Mental Health Among Ohio's Adults and Children: Findings from the Ohio Medicaid Assessment 2019 and Ohio COVID-19 Survey Series

November 2020





Department of Medicaid

Mike DeWine, Governor Maureen Corcoran, Director Jon Husted, Lt, Governor





AUTHORS

Dushka Crane¹, Andreas Teferra^{1,2}, Tim Sahr¹, Amy Ferketich², Mary Applegate³, Kraig Knudsen^{4,} Thomas Albani¹

> ¹ Ohio Colleges of Medicine Government Resource Center
> ² College of Public Health, Ohio State University
> ³ Ohio Department of Medicaid
> ⁴ Ohio Department of Mental Health and Addiction Services



Mental Health, OMAS 2019 and COVID-19 Survey Series

EXECUTIVE SUMMARY

Mental health is vital to overall health and wellbeing in every stage of life. This chartbook describes mental health and associated factors among Ohio adults and children. It examines the prevalence of mental health-related impairment and identifies stressors related to mental health, including comorbid physical health conditions, gaps in access to care and health insurance coverage, and other socioeconomic factors. It also describes subpopulations that may be disproportionately effected by mental health including racial and ethnic minorities and children. The findings are based on results of the 2019 Ohio Medicaid Assessment Survey (OMAS) and the Ohio COVID-19 Survey series.

Key Findings

- In 2019, 8.8% of adults ages 19-64 years reported mental health impairment (MHI) defined as impairment in routine work or other usual activities for at least 14 of the past 30 days due to mental or emotional problems.
- The prevalence of MHI was highest among young adults women, affecting 15.7% of women between 19 and 24 years of age. It was lowest among men between ages 55 and 64 years, affecting 5.7% of men in this age group.
- Adults with MHI experienced gaps in access to care, and barriers to care including transportation and finding available healthcare providers.

- MHI was related to a variety of socioeconomic stressors including financial stress, housing and food insecurity, and social isolation.
- While there were racial and ethnic differences in health and socioeconomic conditions regardless of MHI status, black and Hispanic adults with MHI were disproportionately affected by physical health and socioeconomic stress.
- In 2019, 3.6% of children ages 5 to 11, and 4.9% of children ages 12 to 18 experienced frequent mental distress (FMD), defines as a mental health condition or emotional problem that prevented participation in school, social relationships, or other daily activities for at least 7 or the past 30 days.
- FMD among children was associated with comorbid health conditions including asthma, developmental disabilities, and a adverse childhood experiences (ACEs).
- Medicaid was the most common source of health insurance coverage among adults and children with MHI.

Continued on next page \rightarrow

Visit **grc.osu.edu/OMAS** for additional information about OMAS, including public use files, codebooks, and methods



EXECUTIVE SUMMARY continued

Impact of COVID-19. While data collection for the 2019 OMAS was conducted before the start of the COVID-19 pandemic (August through December 2019), preliminary findings from the Ohio COVID-19 Survey (OCS) (data collection period of April 2020 through June 2021) suggest that the prevalence of major mood disorder symptoms has increased as a result of the COVID-19 pandemic. This finding is consistent with prior iterations of the OMAS, which suggest that the prevalence of mental health problems increased during times of economic stress. Furthermore, there is evidence that individuals with mental or emotional distress are more vulnerable to health and socioeconomic stressors as the pandemic lingers. Strengthening safety net services may lessen the impact of the pandemic on MHI.

<u>Policy considerations.</u> The results of this chartbook highlight opportunities to support mental health recovery and build resilience. Many of the life domains (e.g., physical health and social determinants of health) affected by MHI also limited participation in activities vital for individuals in pursuit of mental health recovery. Many of these barriers can be reduced or modified through programs that improve access to mental health care and address socioeconomic conditions among those most vulnerable.

Medicaid was the most common form of insurance for adults and children with MHI, and enrollment in Medicaid was associated with

improvement in access to mental health care over time. Thus, Medicaid policies have a substantial influence on the system of mental health care for Ohioans with MHI.

Visit **grc.osu.edu/OMAS** for additional information about OMAS, including public use files, codebooks, and methods



CONTENTS

Executive Summary	Slide 3-4
Background	Slides 6-7
Objectives	Slide 8
Methods	Slide 9
Results	Slides 10–58
Key Findings	Slide 59
Policy Considerations	Slide 60-61
References	Slide 62
Acknowledgements	Slide 63



BACKGROUND

The population of interest in this report includes adults and children with mental illness. Understanding the prevalence and impact of mental illness is important because it affects quality of life and health in almost every life domain, from physical health to relationships to financial stability¹⁻⁶. In turn, these stressors reduce one's ability to recover from mental illness and lead a healthy life.

For many individuals, recovery from mental illness can be complicated by comorbid conditions,^{8,9} which require access to a range of health services, including screening and treatment for chronic disease and substance misuse. From a cost perspective, treatment expenditures associated with most chronic medical conditions are two-to-three times greater when there is a cooccurring diagnosis of depression^{11,12} and exceed those associated with cardiovascular disease and cancer.¹⁰ The discrepancy is attributed to a variety of factors including lack of access to care and a lack of providers with sufficient training to treat both behavioral health and general medicine. Psychiatric symptoms also contribute to a lack of adherence to medical treatment due to poor selfmanagement.¹¹

Mental health services can prevent or reduce the impact of mental illness on community functioning¹³ and physical health if they are evidence-based and designed to meet individual needs, preferences, and cultural perspectives. Yet mental illness often goes untreated.¹⁴ When left untreated, its impact can be devastating, including social isolation and substance use disorders, which are common among individuals with mental illness and are also a leading risk factors for suicide and self-harm.^{15–17}

Efforts to reduce the negative impact of mental illness may focus on three broad areas: (1) Reducing gaps in access to evidence-based



Mental Health, OMAS 2019

care; (2) addressing socioeconomic factors that can increase resilience; and (3) acknowledging individual differences and reducing stigma.^{18–19} Several subpopulations are disproportionately affected by mental health conditions:

Racial/ethnic minorities: Racial disparities in mental health care are greater than in other areas of health care.²³ Members of racial/ethnic minority groups in the United States have less adequate access and utilization of mental health services, and lower quality of care. These factors contribute to increased likelihood of poor mental and physical health outcomes. Furthermore, the impact of mental illness is exacerbated be financial stress, which is more common among racial and ethnic minority groups. Children who experience unfair treatment due to race are at increased risk of mental and physical health concerns later in life.²⁴ Estimates based on the Youth Risk Behavior Survey conducted in 2019 suggest that Black or African American high school students in Ohio were more than twice as likely to attempt suicide compared to other high school students (15.8% versus 6.8%).²⁵

Adolescent and young adults: The transition from adolescence to adulthood can be a worrisome time. Mental illness typically starts when individuals are in their mid-teens and 20s. At the same time, utilization of mental health treatment and adherence tends to decline in young adult years.²¹ A range of factors contribute to these declines including system barriers and avoidance of treatment.²¹ Having a parent with mental illness also increases the risk that a child will experience multiple psychosocial difficulties later in life.²¹⁻²²

Continued on next page \rightarrow

BACKGROUND continued

Health Policy Perspective

From a health policy perspective, considerations include access to evidence-based care, providers with sufficient training to treat both behavioral health and co-occurring medical conditions, and access to ancillary supports for self-management.¹¹

Access and quality of care for mental illness and comorbid chronic conditions have improved in recent years due, in part, to federal legislation²⁶ that enabled state reforms. The Mental Health Parity Act of 2008 prohibited differential coverage for mental health conditions;²⁷ and the Affordable Care Act (ACA) of 2010 established mental health treatment as an essential benefit and prohibited exclusions based on preexisting conditions.

In 2014, Ohio expanded Medicaid coverage for adults with incomes up to 138% of the Federal Poverty Level (FPL) (\$29,974 in annual income for a family of three in 2020), which benefited individuals with behavioral health conditions who met the income eligibility criteria. Prior to these reforms, lack of adequate insurance coverage for those with mental illness often led to financial hardship and bankruptcy.

Between 2016 and 2018, Ohio Medicaid redesigned its behavioral health benefit by: (1) Integrating payments for mental health and general medical services to Medicaid managed care plans; (2) covering basic primary care within behavioral health settings; and (3) covering a variety of evidence-based practices and care coordination strategies for individuals with mental illness. Additionally, a variety of payment reforms and federal demonstration projects paved the way for expansion of services that address socioeconomic stressors, providing ancillary supports for housing and employment. Given these efforts, workforce shortages and competency gaps continue to limit access to care for individuals with mental health problems, particularly in rural areas of Ohio.³

The OMAS does not include a direct assessment of mental health. Instead, it includes an assessment of mental health impairment (MHI) among adults and frequent mental distress (FMD) among children as proxy measures for severe mental health symptoms⁷ There is a body of research supporting the assumption that MHI among adults and FDM among children are indicators of mental health symptom severity. ^{2, 3} Findings from prior administrations of the OMAS suggest that between 5% and 9% of adult Ohioans (19-64 years of age) experienced MHI that prevented them from working or participating in other usual activities for at least 14 of the 30 days prior to being interviewed.⁶

The 2019 OMAS was completed prior to the novel coronavirus (known as COVID-19) pandemic in February 2020, thus the findings only describe the impact of MHI prior to the pandemic. A sample of OMAS survey participants were engaged to participate in the Ohio COVID-19 Survey, sponsored by the Ohio Department of Health and the Ohio Department of Medicaid. This survey provided preliminary evidence of the impact of the pandemic on mental health.



OBJECTIVES

The 2019 OMAS Mental Health Chartbook is intended to support the development of state policies that affect Medicaid enrollees with Mental Health Impairment. It focuses on the following six objectives:

- Describe the prevalence of MHI among adults in Ohio and its association with demographic characteristics and Medicaid status;
- 2. Describe the relationship between MHI and comorbid physical health conditions that underscore the need for coordination of services for individuals with MHI;
- 3. Describe access to care and health insurance to cover the cost of care for individuals with MHI;
- 4. Examine modifiable socioeconomic factors that may have an impact of the ability of individuals with MHI to recover from mental illness;
- 5. Examine racial and ethnic differences in the experience of MHI and related health and socioeconomic stress; and

6. Describe the prevalence of frequent mental distress (FMD) among children and associated factors.



METHODS

The Ohio Medicaid Assessment Survey (OMAS) is a random sample telephone survey that assesses Ohio residents' access to health care, health care status, health care use, health risk behaviors, and health demographics. The 2019 OMAS includes interview data from 31,558 Ohio adults, 19 -64 years, and 7,404 adult proxy interviews of Ohio children, 5-18 years. The 2019 OMAS is the 8th iteration of the survey.

Participants include Ohioans on Medicaid, potentially eligible for Medicaid based on family income, and those who are not enrolled in Medicaid. Analyses in this chartbook adjusts for survey design, weights, and complex design to be representative of Ohio's noninstitutionalized residential adults and children. More information on the findings and methodology of the survey is accessible at: https://grc.osu.edu/OMAS/2019Survey.

Data from the 2008, 2010, 2012, 2015, 2017, and 2019 OMAS iterations were examined to identify trends over time in the prevalence of individuals with mental health impairment and their needs and access to care.

Beginning in April, 2020, the 2019 OMAS sample frame and respondents were engaged to assist Ohio's health and human service agencies evaluate the challenges presented by COVID-19 pandemic. The Ohio COVID-19 Survey (OCS) employs a weekly sampling strategy to track trends over time. **Mental Health Impairment (MHI)** among adults was assessed by asking the number of days in the past 30 days prior to being interviewed that a mental health condition or emotional problem kept the respondent from participating in work or other usual activities. This measurement for functional impairment due to mental health or distress is classified as having "MHI." The I4-day threshold aligns with the Centers for Disease Control and Prevention's recommendations for measurement classification.²⁶

Frequent Mental Distress (FMD) among children. Respondents with children in their household reported the number of days in the past 30 days that their child was unable to participate in school, social relationships with friends, or other usual activities due to mental health problems. Mental distress among children 5 to 11 years of age was described as stress, depression, and problems with emotions; for children 12 to 18, mental distress was described as stress, depression, and problems with emotions *or substance use.*

The measure is an extension of the previously validated CDC HRQOL "Health Days Measure."³ The number of days of mental distress were assessed and factors associated with 7 or more days of impairment during the past 30 days were identified to understand the impact of FMD among children. The 7-day threshold was selected in collaboration with senior staff from the Ohio Department of Mental Health and Addiction Services.



METHODS continued

Depression among adults was assessed following the COVID-19 pandemic using the 2-item form of the Patient Health Questionnaire (PHQ-2), which is a well-validated screening instrument for symptoms of major depression.

Statistical Methods: Logistic regression and Pearson's Chi-square were applied to analyses of binomial and categorical outcomes, respectively. All group differences and temporal trends that are described in the results are within .95 precision (.95 confidence bounds), unless otherwise noted.



SECTION 1: PREVALENCE OF MHI AMONG ADULTS

The following section provides an overview of prevalence and trends in mental health impairment (MHI) among adults in Ohio across different demographic characteristics and Medicaid status

Key Findings: Prevalence of MHI among Adults

- Overall, 8.8% of Ohio adults, 19-64 years of age, reporting having MHI in 2019 an increase of 31% from a low of 6.1% in 2015.
- From April through August 2020, between 11.1% and 18.2% of Ohio adults screened positive for depressive symptoms; the prevalence much higher than comparable national estimates of 7.1% prior to the pandemic.
- The prevalence of mental health impairment (MHI) was highest among younger women, 19-24 years, and lowest among men, 55-64 years.
- Most adult Ohioans with MHI were enrolled in Medicaid.



12

Figure 1: Prevalence of MHI among Ohio Adults Ages 19 - 64 Years



A higher proportion of respondents reported mental health impairment (MHI) in 2010 and 2019 compared to other years of the survey



Figure 2: Estimated Prevalence of Major Depression among Adults Ages 19-64 Following COVID-19



The proportion of respondents who screened positive for depression was between 14.2% and 17.5% in the weeks following the start of COVID-19 and dropped to between 10.3% and 15.3% in June through August, 2020. By comparison, the estimated prevalence of major depression in the United States prior to the health crisis (7.1%). In addition, 25.8% of respondents reported negative mental health or substance use effects and 28.1% of reported negative social effects due to the health care crisis.



PHQ-2 Screener, Ohio COVID-19 Survey, April – August, 2020

Figure 3: Prevalence of MHI Among Adults by Sex and Age



The prevalence of mental health impairment (MHI) was greatest among younger women, 19-24 years, and lowest among older man, 55-64 years.



Figure 4: Prevalence of MHI by County Type



There were no noteworthy regional differences in the prevalence of mental health impairment (MHI).



Figure 5: Prevalence of MHI by Education



The prevalence of mental health impairment (MHI) was greatest among respondents with a high school education. Among those with more than high school education, there was a inverse relationship between level of education and prevalence of MHI.



Figure 6: Prevalence of MHI Among Adults by Medicaid Status



The prevalence of mental health impairment (MHI) is higher among respondents who were enrolled in Medicaid than respondents who were not enrolled in Medicaid.



SECTION 2: COMORBID CHRONIC CONDITIONS AMONG ADULT OHIOANS WITH MHI

The following section describes the prevalence of comorbid health conditions by mental health impairment (MHI) status, including hypertension, high cholesterol, diabetes, asthma, arthritis, and related conditions.

Key Findings: Comorbid Physical Health Conditions Among Ohio Adults with MHI

• Among Ohio adults, mental health impairment (MHI) was associated with a higher prevalence of self-rated fair/poor health and chronic physical health conditions including hypertension, high cholesterol, diabetes, asthma, and arthritis.



20

Figure 7: Self-Reported Health Status among Ohio Adults, by MHI status



Adults with mental health impairment (MHI) were more likely that those without MHI to rate their health as fair or poor.



Figure 8: Prevalence of Comorbid Conditions Among Adults, by MHI Status



The prevalence of chronic health conditions, including hypertension, high cholesterol, diabetes, asthma, arthritis, gout, and lupus, was higher among individuals with mental health impairment (MHI).



SECTION 3: ACCESS TO CARE AND HEALTH INSURANCE COVERAGE AMONG OHIO ADULTS WITH MHI

The following section describes health insurance coverage and access to mental health care, and physical health care among adults with mental health impairment (MHI).

Key Findings: Access to Care and Health Insurance by MHI Status

- Adults with mental health impairment (MHI) had more difficulty than those without MHI getting mental and physical health care. They were also more likely to experience an increase in difficulty getting medical care over the past three years.
- Nearly 15% of individuals with MHI were uninsured. Among those with insurance, Medicaid was the most common source of insurance for adults with MHI, while employer-sponsored insurance (ESI) was the most common insurance for adults without MHI.
- Adults with MHI were more likely than those without MHI to report delaying or avoiding care. Common barriers to care included transportation, difficulty findings providers, and lack of available providers.
- Among adults with MHI, those enrolled in Medicaid were more likely to report improved access to care in the past three years than those with other insurance.



Figure 9: Difficulty Getting Healthcare During the Past Year among Ohio Adults, by Type of Care and MHI Status



Individuals with mental health impairment (MHI) were more likely than those without MHI to report being unable to get needed mental health care, substance use treatment, and other health care at least once during the previous 12 months.



Figure 13: Proportion of Ohio Adults Without Health Insurance, by MHI Status



Nearly 15% of adults with mental health impairment (MHI) reported having no health insurance.



Figure 14: Type of Insurance Among Ohio Adults, 19 to 64 Years of Age, by MHI Status



Among adults with health insurance (ages 19-64), Medicaid was the most common form of insurance for those with MHI, while employer sponsored insurance was the most common source of insurance for those without MHI.



Figure 10: Ohio Adults' Ability to Access Medical Care Now Compared to 3 Years Ago, by MHI Status



Ohio adults with mental health impairment (MHI) were more likely than those without MHI to report that getting medical care became harder over the past three years. Respondents without MHI were more likely to report no change in access.



Figure 11: Percent of Ohio Adults who Delayed or Avoided Care in Past Year, by MHI Status



Respondents with mental health impairment (MHI) were more likely than those without MHI to report that they delayed or avoided care at least once during the past 12 months.



Figure 12. Among Ohio Adults who Avoided Care, the Most Common Reasons for Avoiding Care, by MHI Status



Respondents with mental health impairment (MHI) were more likely than those without MHI to report that transportation barriers and difficulty finding available providers were common reasons for delaying or avoiding care.



Figure 13: Access Medical Care Now Compared to 3 Years Ago among Adults with MHI by Medicaid Status



Respondents with MHI who were enrolled in Medicaid were more likely than those without Medicaid coverage to report that access to care had become easier over the previous 3 years.



SECTION 6: SOCIAL AND ECONOMIC STRESSORS AMONG OHIO ADULTS WITH MHI

The following section describes employment, income, housing, food security, and social isolation experienced by adults with mental health impairment (MHI).

Key Findings: Social and Economic Stressors Among Ohio Adults with MHI

- Adults with mental health impairment (MHI) were twice as likely as those without MHI to be unemployed; most attribute unemployment to physical and/or mental health limitations.
- Adults with MHI reported more economic stressors than adults without MHI. They reported lower income, more housing and food insecurity, and more difficulty paying medical bills. Over half reported worrying that food will run out and nearly half reported experiencing food shortages.
- Adults with MHI were at least three times as likely to report social isolation as adults without MHI.



Figure 16: Employment Among Ohio Adults: Full or Part-Time Job Last Week, by MHI Status



Adults with mental health impairment (MHI) were employed at half the rate of those without MHI.



Figure 17: Reasons for Lack of Employment Among Ohio Adults, by MHI Status



Among respondents who reported not working, the most common reason was physical or mental health. Respondents with mental health impairment (MHI) were twice as likely to identify physical or mental health barriers to employment and less likely to identify caring for family members as a barrier to employment.



Figure 18: Distribution of Income Among Ohio Adults, by Percentage of Federal Poverty Level (FPL) and MHI Status



Respondents with mental health impairment (MHI) were more likely to experience poverty than respondents without MHI. *Note that the FPL for Medicaid eligibility is < 138% for adults and <206% for children*.


Figure 19: Current Housing Situation Among Ohio Adults, by MHI Status



Respondents with mental health impairment (MHI) were less like to own a home or pay rent and more likely to stay with friend or family or to be homeless than respondents without MHI.



Figure 20: Financial Stress – Ease of Paying Rent in Past Year Among Ohio Adults, by MHI Status



Respondents with mental health impairment (MHI) were more likely than respondents without MHI to report that that paying rent had become harder over the past 12 months.



Figure 21: Financial Stress Among Ohio Adults – Food Insecurity, by MHI Status



Respondents with mental health impairment (MHI) were more likely than respondents without MHI to report food insecurity.



Mental Health, OMAS 2019

Figure 22: Financial Stress Among Ohio Adults: Difficulty Paying Medical Bills, by MHI Status



Respondents with mental health impairment (MHI) were twice as likely as respondents without MHI to report difficulty paying medical bills.



Figure 23: Loneliness by MHI Status



Respondents with mental health impairment (MHI) reported had higher rates of loneliness than respondents without MHI, including lack of companionship, feeling left out, and feeling isolated from others.



SECTION 7: RACE/ETHNIC DISPARITIES IN MENTAL HEALTH IMPAIRMENT AMONG OHIO ADULTS

The following section describes racial and ethnic differences in the experience of MHI and associated chronic conditions, access to care, and social and economic determinants of health.

Key Findings: Impact of Race and Ethnicity

- Racial and ethnic differences in the prevalence of mental health impairment (MHI) differed by income. Among low income adult, the prevalence of MHI was greater among white than black, African American, or Hispanic respondents. Among higher income adults, the prevalence of MHI was greater among Hispanic adults than white, black, or African American adults.
- There were racial and ethnic differences in comorbid physical health and socioeconomic stress regardless of MHI status. However, some racial disparities were greater among racial and ethnic groups with MHI compared to those without MHI.



43

Figure X: Prevalence of MHI among Ohio Adults, by Income and Race/Ethnicity



Among lower income groups (≤ 100% FPL), the prevalence of MHI was higher among white adults than among black, African American, or Hispanic adults. Among higher income groups (> 100% FPL), the prevalence of MHI was greater among Hispanic adults than white, black, or African American adults.



Figure 25: Hypertension Among Ohio Adults by MHI Status and Race/Ethnicity



There were racial disparities in hypertension regardless of mental health impairment (MHI) status. Black or African American adults with MHI had the highest rate of hypertension (49.7%).



Figure 25: Diabetes Among Ohio Adults by MHI Status and Race/Ethnicity



There were racial disparities in diabetes regardless of mental health impairment (MHI) status. However, disparities were greater among racial and ethnic groups with MHI. Black or African American adults with MHI had the highest rate of diabetes (25.3%).



Figure 25: Asthma Among Ohio Adults by MHI Status and Race/Ethnicity



Disparities in the prevalence of asthma were observed between white and black and African American adults. The disparity between Black and African American adults versus white and Hispanic adults was greater among those with MHI.



Figure 26: Distribution of Income Among Ohio Adults by MHI Status and Race/Ethnicity



Black or African American adults with MHI experience higher levels of poverty than white and Hispanic adults and adults without MHI. There is an association between MHI and low income among White, Black and African American Adults, but not Hispanic adults.



Figure 27: Food Insecurity Among Adults with MHI by Race/Ethnicity: Worry that Food will Run Out



Racial and ethnic differences in food insecurity were identified regardless of MHI status. Well over half of Black and African American adults with MHI experience food insecurity.



Figure 27: Food Insecurity Among Adults with MHI by Race/Ethnicity: Ran Out of Food Before Getting More



Racial and ethnic differences in food insecurity were identified regardless of MHI status. Well over half of Black and African American adults with MHI experience food insecurity.



SECTION 8: FREQUENT MENTAL DISTRESS AMONG OHIO CHILDREN

The following section describes impact of frequent mental distress (FMD) on Ohio children and adolescents, less than 19 years of age.

Key Findings: Impact of Frequent Mental Distress (FMD) on Children

- 4.4% of children experienced frequent mental distress (FMD), defined as mental health problems that kept them from school, social relationships, and other usual activities for at least 7 or the past 30 days. The proportion of children with FMD increased during adolescence (4.9% among ages 12-18) and was greatest among Hispanic adolescents (7.1%).
- FMD among children was associated with an increased prevalence of asthma and developmental disabilities.
- Medicaid was the primary source of insurance for children and more common among children with FMD than children without FMD.
- FMD among children was associated with adverse childhood experiences. Children with FMD were more likely than children without FMD to have experienced unfair treatment due to race and lived in a household in which one or more adults had a mental illness or substance use disorder.



Figure 28: Percent of Ohio Youth with Frequent Mental Distress (FMD)



The proportion of children with mental or emotional problems that kept them from school, social relationships, and other usual activities for at least 7 of the past 30 days (frequent mental distress, FMD) increased from 3.6% among children 5-11 years of age, to 4.9% among adolescents 12 – 18 years of age.



Figure 29: Percent of Ohio Youth with FMD, by Race



The percent of children with mental or emotional problems that kept them from school, social relationships, and other usual activities for at least 7 of the past 30 days (frequent mental distress, FMD) was lowest of among white children ages 5-11 years (3.5%) and highest among Hispanic children ages 12 – 18 years (7.1%).



Figure 31: Co-occurring Health Conditions among Children (5-18) by FMD Status



Asthma and developmental disabilities are more common children with mental or emotional problems that kept them from school, social relationships, and other usual activities for at least 7 of the past 30 days (frequent mental distress, FMD).



Figure 33: Prevalence of FMD Among Children Enrolled in Medicaid



The prevalence of frequent mental distress (FMD) was greater among children enrolled in Medicaid and those who were potentially eligible for Medicaid or likely not eligible for Medicaid based on family income. Note that over 80% of children with FMD were enrolled in Medicaid.



Figure 38: Percent of Children with MHI by Adverse Childhood Event Categories



Children with frequent mental distress (FMD) were more likely than children without FMD to experience adverse childhood experiences that are associated in increased risk of poor outcomes.



Figure 36: Association Between Childhood Mental Distress and Unfair Treatment Due to Race



Frequent mental distress (FMD) was associated with past experience of unfair treatment due to race. The experience of unfair treatment due to race was nearly twice as likely among young children (5-11 years) with FMD and three times as likely among adolescents (12-18 years) with FMD compared to children in the same age groups without FMD.



Figure 36: Association Between Childhood Mental Distress and Adult Mental Health



Children with Frequent Mental Distress were more likely than children without FMD to have lived in a household with an adult with mental illness or substance use disorder. By adolescents, approximately half of children with FMD had lived in a household with an adult with mental illness or substance use disorders.



KEY FINDINGS

Prevalence. The prevalence of mental health impairment (MHI) among adults ages 18-64 varied from 7.4% (2008) to 9.7% (2010) to 6.1% (2015) to 8.8% (2019). The prevalence of MHI was greater among adults ages 19-24 compared to those over 24 years of age. Younger women between ages 18 and 24 had the highest rate of MHI (19.7%). From April through August 2020, between 11.1% and 18.2% of Ohio adults screened positive for depressive symptoms.

Comorbid conditions. MHI was associated with fair/poor selfratings of health and a higher prevalence of chronic disease including hypertension, high cholesterol, diabetes, asthma, and arthritis.

Access to care. Adults with MHI had more difficulty getting mental and physical health care than adults without MHI. They were also more likely to experience increased difficulty getting medical care over the past three years. Common barriers to health care were transportation and finding available providers.

Health insurance coverage. Adults with MHI were less likely to have health insurance coverage and had more difficulty getting mental and physical health care. Among those who had coverage, Medicaid was their primary source of insurance.

Social and economic stressors. Adults with MHI had twice the rate of unemployment and experienced more social and financial stress than adults without MHI. Over half of adults with MHI reported incomes at or below 138% of FPL, twice the rate reported by adults without MHI. MHI was also associated with difficulty paying for housing, less secure housing conditions (e.g., less permanent housing), and food insecurity. Finally, over a third

of adults with MHI reported social isolation.

Racial disparities. While health and economic disparities exist in the general population, Black and African American adults with MHI are no exception. Black and African American individuals with MHI experienced higher rates of physical health comorbidity, poverty, and food insecurity than white and Hispanic adults with MHI.

Children with MHI. 4.4% of children between ages 9 and 18 experienced seven or more days of mental distress (Frequent Mental Distress, FMD) in the past 30 days. Youth with seven or more day of FMD had a higher prevalence of asthma and developmental disabilities and adverse childhood experiences (ACEs) compared to children with less than seven days of MHI. The prevalence of MHI peaked during adolescents.



Policy Considerations

Fluctuations in the prevalence of mental health impairment (MHI) in Ohio have coincided with historic events that reshaped Ohio's mental health system. The prevalence of MHI peaked following the "Great Recession" and dropped following the Affordable Care Act and Ohio's Medicaid expansion. The prevalence of MHI in 2019 was 31% greater than the prevalence observed immediately following Ohio's Medicaid expansion. The OMAS-19 points to a variety of important policy pathways to reduce the prevalence and burden of MHI in Ohio.

Access to care. The findings revealed gaps in access and insurance coverage for mental health care among Ohioans with MHI. Efforts to improve access may include training the workforce to implement evidence-based practices, adding new types of providers such as peers, and collaborating with insurance plans to ensure sufficient service capacity in all regions of the state.

Comorbid conditions. Ohioans with MHI reported more chronic medical conditions and more difficulty in accessing care over the past three years. Efforts to improve care for chronic conditions have focused on integration of mental and physical health care through system redesign and other payment reform efforts. Additional strategies to manage medical needs may focus on the healthcare workforce, consumer health literacy, and socioeconomic factors such as housing and food.. In particularly, improvement efforts could focus on addressing racial disparities in comorbid physical health conditions that affect quality of life impede recovery from mental illness.

Ancillary supports. MHI often leads to loss of housing and food security, social connectedness, and employment. These factors are barriers to recovery from mental illness and can prevent people from regaining their capacity to function independently. These needs may be addressed through ancillary support service and

community collaborative models that integrate services across local systems of care.

Medicaid. Medicaid is the primary source of insurance for Ohioans with MHI. Thus, it plays a critical role in shaping Ohio's mental health system and reducing the negative impact of MHI. The 2019 OMAS showed that Medicaid improves access to care more than any other sources of insurance coverage. While Medicaid policies have been implemented to address many of the gaps identified in this chart book, a disproportionate number of Ohioans with MHI are uninsured even though they are eligible for Medicaid coverage. The human and economic burden of MHI in Ohio may be reduced by facilitating enrollment in Medicaid for individuals with MHI who are eligible.

Addressing the needs of adolescents and young adults. The findings were consistent with prior research indicating that mental and emotional distress peaks in adolescence and early adulthood.²⁸ At the same time, young adults with MHI are more likely to experience gaps in access to care. These gaps increase the risk of substance misuse and self-harm.^{20 29} Studies show that access to treatment can improve by integrating mental health care in educational and medical settings for young adults. ³⁰ Avoidance of services and stigma may be reduced by expanding access to practitioners who specialize in the treatment of youth, culturally appropriate services, and increasing mental health literacy among youth and families.³¹



Mental Health Impairment, OMAS 2019

Continued on next page \rightarrow

Policy Considerations continued

The impact of trauma on children is well-established. The findings demonstrate a strong association between MHI and adverse childhood experiences. Communities and states may implement strategies put forth by the CDC to prevent and reduce the harm of adverse childhood experiences to strengthen economic supports for families, promote social norms that protect against violence and adversity, and build resilience for managing challenges.³²

Response to COVID-19. The economic and health impact of the current COVID-19 health care crisis is likely to produce another increase in the prevalence of mental health impairment (MHI) among Ohioans and may require additional behavioral health services and supports. Recent evidence points to an increase in the prevalence of psychological distress linked to COVID-19, consistent with trends observed after other large-scale disasters, including epidemics.³³ Preliminary findings from the Ohio COVID-19 Survey suggest that many Ohioans experienced psychological symptoms of depression after the start of the pandemic in April 2020.

Ohioans with MHI are a vulnerable population because they have fewer resources to deal with the economic and social stress associated with this health care crisis. Black or African American Ohioans with MHI may be particularly vulnerable to the psychological impact because they have more medical and



Mental Health Impairment, OMAS 2019

economic stressors. There is also evidence that adolescents and young adults are especially hard hit because the crisis is likely to affect education and career development.³⁴ In preparation for the expected consequences of COVID-19, experts recommend developing approaches to strengthening our mental health system and improve access to safety net services. Results of Ohio COVID-19 Survey are likely to prompt additional guidance to minimize the mental health impact of COVID-19.

REFERENCES

- 1. Crane D, Adhikari SB, Kim YH. Mental Health Impairment and Co-occurring Chronic Conditions among Ohioans. :6.
- Moberly S, Maxey H, Foy L, Vaughn SX, Wang Y, Diaz D. Scratching the Surface of Psychiatric Services Distribution and Public Health: an Indiana Assessment. J Behav Health Serv Res. 2019;46(2):267-282. doi:10.1007/s11414-018-9626-7
- Perou R, Bitsko RH, Blumberg SJ, Pastor P, Ghandour RM, Gfroerer JC, Hedden SL, Crosby AE, Visser SN, Schieve LA, Parks SE, Hall JE, Brody D, Simile CM, Thompson WW, Baio J, Avenevoli S, Kogan MD, Huang LN; Centers for Disease Control and Prevention (CDC). Mental health surveillance among children--United States, 2005-2011. MMWR Suppl. 2013 May 17;62(2):1-35. PMID: 23677130.
- Sullivan M, Simon G, Spertus J, Russo J. Depression-Related Costs in Heart Failure Care. Arch Intern Med. 2002;162(16):1860-1866. doi:10.1001/archinte.162.16.1860
- 5. Gilmer TP, O'Connor PJ, Rush WA, et al. Predictors of Health Care Costs in Adults With Diabetes. *Diabetes Care*. 2005;28(1):59-64. doi:10.2337/diacare.28.1.59
- Edlund MJ, Wang J, Brown KG, et al. Which mental disorders are associated with the greatest impairment in functioning? Soc Psychiatry Psychiatr Epidemiol. 2018;53(11):1265-1276. doi:10.1007/s00127-018-1554-6
- Ciprandi G, Schiavetti I, Rindone E, Ricciardolo FLM. The impact of anxiety and depression on outpatients with asthma. *Ann Allergy Asthma Immunol.* 2015;115(5):408-414. doi:10.1016/j.anai.2015.08.007
- Kessler RC, Nelson CB, McGonagle KA, Edlund MJ, Frank RG, Leaf PJ. The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization. Am J Orthopsychiatry. 1996;66(1):17-31. doi:10.1037/h0080151
- Lasser K, Boyd JW, Woolhandler S, Himmelstein DU, McCormick D, Bor DH. Smoking and Mental Illness: A Population-Based Prevalence Study. JAMA. 2000;284(20):2606-2610. doi:10.1001/jama.284.20.2606
- Roehrig C. Mental Disorders Top The List Of The Most Costly Conditions In The United States: \$201 Billion. *Health Aff (Millwood)*. 2016;35(6):1130-1135. doi:10.1377/hlthaff.2015.1659
- Lee S, Black D, Held M. Associations of multiplicity of comorbid health conditions, serious mental illness, and health care costs. Soc Work Health Care. 2016;55(7):518-530. doi:10.1080/00981389.2016.1183551
- Yoon J, M. Yano E, Altman L, et al. Reducing Costs of Acute Care for Ambulatory Caresensitive Medical Conditions: The Central Roles of Comorbid Mental Illness. *Med Care*. 2012;50(8):705-713. doi:10.1097/MLR.0b013e31824e3379
- Bybee D, Mowbray CT, Oyserman D, Lewandowski L, Variability in community functioning of mothers with serious mental illness. *J Behav Health Serv Res*. 2003;30(3):269-289. doi:10.1007/BF02287317
- Chiles JA, Lambert MJ, Hatch AL. The Impact of Psychological Interventions on Medical Cost Offset: A Meta-analytic Review. *Clin Psychol Sci Pract*. 1999;6(2):204-220. doi:10.1093/clipsy.6.2.204
- Miller NS, Mahler JC, Gold MS. Suicide Risk Associated with Drug and Alcohol Dependence. J Addict Dis. 1991;10(3):49-61. doi:10.1300/J069v10n03_06
- Winokur G, Black DW. Suicide What Can Be Done? N Engl J Med. 1992;327(7):490-491. doi:10.1056/NEJM199208133270710
- Black DW, Warrack G, Winokur G. The Iowa Record-Linkage Study: I. Suicides and Accidental Deaths Among Psychiatric Patients. Arch Gen Psychiatry. 1985;42(1):71-75.

doi:10.1001/archpsyc.1985.01790240073007

- Stone DM, Simon TR, Fowler KA, et al. Vital Signs: Trends in State Suicide Rates United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015. Morb Mortal Wkly Rep. 2018;67(22):617-624. doi:10.15585/mmwr.mm6722a1
- Hedegaard H, Curtin SC, Warner M. Suicide Rates in the United States Continue to Increase. Natl Cent Health Stat. June 2018. https://www.cdc.gov/nchs/data/databriefs/db309.pdf.
- Mojtabai, R., Olfson, M., & Han, B. (2016). National trends in the prevalence and treatment of depression in adolescents and young adults. Pediatrics, 138(6).doi:10.1542/peds.2016-1878
- 21. Nicholson J, Biebel K, Hinden B, Henry A, Stier L. Critical Issues for Parents with Mental Illness and their Families: (303792004-001). 2001. doi:10.1037/e303792004-001
- Lauritzen C, Reedtz C, Rognmo K, Nilsen MA, Walstad A. Identification of and Support for Children of Mentally III Parents: A 5 Year Follow-Up Study of Adult Mental Health Services. Front Psychiatry. 2018;9. doi:10.3389/fpsyt.2018.00507
- Cook BL, Hou SS-Y, Lee-Tauler SY, Progovac AM, Samson F, Sanchez MJ. A Review of Mental Health and Mental Health Care Disparities Research: 2011-2014. *Med Care Res Rev.* 2019;76(6):683-710. doi:10.1177/1077558718780592
- Slopen, Natalie, Jack P. Shonkoff, Michelle A. Albert, Hirokazu Yoshikawa, Aryana Jacobs, Rebecca Stoltz, and David R. Williams. "Racial Disparities in Child Adversity in the U.S." American Journal of Preventive Medicine 50, no. 1 (January 2016): 47–56. doi.org/10.1016/j.amepre.2015.06.013.
- Ohio Department of Health. "Percentage of High School Students Who Attempted Suicide One or More Times During the 12 Months Before the Survey, 2019." Accessed April 27, 2020. Chart. https:// odh.ohio.gov/wps/portal/gov/odh/know-our-programs/youthriskbehavior-survey/high-school-data/2019-hs-mentalhealth-suicideself-harm-report.
- Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, Georgia: CDC, November 2000.
- Druss BG, Goldman HH. Integrating Health and Mental Health Services: A Past and Future History. Am J Psychiatry. 2018;175(12):1199-1204. doi:10.1176/appi.ajp.2018.18020169
- 28. https://www.hhs.gov/ash/oah/adolescent-development/mental-health/adolescent-mentalhealth-basics/index.html
- U.S. Department of Health and Human Services, National Institute of Mental Health. (2017). Suicide prevention. Retrieved from https://www.nimh.nih.gov/health/topics/suicideprevention/index.shtml
- 30. https://www.samhsa.gov/data/sites/default/files/report_1973/ShortReport-1973.html
- Ross, L., & Connors, L. C. (2018). Improving Youth Access to Mental Health Support through a Youth–Adult Partnership. *Journal of Youth Development*, *13*(3), 24–42. doi.org/10.5195/JYD.2018.514
- 32. https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf
- 33. https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/navigatingcovid-19s-mental-health-impact
- Guessoum, S. B., Lachal, J., Radjack, R., Carretier, E., Minassian, S., Benoit, L., & Moro, M. R. (2020). Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Research*, 291, 113264. doi.org/10.1016/j.psychres.2020.113264



ACKNOWLEDGEMENTS



Ohio Department of Medicaid

Mike DeWine, Governor Jon Husted, Lt. Governor Maureen Corcoran, Director









Department of Mental Health and Addiction Services



Figure 26: Distribution of Income Among Ohio Adults by MHI Status and Race/Ethnicity



Federal Poverty (FPL)Income Bracket

Black or African American adults with mental health impairment (MHI) were more likely to be in the lowest income category (<100% FPL) and less likely to be in the highest income category (>400 FPL). There was no significant racial/ethnic difference the proportion of adults with MHI who worked: White (37.4%); Black or African American (37.0%), Hispanic (42.9%).



Figure 28: Distribution of Income Among Ohio Adults without MHI by Race/Ethnicity

100% 18.6% 90% 23.2% 80% 39.2% 70% 22.3% 23.1% >400% FPL 60% ■ 206%-400% FPL 15.6% 50% 28.0% ■ 138%-206% FPL 15.9% 40% 11.4% 100%-138% FPL 10.2% 30% <100% FPL 12.2% 20% 6.1% 32.1% 27.6% 10% 14.5% 0% White Black or African American Hispanic





Mental Health, OMAS 2019

Figure 26: Distribution of Income Among Ohio Adults by MHI Status and Race/Ethnicity



Federal Poverty (FPL)Income Bracket

Black or African American adults with mental health impairment (MHI) were more likely to be in the lowest income category (<100% FPL) and less likely to be in the highest income category (>400 FPL). There was no significant racial/ethnic difference the proportion of adults with MHI who worked: White (37.4%); Black or African American (37.0%), Hispanic (42.9%).

