

## **Co-Occurring Disorder-Related Quick Facts: PHYSICAL HEALTH**

**Physical Health:** Jones et al reported finding at least one diagnosed chronic health problem in a recent survey of individuals with serious psychological distress.<sup>1</sup> The physical health sequelae of substance abuse may be broadly classified into three main areas:

1. *Alcohol and drug abuse as a causal or contributing factor to illness, injury, or the transmission of infectious disease* (e.g., cocaine-induced myocardial infarction, substance-related cardio- and skeletal myopathy, alcohol induced bone loss, intentional and unintentional injury, poor fetal outcomes, tobacco-related cancers, HIV transmission among drug injectors)
2. *Alcohol and drug abuse as an exacerbating factor to a non-substance-related illness* (e.g., abdominal pain, diabetes, epilepsy, essential hypertension)
3. *Alcohol and drug abuse as a complicating factor in treatment or patient compliance* (e.g., asthma, diabetes, tuberculosis)

This fact sheet will focus on cardiac disease, essential hypertension, and diabetes. Of course, the psychological distress associated with any of these disorders may lead to an increased risk of substance abuse. In general however, substance abuse as direct sequelae of these particular conditions is not common, as might be the case with medication addiction secondary to chronic pain.

**Epidemiology:** *Cardiac Disease*—Cocaine use is associated with several cardiovascular conditions including myocardial infarction, acute myocardial ischemia, arrhythmias, sudden death, and cardiomyopathy.<sup>2,3</sup> These effects may be exacerbated with concomitant alcohol consumption; cardiomyopathy and arrhythmias can be caused by alcohol abuse alone. Women appear to suffer these consequences at lower doses of alcohol than do men.<sup>2,4,5</sup> Amphetamine use causes many of the same cardiac problems as cocaine. Heroin and other opioids, per se, are not commonly associated with major cardiac effects, although arrhythmias and reduced cardiac output have been reported for these drugs.<sup>2,4</sup> However, injection drug use may lead to infective endocarditis.<sup>2</sup> The number of hospitalizations for endocarditis relating to injection drug use increased by 38-66 percent in the United States between 2001-2002 and 2002-2003.<sup>6</sup>

One long-term prospective study found that mental health status is related to cardiovascular disease-related death, although this result was significant only for men.<sup>7</sup> However, the Women's Health Initiative Observational Study found that depressive symptoms among older women are significantly related to increased risk of cardiovascular disease death even after controlling for established risk factors.<sup>8</sup> This same study showed increased cardiovascular mortality and morbidity among women with a history of full-blown panic attacks.<sup>8</sup> Several studies have suggested that the lifestyles of persons with severe mental illness (diet, smoking, lack of, or excessive exercise) may increase the risk of cardiac illness.<sup>7,9</sup> Male veterans suffering from posttraumatic stress syndrome (PTSD) have also been found to have elevated rates of cardiac disease.<sup>10</sup> Heart disease is three times more common among homeless persons than among the

age-matched general population.<sup>11</sup> Among homeless persons, heavy smoking, cocaine abuse, and alcohol abuse are common cardiac risk factors.<sup>12</sup>

*Essential Hypertension*—Worldwide, approximately one in four adults suffer from essential hypertension, making it the most common cardiovascular disease and one of the most common chronic diseases. Both the disease and its management are complicated when patients abuse alcohol, tobacco, and other drugs. For example, hypertensive alcoholics appear to be more prone to left ventricular hypertrophy, and underlying hypertensive disease may contribute to cocaine-induced aortic dissection.<sup>2</sup> Reduction in use or abstinence from these substances can facilitate management of hypertension.

There is little published research on the management of essential hypertension among persons with co-occurring mental health problems. However, one European study suggests that persons with mental illness are as likely as the general population to be aware of the problem but are less likely to have their illness treated.<sup>13</sup> Similarly, homeless persons are no more likely than the general population to have essential hypertension, but are much less likely to have it successfully controlled.<sup>12</sup>

*Diabetes*—Diabetes is representative of the “ambulatory care sensitive” (ACS) disorders—chronic diseases that can be effectively managed in primary care but that lead to expensive emergency care and hospitalizations when left untreated.<sup>14</sup> Access to and availability of primary care as well as patient compliance with treatment regimens will determine the extent to which ACS disorders like diabetes are successfully controlled. Available literature suggests that persons with substance abuse and mental health problems are more likely than persons without these problems to require expensive acute care for ACS disorders and are more likely to die.<sup>15</sup> Unsurprisingly, homeless persons with ACS are less likely than housed individuals to receive primary care services for diabetes and other ACS disorders.<sup>11</sup>

**Evidence-Based and Promising Approaches:** There is broad agreement about the need to address the impact of substance abuse, co-occurring disorders, and related co-morbidities on physical health. The Co-occurring Center for Excellence (COCE) Overview Paper # 3 (*Overarching Principles*,<sup>16</sup> notes that “behavioral health systems must collaborate with professionals in primary care, human services, housing, criminal justice, education, and related fields in order to meet the complex needs of persons with COD.” COCE’s Overview Paper # 2 (*Screening, Assessment, and Treatment Planning for Persons with Co-Occurring Disorders*,<sup>17</sup> urges the incorporation of physical health assessments into treatment planning for persons with co-occurring disorders. Numerous Federal initiatives have sought to increase screening and assessment for substance abuse and mental health problems in health care settings. However, there is limited success in integrating mental health and substance abuse with physical health services at either the systems or provider levels. Although excellent examples of integrated systems and services exist, there is substantial room for improvement. The need for further progress in this area is reflected in the centrality of workforce development in the Substance Abuse and Mental Health Administration’s (SAMHSA’s) matrix and emphasis on “the collaboration needed to promote holistic, integrated approaches.”

## Major SAMHSA Activities/Resources:

- Illness Management and Recovery for People in Contact with the Criminal Justice System, Kim T. Mueser and Sally MacKain:  
<http://www.gainscenter.samhsa.gov/pdfs/ebp/Papers/IllnessManagement.pdf>
- Evidence-Based Practices: Shaping Mental Health Services Toward Recovery Illness Management and Recovery Workbook:  
<http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/illness/workbook/handout3.asp>
- Health effects of alcohol and other drugs on your body. Fact Sheet:  
[http://www.workplace.samhsa.gov/WPWorkit/pdf/health\\_effects\\_on\\_your\\_body\\_fs.pdf](http://www.workplace.samhsa.gov/WPWorkit/pdf/health_effects_on_your_body_fs.pdf)
- The Physical Effects of Fetal Alcohol Spectrum Disorders:  
<http://ncadistore.samhsa.gov/catalog/productDetails.aspx?ProductID=17690>
- Quick Guide for Clinicians Based on TIP 29: Substance Use Disorder Treatment for People with Physical and Cognitive Disabilities:  
<http://ncadistore.samhsa.gov/catalog/productDetails.aspx?ProductID=16165>
- TIP 24: Guide to Substance Abuse Services for Primary Care Physicians (not available electronically)
- Sexually Transmitted Diseases and Substance Use. NSDUH Report:  
<http://www.oas.samhsa.gov/2k7/STD/STD.cfm>
- *Screening, Assessment, and Treatment Planning for Persons with Co-Occurring Disorders*. COCE Overview Paper 2.  
[http://www.coce.samhsa.gov/products/overview\\_papers.aspx](http://www.coce.samhsa.gov/products/overview_papers.aspx)
- *Overarching Principles to Address the Needs of Persons with Co-Occurring Disorders*. COCE Overview Paper 3. [http://www.coce.samhsa.gov/products/overview\\_papers.aspx](http://www.coce.samhsa.gov/products/overview_papers.aspx)
- *Addressing Co-Occurring Disorders in Non-Traditional Service Settings*. COCE Overview Paper 4.  
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