The utilization of programmatic and surveillance data to guide the development of Ryan White Part A-funded mental health services

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Introduction

- Mental health (MH) conditions can negatively impact HIV health outcomes, including engagement[1] and retention in medical care,[2] antiretroviral therapy (ART) initiation,[3] ART adherence,[2] and viral suppression (VS).[2,3]
- MH conditions can interfere with quality of life and functioning among people living with HIV (PLWH) and are associated with a more rapid HIV disease progression, leading to a reduced life expectancy.[3]
- Engagement in MH services is associated with higher ART adherence and viral load suppression.[2]

Methods and Activities

Activities

- The NY HIV Planning Council (the Council) formed a subcommittee to identify the needs of NY Ryan White Part A (RWPA) clients with reported MH diagnoses
- The Council worked with the Care and Treatment Program (CTP) Research and Evaluation Unit (REU) at the NYC DOHMH to:
  - Plan analyses, using programmatic and surveillance data
  - Describe the prevalence and clinical correlates of reported MH diagnoses among NYC RWPA clients
  - Inform the delivery of RWPA-funded MH services

Data Sources

- **The Electronic System for HIV/AIDS Reporting and Evaluation (eSHARE):** Demographic and services data, as well as MH diagnosis status assessments, for clients served by the local RWPA program
- **The NYC HIV Surveillance Registry (the "Registry"):** All HIV-related laboratory tests ordered by NYC clinical providers. NYC client-level RWPA data are routinely matched and merged with Registry data

Client Population: The analysis included 7,317 NYC HIV-positive clients who received ≥1 RWPA service between March 2018 and February 2019 (GY 2018) and were assessed[4] for lifetime history of MH diagnosis.

Definitions

- **MH diagnosis:** A '**Yes**' to the MH assessment question and selection of ≥1 MH diagnosis
  - The MH assessment question asks: "Has the client ever received a mental health diagnosis?"
  - If the answer is Yes, then there is another question: "What diagnosis or diagnoses?"
- **Viral suppression**: A value of <200 copies/mL on the client's last VL test result in GY2018 (missing VL for GY2018 was treated as lack of viral suppression)

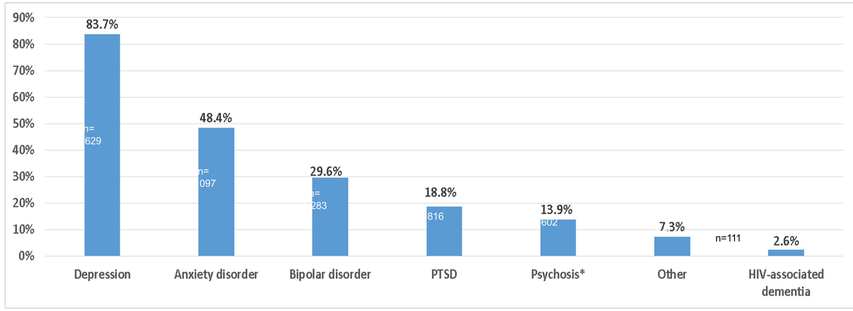
Results

Table 1. Characteristics of NYC RWPA clients by MH diagnosis status, N=7,268[†]

Characteristic, GY 2018	Any MH diagnosis reported n=4,335	No MH diagnosis reported n=2,933
	%	%
Race/ethnicity		
White	7.6	4.1
Black	50.1	54.7
Hispanic	40.9	37.3
Other	1.4	3.9
Age (in years)		
<30	9.4	14.7
30-49	36.1	40.8
≥50	54.5	44.5
Gender		
Male	58.9	70.1
Female	36.0	26.8
Transgender	5.0	3.0
Other[††]	0.02	0.1
<High School/GED	40.5	36.3
Born in USA/US Territory	80.0	57.4
Income <100% Federal Poverty Level	52.2	46.3
Unemployed	76.5	57.5

[†]0.7% of the clients in the sample (N=7,268) had an unknown mental health diagnosis status (data not included in the table)
[††]Other includes: gender nonconforming (n=4) and not sure/questioning (n=4)

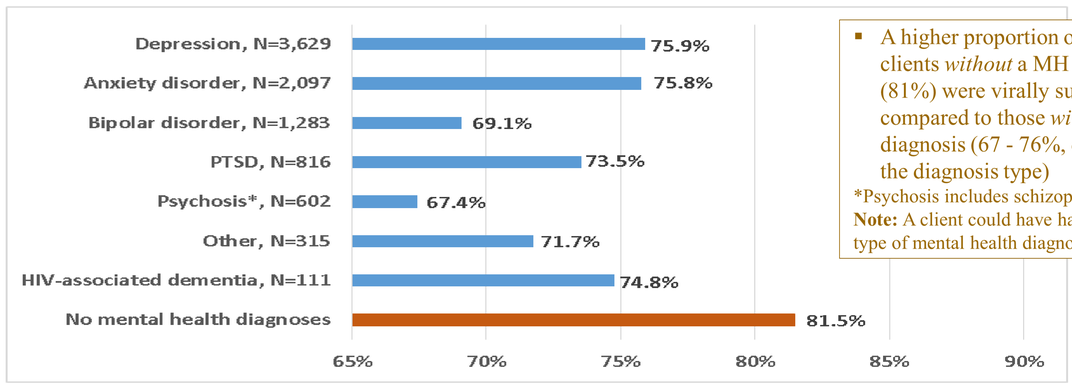
Figure 1. MH diagnosis types among NYC RWPA clients with a MH diagnosis (n=4,335)



- **59%** (n=4,335) of the clients in the sample were reported to have had a MH diagnosis (ever)
- Depression, anxiety disorder and bipolar disorder were most frequently reported

*Psychosis includes schizophrenia.
Note: A client could have had more than one type of mental health diagnosis reported

Figure 2. Viral suppression among NYC RWPA clients by MH diagnosis status, GY2018



- A higher proportion of clients *without* a MH diagnosis (81%) were virally suppressed, as compared to those *with* a MH diagnosis (67 - 76%, depending on the diagnosis type)

*Psychosis includes schizophrenia.
Note: A client could have had more than one type of mental health diagnosis reported

Lessons Learned

- Treatment strategies in NYC RWPA MH programs should focus on addressing depression, anxiety disorder, and bipolar disorder as these are the most frequently reported MH diagnoses
- These findings highlight the need to improve HIV medical outcomes among PLWH with a MH diagnosis, since a significantly higher proportion of clients *without* a MH diagnosis were virally suppressed, as compared to those with a MH diagnosis
- Robust partnerships between RW recipient agencies and community stakeholders allow for the development of relevant research question(s) and analyses, which help inform service planning and strategies to reduce the negative impact of MH conditions or other barriers on health outcomes

Challenges/Limitations

- We cannot know from eSHARE which reports of MH diagnoses are based on a qualified provider having conducted a psychiatric assessment with an appropriate diagnostic tool
- In cases where providers rely on self-report to answer this question, some clients may not know (or share) their actual diagnosis status
- Clients who were *only* served in the NYC RWPA service categories[4] for which assessment forms do not include the MH diagnosis questions were not included in our sample

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[1]Pence BW, Mills JC, Bengtson AM, et al. Association of increased chronicity of depression with HIV appointment attendance, treatment failure, and mortality among HIV-infected adults in the United States. *JAMA Psychiatry*. 2018;75(4):379-385

[2]Coyle RP, Schneck CD, Morrow M, et al. Engagement in mental health care is associated with higher cumulative drug exposure and adherence to antiretroviral therapy. *AIDS Behav*. 2019;23:3493–3502.

[3]Gaynes BN, Pence BW, Eron JJ, Miller WC. Prevalence and comorbidity of psychiatric diagnoses based on reference standard in an HIV+ patient population. *Psychosom Med*. 2008;70(4):505-511.

[4]NYC RWPA service categories for which assessment forms include MH diagnosis questions: Medical Case Management, Mental Health Services, Substance Abuse Outpatient Care, Health Education/Risk Reduction, and Housing services. Service categories for which assessment forms *do not* include MH diagnosis questions: Case Management (non-medical), Food Bank/Home-Delivered Meals, Legal Services, Psychosocial Support Services, Medical Transportation.