Health and Healthcare Utilization Differences Among Singly- and Dually-Diagnosed Low-Income, Uninsured Working Adults

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The Texas DMIE Study

•The Texas Demonstration to Maintain Independence and Employment (DMIE) is a research study that assesses the effect of expanded access to health and employment benefits on working people with major health conditions who are at risk of becoming disabled.

•The study was implemented at the Harris County Hospital District, a public healthcare system that serves approximately 500,000 primarily low-income, uninsured residents of the Houston area each year.

• DMIE services included expanded vision, dental and substance abuse services, expedited appointments, case management and employment supports.

•To join the study, participants must have been working, age 21-60, and have a serious mental illness (bi-polar disorder, schizophrenia, or major depression) or a combination of behavioral and physical health conditions that could potentially lead to disability.

Objective

This presentation examines differences in health and use of healthcare in the year before study entry between participants diagnosed with either a mental health disorder, a substance abuse disorder, or both kinds of disorder.

Methods

•1,250 participants in the DMIE study who had a mental health diagnosis (MH), an alcohol or drug diagnosis (AOD) or a dual diagnosis (DD) are included in this analysis.

•Data on demographics, health and healthcare come from a participant survey done at study entry and from hospital district medical records.

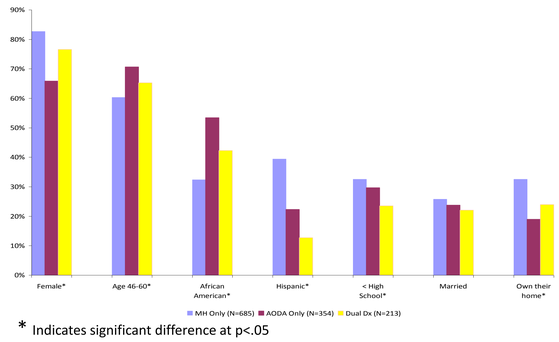
•Propensity scores were used to control for demographic differences among the three groups. The variables used to create propensity score weights were gender, age, race/ethnicity, educational level, marital status, any children, housing status and type of job.

Demographic Characteristics

•DMIE participants were predominantly female (77%), middle-aged (mean=47), and minority (40% African American, 30% Hispanic). About 30% had not graduated from HS. One-quarter were currently married, one-quarter owned their own home, and almost 80% had children. Average household income was about $18,000.

- MH – most likely to be female (83%), Hispanic (39%), and to own their own home (33%)
- AOD – least likely to be female (66%) or own their own home (19%); more likely to be older and African American (53%)
- DD –more likely to be white (42%) and to have graduated from HS (76%),

•Marital status, children, and average household income were similar across all groups.



* Indicates significant difference at p<.05

Physical and Mental Health

•DD was most likely to report ADL (Activities of Daily Living) functional limitations and fair/poor mental health, had higher (worse) scores on the BASIS-24 (a measure of psychiatric and substance abuse dysfunction), and more physical and mental health diagnoses in their medical records.

•AOD showed the least dysfunction on these measures.

	MH Only	AODA Only	Dual Dx	
5+ ADL limitations	2.9%	2.3%	6.9%	*
5+ IADL limitations	4.8%	3.0%	8.5%	*
Physical health (fair, poor)	44.9%	39.9%	46.5%	
Mental health (fair, poor)	28.3%	16.2%	35.1%	*
BASIS24 Average	*0.901*	*0.707*	*1.042*	*
Mean # physical diagnoses	2.2	2.2	2.5	*
Mean # mental diagnoses	1.8	1.3	2.9	*

All variables come from survey self-report, except for Medical Records Diagnoses

*indicates 3-way comparison is significant at p<.05

Yellow (higher than expected) and blue (lower than expected) based on cell chi-sq greater than 3

Data are weighted by inverse of propensity score to control for demographics.

Healthcare Received in Past Year

	MH Only	AODA Only	Dual Dx	
Self Report:				
Got urgent care as soon as needed	60.0%	74.1%	53.9%	*
Got non-urgent care as soon as needed	53.1%	58.1%	42.7%	*
Got a routine physical exam	90.5%	90.7%	90.1%	
Mean times, if any	*4.9*	*4.9*	*4.9*	
Got a routine dental/eye exam	57.4%	52.8%	54.6%	
Mean times, if any	*2.0*	*2.1*	*2.4*	*
Got urgent care	47.0%	47.4%	52.9%	
Mean times, if any	*2.4*	*2.3*	*2.6*	
Visited a mental health professional	34.1%	7.0%	42.8%	*
Mean times, if any	*4.7*	*5.5*	*6.2*	
Spent any nights in hospital	18.8%	27.1%	31.0%	*
Mean nights, if any	*5.4*	*5.0*	*5.5*	
Medical Records:				
Any inpatient visit	5.5%	14.9%	15.1%	*
Mean times, if any	*2.2*	*2.3*	*2.0*	
Any emergency visit	20.8%	27.1%	25.7%	+
Mean times, if any	*2.1*	*2.0*	*2.7*	+
Any outpatient visit	97.8%	94.0%	97.0%	*
Mean times, if any	*11.2*	*10.8*	*11.7*	

*indicates 3-way comparison is significant at p<.05

+ indicates significance at p<.07

Yellow (higher than expected) and blue (lower than expected) based on cell chi-sq greater than 3

Data are weighted by inverse of propensity score to control for demographics.

•The dual diagnosis group was the least likely to report being able to get care when they felt they needed it, while the AOD group was the most likely to report timely care.

•Based on self-report, the three groups were equally likely to have gotten a routine physical check-up, dental or eye exam, or urgent care in the year before study entry.

•Not surprisingly, the AOD group was the least likely to have had a visit with a psychiatrist, psychologist or other mental health professional; the DD group was significantly more likely than the MH group to have had such a visit.

•The dual diagnosis group was the most likely to have spent any nights in the hospital, while the MH group was the least likely to have done so.

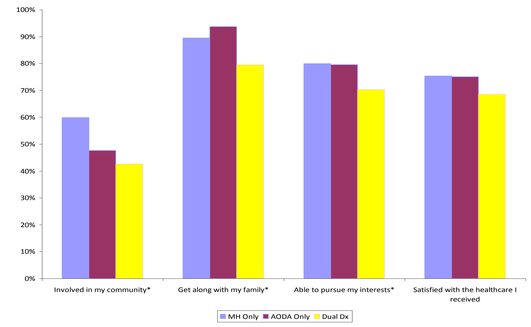
•Medical records also showed that the DD group was most likely, and the MH group least likely, to have had an inpatient visit.

•The DD group had a marginally higher number of emergency visits.

Satisfaction with Life and Healthcare

•The dually-diagnosed were the least likely to report being involved in their community, getting along with their family, or being able to pursue their interests. The mental health group reported the most involvement with community, while the AOD group was most likely to report getting along with their family.

•The three groups were equally satisfied with the healthcare they had received before joining the study.



•Indicates significant difference at p<.05

•Data are weighted by inverse of propensity score to control for demographics.

Discussion

•At entry to the DMIE study, the three diagnostic groups showed some demographic, health and healthcare differences. The dual diagnosis group had a higher level of education and was less likely to belong to a minority group, factors that might have been expected to confer an advantage in health and healthcare; yet, after controlling for these factors with propensity scores, they appeared to be worse off on physical and mental health, life satisfaction, and access to care when needed.

•In addition to simply having comorbid disorders, the dual-diagnosis group may have been more seriously afflicted:

- having a slightly higher proportion of individuals with serious mental illness (23% in the DD group vs 19% in the MH group)
- being more likely to self-report substance problems (34% in the DD group vs 25% in the AOD group).

•Individuals with dual diagnoses would likely need the most supports to remain independent and employed.

•A related presentation (***Differential Impact of Enhanced Health***….) examines the trajectories of these three groups after one year of DMIE services.

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