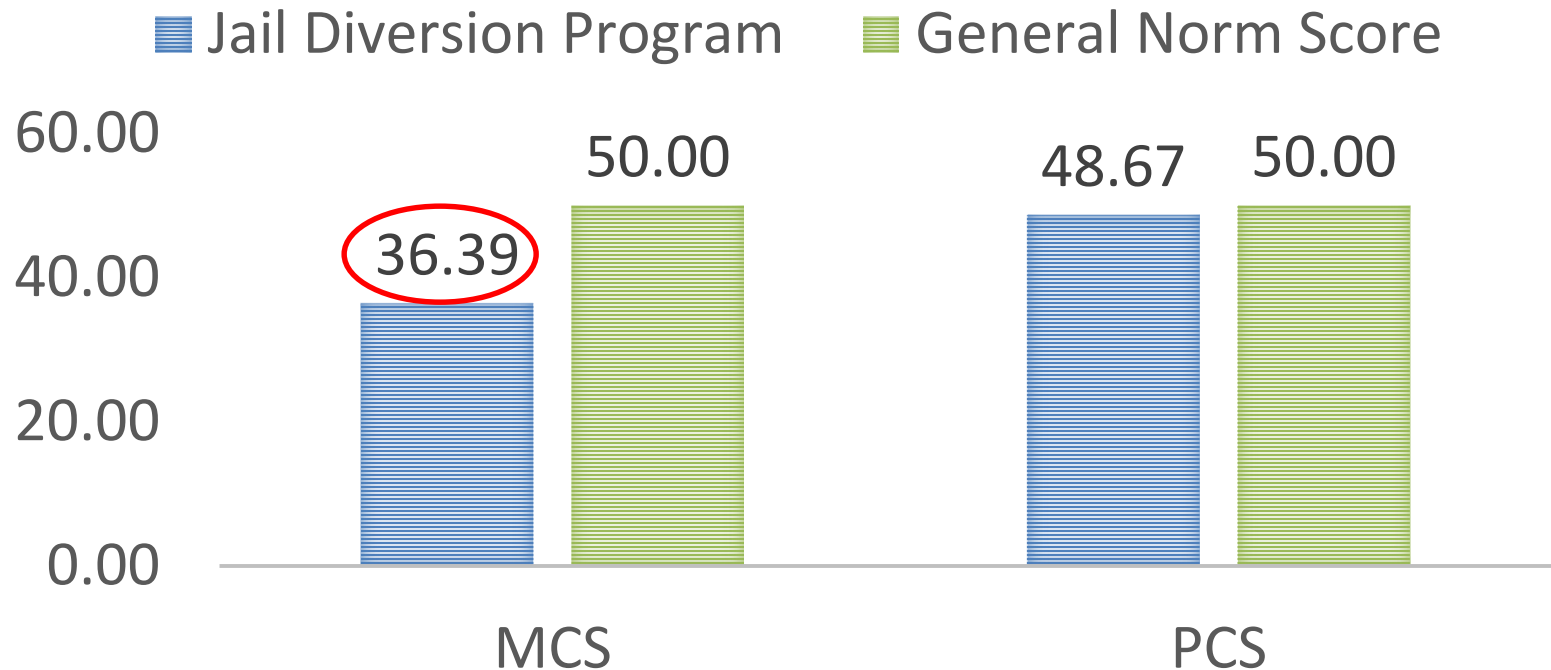
- Short Form Health Survey (SF-12 v2; Ware et al. 1996)
 - Mental health status (MCS)
 - Physical health status (PCS)
 - Possible range=0-100
 - Higher score indicates better health
- Addiction Severity Index Drug and Alcohol Subscales (McLellan et al. 1980)
- Dartmouth Assessment of Lifestyle Instrument (Rosenberg et al., 1998; 2001)
 - Both dichotomized to indicate substance use disorder (1=yes)
- Brief Psychiatric Rating Scale (BPRS; Lukoff et al., 1986; Overall & Gorham, 1962)
 - Possible range=7-70
 - Higher score indicates greater mental illness symptom severity

Procedures

- Both studies:
 - Structured battery of assessments.
 - Interview
 - Administered by trained research assistant.

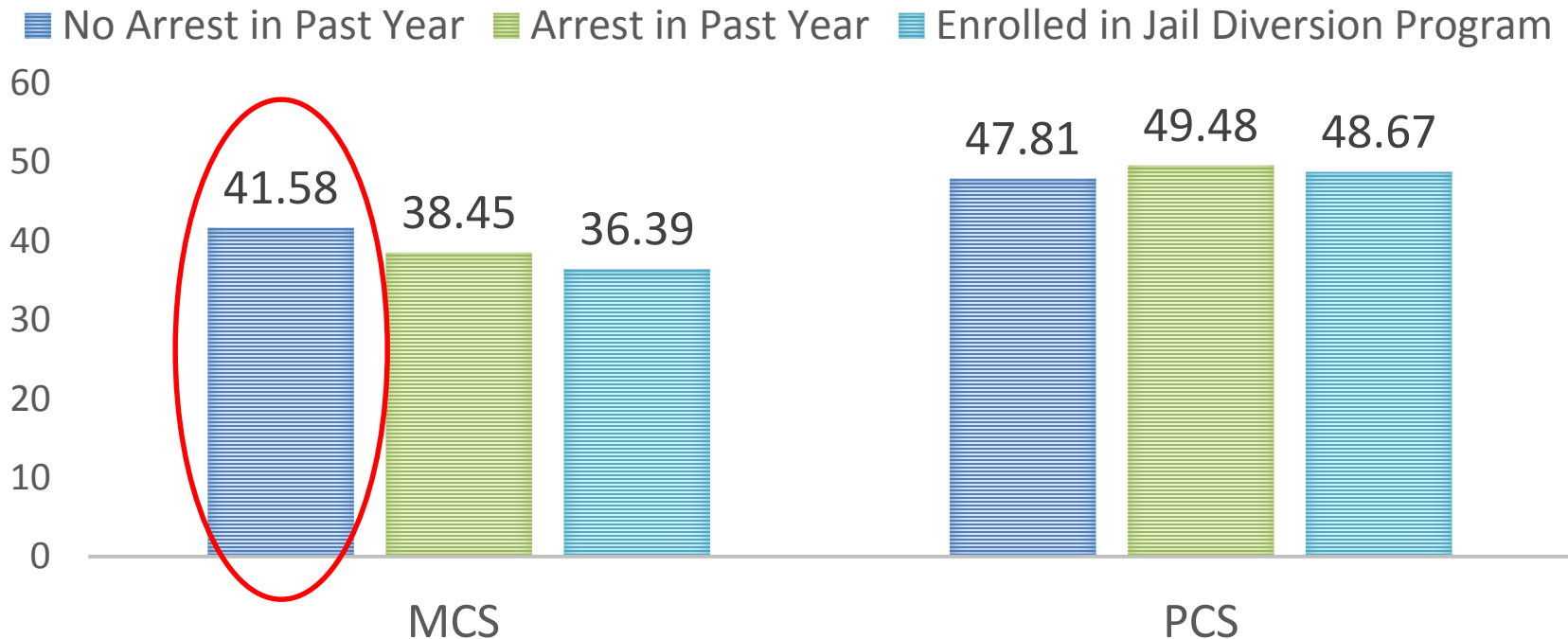
Research Question 1: Are jail diversion program participants' mental and physical health status lower than general population norms?

MEAN SF-12 SCORES



Research Question 2: Are jail diversion program participants' mental and physical health status different than a sample of adults with SMI with and without an arrest in the past year?

ANOVA FOR MCS & PCS SCORES



Research Question 3a: Are drug and alcohol use and psychiatric symptom severity significantly related to **mental health status**?

Dependent Variable	Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
MCS						
	Age	1	296.46	296.46	2.47	0.116
	BPRS	1	1060.33	1060.33	8.85	0.003
	PCS	1	3174.38	3174.38	26.49	<.0001
	Justice Involved Status	2	999.89	499.95	4.17	0.016
	Substance use (1=yes)	1	390.77	390.77	3.26	0.071
	Justice Involved*Substance use	2	123.60	61.80	0.52	0.597

Research Question 3a: Are drug and alcohol use and psychiatric symptom severity significantly related to **mental health status**?

Justice Involved Status	Substance use Disorder (1=yes)	MCS LS Mean
No Arrest in Past Year	0	42.63
No Arrest in Past Year	1	39.97
Arrest in Past Year	0	39.36
Arrest in Past Year	1	38.18
Jail Diversion Program	0	41.01
Jail Diversion Program	1	36.23

Research Question 3b: Are drug and alcohol use and psychiatric symptom severity significantly related to **physical health status**?

Dependent Variable	Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
PCS	Age	1	3382.04	3382.04	37.30	<.0001
	BPRS	1	332.94	332.94	3.67	0.056
	MCS	1	2402.21	2402.21	26.49	<.0001
	Justice Involved Status	2	17.53	8.76	0.10	0.908
	Substance use (1=yes)	1	60.09	60.09	0.66	0.416
	Justice Involved*Substance use	2	59.09	29.55	0.33	0.722

Research Question 3b: Are drug and alcohol use and psychiatric symptom severity significantly related to **physical health status**?

Justice Involved Status	Substance use Disorder (1=yes)	PCS LS Mean
No Arrest in Past Year	0	48.53
No Arrest in Past Year	1	48.59
Arrest in Past Year	0	48.85
Arrest in Past Year	1	48.24
Jail Diversion Program	0	49.12
Jail Diversion Program	1	46.28

Summary of Results

- Jail diversion clients have lower mental health status scores on the SF-12 compared to both the general population and non-justice involved adults with SMI.
- Some evidence that mental health status worse in jail diversion and past year arrest participants.
 - Psychiatric symptom severity significant
 - Role of substance use less clear
- Limited evidence for role of substance use and psychiatric symptom severity in contributing to poor physical health outcomes.

Discussion

- Limitations
 - Unequal sample sizes and small jail diversion sample.
 - Observational data.
 - High rates of substance use disorder in jail diversion sample.
- Implications
 - Further evidence of worse mental health status associated with criminal justice involvement.
 - Limited support for relationship between physical health status, substance use, and criminal justice involvement.
- Future Directions
 - Research examining factors that contribute to increased risk for poor health outcomes in justice-involved adults with SMI.

Thank you!

- Contact information:

Robin P. Telford, M.A.

Doctoral Candidate

Department of Community & Family Health

College of Public Health

University of South Florida

Email: rtelfor1@health.usf.edu