

## Addictions with Co-occurring Problems: Statistics and Challenges

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### Introduction

Addiction remains a serious public health concern because of its associated health and related socio-economic impacts. The World Health Organization (WHO) lists interventions to reduce harm from substance abuse as a top priority. In 2009, tobacco and alcohol figured among the 10 leading risk factors internationally in terms of avoidable diseases, and contributed 3.7 and 4.4 percent respectively to the world burden of illness, while illicit substances accounted for 0.9 percent [1]. More than 80 chronic and infectious diseases and injuries – including trauma, suicide, road accidents, neglect and family violence – are associated with the consumption of psychoactive addiction [2]. Pathological gambling also leads to a number of significant problems such as financial hardship, illegal activities and loss of social support [3]. Meanwhile, the global social costs (death, illness and economic burden) of substance abuse have reached alarming levels. Canada estimated such costs – excluding gambling – at \$39.8 billion in 2002. Productivity losses, premature deaths and illnesses represent nearly two thirds of the social costs, followed by health care (22%) and legal expenditures (14%) [4].

People usually experience the onset of mental disorders and addiction at a young age, before they reach 25 in most cases [5]. For the majority of them, addiction becomes a long-term or chronic condition as they experience cycles of recovery, relapse, and repeated treatments. As opposed to other consumers, chronic users generally consume a wider variety of substances, in larger quantities and more frequently [3,6]. Among other factors that may lead to chronic addiction are early onset of consumption, delay in seeking treatment, unstable living conditions, and the presence of other health problems such as mental disorders.

Research shows that the co-occurrence of addiction and mental disorders is the rule rather than the exception [7,8]. An epidemiological studies review has shown that from seven to forty-five percent of individuals with alcohol dependence, and from seventeen to fifty-five percent of those with drug dependence, also suffer from a mood or anxiety disorder [9]. Another report concluded that the most common psychiatric diagnosis among substance users was personality disorder (50-90%), followed by affective disorders (20-60%) and psychotic disorders (20%). Between ten and fifty percent of patients exhibited more than one psychiatric or personality co-morbidity disorder [10]. Individuals suffering from mental disorders smoke at nearly twice the rate of the general population (i.e., 41% versus 23%) with even higher rates among the severely mentally ill and those with additional addictions [11,12]. Eating disorders (particularly bulimia nervosa and binge-eating disorder) have also been associated with co-morbid substance abuse [13]. Studies have shown that between twenty

and forty percent of women suffering from bulimia reported a history of problems with alcohol, drugs or both [14,15]. Recent papers have also identified a link between problem gambling and increased rates of substance use and mental health problems [16,17]. Pathological gamblers are two to three times more likely to experience mental disorders than non-gamblers [18]. The prevalence of co-occurring pathological or problem gambling and alcohol addiction is around twenty-eight percent, while concurrent drug and gambling addictions are present in seventeen percent of cases [19]. Overall, individuals presenting co-occurring disorders have comprehensive needs that require complex, long-term treatment, including a full array of services (e.g., rehabilitation, detox, supported housing) [20].

On the other hand, treatment of people with substance abuse and co-occurring disorders can be a difficult proposition. This group often shows no desire to receive treatment, and motivational therapy and harm reduction initiatives must therefore become essential elements of a rehabilitation plan. In 2002, for example, the ratio of Canadians seeking the advice of a family physician, psychiatrist or psychologist within a 12-month period were respectively 6.2, 1.8 and 2.3 percent among individuals with substance dependence, 31.6, 14.1 and 10.0 percent among those with mental disorders, and 34.6, 16.1 and 11.0 percent among those with co-occurring disorders [21]. These groups – and especially persons with only a substance abuse problem – therefore use services well below the optimal level that might address their actual needs [22,23]. Individuals with co-occurring disorders are more likely to require the services of hospital emergency departments [24,25], and to have trouble adhering to treatment and medication. They also suffer higher rates of relapse and hospitalization and worse outcomes (in terms, for example, of functional status, employment and quality of life) than people showing only a substance abuse or mental disorder [6,26].

A number of developed countries such as the US, the UK, Canada and Australia have invested significant resources to establish best practices and guiding principles to assist practitioners and policy-makers and provide optimal treatment to people with substance abuse and co-occurring disorders [8,27,28]. Experts agree on the need to revamp addiction services, which are usually set up to handle addiction primarily as an acute or transitory problem and to treat it as a self-contained illness. Services must therefore become more effective in dealing with chronic and co-occurring addictions [29]. They might need, for example, to re-examine the duration of treatment and definition of successful rehabilitation (based on several years), and provide longer follow-up periods. Research has shown that providing treatment in different settings (i.e., separate facilities to deal with mental health and addiction) results in fragmented and ultimately ineffective care. Individuals receive disparate messages about

treatment and face discontinuity of care, difficulties in navigating the separate systems, and lack of access to services because of other illnesses. Such conditions seem to suggest that integration of substance-abuse and mental health services has become a necessity.

The general heading of co-occurring disorders comprises a heterogeneous clientele with distinctive profiles – including gender differences – and varied and complex needs requiring high-quality, and usually comprehensive and integrated care to ensure better outcomes. Adapting treatment facilities, implementing coordination mechanisms and tailoring services specifically to address co-occurring disorders would result in more effective treatment. Controlled studies suggest that greater integration of substance-abuse and mental health services lead to more productive interventions. Vertical integration as proposed by the Drake and Mueser model of integrated treatment [30] particularly seems to maximize advantages for the more severe and persistent cases of individuals with co-occurring disorders [31]. There are strong indications that this model is more efficient in addressing such cases than traditional non-integrated services, but further study is needed to validate results. For individuals whose co-occurring disorders are less severe and persistent, the solution could involve step-care approaches [32] and service networks [33], including improved continuum of services by developing coordination mechanisms to prevent fragmentation (e.g., systematic screening, one-stop services, collaborative clinical plans, electronic clinical records, case managers, boundary spanners, treatment protocols, shared-care, joint programs, and referral arrangements between organizations). We need to learn more about best practices in the treatment of co-occurring disorders [30] and to commit substantial efforts to successfully integrate services and coordinate care, which implies more flexible, multilevel and variable levels of treatment.

In this special issue, we seek to gain deeper knowledge of addiction with co-occurring problems, as we look at risk factors and adverse outcomes and avenues for practitioners and policy-makers to provide services better suited to the needs of individuals with co-occurring disorders. The issue covers epidemiological, service-use and outcome research, along with one study on treatments and issues related to co-occurring disorders. Reports on co-occurring addictions (i.e. tobacco, alcohol, and drugs, but also problem gambling) are included. Most of the articles in this issue consider mental disorders (e.g. depression, eating disorders, and severe mental disorders) as they relate to addiction in different environments (Australia, Canada and Switzerland). We believe readers of JART will find this issue informative as it sheds new light on the interrelationship between addiction and mental health.

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