

Relationship Between Behavioral Health and Chronic Diseases

Behavioral health and physical health are profoundly interlinked. A person experiencing severe mental illness or a substance use disorder is at greater risk for developing chronic physical health conditions than the general population because of the illness itself as well as potential consequences related to treatment.¹ Furthermore, high smoking rates in this population are a major contributing risk factor in the development of cardiovascular disease, respiratory disease and cancer. Conversely, a person managing one or more chronic illnesses is at risk for developing mental health conditions or maladaptive health behaviors because of physiological factors and potential stressors related to managing the condition(s).

Impact of Severe Mental Illness on Chronic Disease

DIABETES

Clients with depression and schizophrenia are highly susceptible to developing type 2 diabetes because of the impact on the body's resistance to insulin.¹ Antipsychotics—especially second-generation antipsychotics (e.g., quetiapine/Seroquel and risperidone/Risperdal)—increase risk for weight gain and other risk factors that predispose clients to developing diabetes. Additionally, psychiatric medications may pose significant drug interactions with medications used to manage chronic health conditions.²

Mental health conditions may also impact a client's ability to effectively manage their chronic condition. For instance, fatigue, low mood, and anhedonia may make a client less able to manage their chronic disease as they may not engage in physical activity or taking medications in a timely fashion. Clients with anxiety disorders may find that their anxiety prevents them from adhering to medical treatment, such as feeling anxiety and fear about for blood glucose monitoring.

CARDIOVASCULAR DISEASE

Clients with severe mental illnesses often experience cardiovascular disease, conditions that affect the heart and blood vessels, especially high blood pressure (hypertension) and changes in heart rate. Additionally, certain antipsychotic medications may lead to irregular heart rhythms (arrhythmias).³ Similar to risks for diabetes, certain psychiatric medications increase the likelihood of gaining weight and developing dyslipidemia, which are risk factors for developing cardiovascular disease.⁴

Physiologically, there is a correlation between increased cortisone that some people with depression may experience with elevated blood glucose levels, weight gain, blood pressure, and alterations to cholesterol levels.⁵ Additionally, depressive symptoms increase risk for cardiovascular disease because of their effects on lifestyle choices and adherence to recommended treatment. Although the evidence for how anxiety and psychological distress impacts cardiovascular disease is still tenuous, some speculate there may be some cumulative impact of anxiety symptoms on coronary function.⁵

RESPIRATORY DISEASE

Clients with severe mental illness often experience a variety of comorbidities listed in the previous sections; these risk factors and health conditions also put them at risk for developing respiratory diseases. Clients with schizophrenia and affective psychoses have a higher rate of developing chronic obstructive pulmonary disease (COPD), chronic bronchitis, and pneumonia,⁶ which can be dangerous if not treated.

Link Between Substance Use Disorder and Chronic Disease

There is a link between numerous substances, such as alcohol, heroin, and methamphetamines, and increased risk for cardiovascular problems and disease.⁷ Certain drugs, such as cocaine, can immediately affect blood pressure, potentially leading to chest pain and heart attack. Excessive alcohol use may lead to high blood pressure and heart failure. Chronic and excessive alcohol and drug misuse can greatly impact insulin production and blood sugar levels.⁸ Chronic alcohol consumption influences blood sugar levels differently depending on whether the person is in a fasted or fed state.⁸ Additionally, smoking is common among clients with severe mental illness, which has a detrimental impact on diabetes, cardiovascular diseases, and respiratory diseases.

While there has been a significant decline in smoking and other tobacco use among the general population in Washington State and across the nation, smoking rates for people with serious mental illness and/or addiction disorders have remained high.⁹ Tobacco use contributes significantly to this population's reduced life expectancy and level of co-morbidities. Tailored smoking cessation interventions would go a long distance toward disease prevention of chronic health conditions for which tobacco use is a key risk factor.

Impact of Chronic Disease on Behavioral Health

DIABETES

Fatigue and neuropathy due to complications of diabetes may discourage clients from engaging in previous activities they have enjoyed, which can greatly affect their mood. Additionally, clients having to alter their lifestyle behaviors may feel more isolated, withdrawing from others and social situations as a result of feeling guilty, self-conscious, and/or anxious about their medical condition. Clients may also feel anxious about performing injections or blood draws to monitor their blood glucose levels, which may lead them to avoid these activities altogether. Symptoms of hypoglycemia (also known as low blood sugar), such as shakiness and heart palpitations, can be mistaken for anxiety, which may make it difficult for a client to differentiate between the two.¹⁰ Changes in dietary habits and behaviors may also increase a client's risk for developing disordered eating habits. Conversely, clients may utilize their diabetic condition to further their disordered eating behavior, such as clients with type 1 diabetes restricting their insulin to lose weight.¹⁰

CARDIOVASCULAR DISEASE

Shortness of breath, changes in heart rate, and chest pain and discomfort may elicit and/or exacerbate symptoms of anxiety. These physiological symptoms are also commonly associated with anxiety disorders, and can be mistakenly attributed to the client's anxiety. Additionally, clients experiencing these symptoms in a certain setting or event may develop symptoms of anxiety or traumatic stress.

Fatigue, especially seen in cardiomyopathy, decreases a client's energy and activity levels, which may exacerbate depressed mood. Lack of energy to engage in previously enjoyable activities may evolve into anhedonia.

Additionally, developing cardiovascular disease may make a client susceptible to experiencing grief as a result of the loss of their previous level of functioning (e.g., "I used to be able to go out and spend time with my children, but now I'm too tired and cannot be out with them for more than 10 to 15 minutes at a time before needing a break").

RESPIRATORY DISEASE

Whether as a result of asthma or COPD, difficulty breathing and shortness of breath may elicit and/or exacerbate symptoms of anxiety. These physiological symptoms are also commonly seen in anxiety disorders and may be indiscernible from anxiety. Additionally, a potential link has been found between overusing asthma medications and anxiety and panic symptoms—a result of asthma medications' anxiogenic properties.¹¹

COPD can be a debilitating chronic disease, limiting a client's ability to perform typical activities of daily living. Because of potentially needing to alter their lifestyle, clients with COPD may be at greater risk for mental health concerns, such as depression and substance use disorder.¹²

Citations

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