

Depression and Anxiety Diagnoses Amongst Persons Living with Diagnosed HIV/AIDS, NYS excluding NYC, 2015 – 2020

Introduction

Depression and anxiety are two of the most common mental health disorders affecting 6.7% and 3.1% of adults in the United States (US), respectively.^{1,2} Persons living with diagnosed human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) (PLWDH) are known to be placed at higher risk for mental health disorders.³ This statistical brief provides an overview of diagnosed depression and anxiety amongst PLWDH in New York State (NYS), excluding New York City (NYC), from 2015 – 2020.

Methods

Data from the 2015-2020 Medical Monitoring Project (MMP), an expanded HIV surveillance project conducted by the NYS Department of Health (DOH) (NYSDOH) in collaboration with Centers for Disease Control and Prevention (CDC), were used in these analyses. Data on self-reported unmet needs for mental health services were collected from participant interviews; data on diagnosed depression, generalized anxiety disorder (GAD), and psychotropic medications prescribed in the two years before interview were abstracted from medical records at the health care facility identified by the participant as their most frequent source of HIV care. PLWDH residing in NYC were excluded from this analysis, limiting the study sample to PLWDH residing in rest of state (ROS) areas. Mental health diagnosis was defined as a recorded diagnosis of depression or GAD in the two years before interview. Weighted percentages were presented to represent the entire PLWDH population and not solely the characteristics of respondents (For more information on MMP's sampling and weighting methodology, please refer to the [MMP 2018-2020 Protocol \(cdc.gov\)](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6802a1.htm)).

Key Findings:

- About 40% of PLWDH residing in NYS, excluding NYC, were diagnosed with either depression or Generalized Anxiety Disorder.
- Approximately 12% of PLWDH with at least one mental health diagnosis needed a mental health service but did not receive it in the past two years.
- Nearly 80% of PLWDH with at least one mental health diagnosis were prescribed a psychotropic medication.

Results

Our sample consisted of PLWDH who participated in the MMP between 2015-2020 residing in ROS during the time of their interview/chart review. Of these participants, an estimated 39.6% were non-Hispanic Black and an estimated 33.8% were non-Hispanic White. Most participants had more than a high school education (53.2%) and were diagnosed with HIV for ten years or more (73.1%).

An estimated 37.9% of PLWDH were diagnosed with at least one mental health diagnosis, with most PLWDH being diagnosed with GAD only (29.8%). An estimated 13.4% of PLWDH were diagnosed with both depression and GAD. Having at least one mental health diagnosis (diagnosed with either depression or GAD) was most prevalent among non-Hispanic White PLWDH (51.0%), while having concurrent mental health diagnosis (being diagnosed with both depression and GAD) was most prevalent among Asian/American Indian/Alaska Native/Multiracial PLWDH (24.2%) (**Table 1**).

Among PLWDH who had at least one mental health diagnosis, an estimated 11.9% had unmet mental health needs (i.e., needed mental health services but did not receive them within the 12 months prior to interview). PLWDH who were aged 50 to 59 had the highest proportion of unmet mental health needs (15.0%) among all age categories. A higher proportion of individuals who were assigned female sex at birth reported unmet mental health needs compared to individuals who were assigned male sex at birth (16.8% vs 9.7%). PLWDH with a high school equivalency had the highest proportion of unmet mental health needs (20.1%) among all education attainment categories. Hispanic/Latino PLWDH had the highest proportion of unmet mental health needs (19.5%) among all race/ethnicity categories. The proportion of PLWDH who had unmet mental health service needs was greater among those who were diagnosed with HIV for less than 10 years than those who were diagnosed for 10 years or more (15.7% vs 10.6%) (**Table 2**). A majority of PLWDH with at least one mental health diagnosis (78.9%) were prescribed one or more drugs classified as psychotropic medications (a medication used to treat mental health disorders) (**Table 3**).

Discussion

Overall, about two-fifths of PLWDH had a mental health diagnosis recorded in the medical record during the 2-year observation period preceding the MMP interview. While approximately 80% of these individuals were prescribed a psychotropic medication, over 10% reported needing, but not receiving, a mental health service in the 12 months before interview.

Mental health is essential to overall health, and the reported inability to obtain needed mental health services highlights an important unmet need among PLWDH in NYS. It is vital that PLWDH with mental health needs receive the appropriate support and care to live healthy lives without regard to sex, gender, age, culture, or ethnicity. Special attention must be paid to groups of PLWDH reporting the highest proportion of unmet mental health needs, including persons reported as female, Hispanic/Latino, and older than 50 years.

Table 1. Mental Health Diagnosis Among Persons Living with Diagnosed HIV/AIDS

	Total		Depression		Generalized Anxiety Disorder		Diagnosed with both Depression and GAD ¹		At least One Mental Health Diagnosis ²	
	N	Col. %	N	Row % ³	N	Row % ³	N	Row % ³	N	Row % ³
Age Group										
Total	449	-	100	21.5	144	29.8	64	13.3	180	37.9
18-29 years	37	6.6	9	21.3	14	34.8	7	15.8	16	40.3
30-39 years	67	11.2	15	23.8	14	19.4	6	8.6	23	34.5
40-49 years	73	18.4	19	22.8	28	32.1	13	15.6	34	39.3
50-59 years	154	36.4	40	25.4	49	32.2	24	14.8	65	42.8
>=60 years	118	27.4	17	14.5	39	28.0	14	11.2	42	31.2
Sex at Birth										
Male	325	70.0	72	20.6	102	28.3	43	11.6	131	37.2
Female	124	30.0	28	23.7	42	33.2	21	17.4	49	39.5
Education Attainment										
Missing	3	0.5	2	61.3	2	61.3	2	61.3	2	61.3
< High School	68	13.9	13	17.1	27	38.6	9	13.3	31	42.4
High School Equivalent	141	32.4	36	24.0	50	30.6	25	16.6	61	38.1
> High School	237	53.2	49	20.8	65	26.6	28	10.9	86	36.4
Race/Ethnicity										
Non-Hispanic White	165	33.8	54	31.6	66	36.5	32	17.0	88	51.1
Non-Hispanic Black	165	39.6	20	12.5	44	25.7	13	8.3	51	29.9
Hispanic or Latino	78	18.6	15	19.1	20	24.0	10	12.7	25	30.4
Asian/American Indian/Alaska Native/Multiracial	41	8.0	11	28.9	14	34.6	9	24.2	16	39.2
Time after HIV diagnosis										
< 10 years	133	26.9	29	22.0	42	28.8	21	14.2	50	36.7
>=10 years	316	73.1	71	21.3	102	30.1	43	13.0	130	38.4

Note: All numbers are unweighted and all percentages (%) are weighted.

- 1. Diagnosed with both Depression and GAD:** If participant was ever diagnosed with both depression and GAD at any point two years prior to their interview date
- 2. At least 1 Mental Health Diagnosis:** If participant was diagnosed with either depression or GAD at any point two years prior to their interview date
- 3. Row %:** Calculated with the total participants as the denominator

Table 2. Unmet Mental Health Need amongst PLWDH with at least 1 Mental Health Diagnosis

	Total		At least One Mental Health Diagnosis ¹		Needed Mental Health Service but did not receive in the prior 12 months ²	
	N	Col. %	N	Col. %	N	Row % ³
Age Group						
Total	449	-	180	-	20	11.9
18-29 years	37	6.6	16	7.0	1	5.5
30-39 years	67	11.2	23	10.2	3	10.1
40-49 years	73	18.4	34	19.1	3	9.8
50-59 years	154	36.4	65	41.2	8	15.0
>=60 years	118	27.4	42	22.5	5	10.9
Sex at Birth						
Male	325	70.0	131	68.7	12	9.7
Female	124	30.0	49	31.3	8	16.8
Education Attainment						
Missing	3	0.5	2	0.9	0	0.0
< High School	68	13.9	31	15.5	2	6.8
High School Equivalent	141	32.4	61	32.5	11	20.1
> High School	237	53.2	86	51.1	7	8.5
Race/Ethnicity						
Non-Hispanic White	165	33.8	88	45.6	11	13.7
Non-Hispanic Black	165	39.6	51	31.2	4	8.9
Hispanic or Latino	78	18.6	25	14.9	5	19.5
Asian/American Indian/Alaska Native/Multiracial	41	8.0	16	8.3	0	0.0
Time after HIV diagnosis						
< 10 years	133	26.9	50	26.0	7	15.7
>=10 years	316	73.1	130	74.0	13	10.6

Note: All numbers are unweighted and all percentages (%) are weighted.

- At least 1 Mental Health Diagnosis:** If participant was diagnosed with either depression or GAD at any point two years prior to their interview date
- Needed Mental Health Service but did not receive in the prior 12 months:** Restricted to among participants who were diagnosed with either depression or GAD at any point two years prior to their interview date
- Row %:** Calculated with participant who were diagnosed with either depression or GAD at any point two years prior to their interview date as the denominator

Table 3. Psychotropic Medication Prescription Pattern amongst PLWDH with at least 1 Mental Health Diagnosis

	Total		At least One Mental Health Diagnosis ¹		Prescribed a Psychotropic Medication at least once during the Observational Period ²	
	N	Col. %	N	Col. %	N	Row % ³
Age Group						
Total	449	-	180	-	143	78.9
18-29 years	37	6.6	16	7.0	10	61.6
30-39 years	67	11.2	23	10.2	17	63.9
40-49 years	73	18.4	34	19.1	26	76.8
50-59 years	154	36.4	65	41.2	52	80.8
>=60 years	118	27.4	42	22.5	38	89.6
Sex at Birth						
Male	325	70.0	131	68.7	105	78.9
Female	124	30.0	49	31.3	38	78.9
Education Attainment						
Missing	3	0.5	2	0.9	2	100.0
< High School	68	13.9	31	15.5	22	67.1
High School Equivalent	141	32.4	61	32.5	53	88.8
> High School	237	53.2	86	51.1	66	75.9
Race/Ethnicity						
Non-Hispanic White	165	33.8	88	45.6	79	90.2
Non-Hispanic Black	165	39.6	51	31.2	35	70.2
Hispanic or Latino	78	18.6	25	14.9	15	57.4
Asian/American Indian/Alaska Native/Multiracial	41	8.0	16	8.3	14	88.4
Time after HIV diagnosis						
< 10 years	133	26.9	50	26.0	38	76.9
>=10 years	316	73.1	130	74.0	105	79.7

Note: All numbers are unweighted and all percentages (%) are weighted.

1. **At least 1 Mental Health Diagnosis:** If participant was diagnosed with either depression or GAD at any point two years prior to their interview date
2. **Prescribed a Psychotropic Medication at least once during the Observational Period:** Restricted to among participants who were diagnosed with either depression or GAD at any point two years prior to their interview date
3. **Row %:** Calculated with participant who were diagnosed with either depression or GAD at any point two years prior to their interview date as the denominator

References

1. Depression: Anxiety and depression association of america, ADAA. Depression | Anxiety and Depression Association of America, ADAA. (n.d.). Retrieved August 1, 2022, from <https://adaa.org/understanding-anxiety/depression>
2. Generalized anxiety disorder (GAD): Anxiety and depression association of America, ADAA. Generalized Anxiety Disorder (GAD) | Anxiety and Depression Association of America, ADAA. (n.d.). Retrieved August 1, 2022, from <https://adaa.org/understanding-anxiety/generalized-anxiety-disorder-gad>
3. U.S. Department of Health and Human Services. (n.d.). HIV/AIDS and mental health. National Institute of Mental Health. Retrieved August 1, 2022, from <https://www.nimh.nih.gov/health/topics/hiv-aids>

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