The Diabetes, Depression, and Alcohol Triad: Potential Impact on Community Development

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ABSTRACT

Type 2 diabetes, depression and alcohol abuse exist in many populations as co-morbidities. These conditions contribute to worsened health status and lost productivity. Such diseases also contribute to high medical expenses and other societal costs. Diabetes, depression and alcohol abuse are individually associated with compromised financial status. Treating these combined conditions as a syndrome rather than as isolated disease states may result in improved quality of care, better health outcomes, and reduced costs to society. A conceptual model that could be used to address this triad is the Social Ecological Model in which intrapersonal, interpersonal, institutional and community factors as well as public policy are considered for their impact on outcomes. The triad of diabetes, depression and alcohol abuse may have common etiological factors such as social isolation and poverty, and such a holistic approach to the common determinants underlying all three conditions holds out the most hope to reduce both the prevalence of this unique disease triad and the associated costs to society.

Keywords: Alcohol Abuse, Depression, Diabetes, Health Behavior, Social Determinants of Health

INTRODUCTION

Type 2 diabetes, depression, and alcohol abuse exist as multiple co-morbidities (Laiteerapong et al., 2011; Mark A Strand, Perry, & Wang, 2012; Tait, French, Burns, & Anstey, 2012). The co-existence of any of these pairs of diagnoses in a population of patients requires deeper exploration into the health and social determinants underlying them and the possibility of shared etiology and risk factors. These health determinants, or causes, can be intrinsic forces, such as genetics, behavior or biological mechanisms, and extrinsic forces such as social influences, including access to and coordination of health services. The triad of diabetes, depression and alcohol abuse (Figure 1) potentially shares numerous health and social determinants that need to be better understood, in particular the determinants that go beyond individual agency and include societal influences (Schmidt, Makela, Rehm, & Room, 2008).

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Diabetes, depression and alcohol abuse are not the only diseases which present in a syndromic fashion and would benefit from a multidisciplinary research approach. Tuberculosis, HIV/AIDS and diabetes are common comorbid conditions. Individuals with ankylosing spondylitis frequently present with an array of inflammatory diseases of the eye, cardiovascular system and digestive system (Bremander, Petersson, Bergman, & Englund, 2011). These comorbidities have a shared biological etiology. There are other syndromic conditions which have social determinants as a shared underlying etiology, and could be approached similarly to the method being proposed in the current paper. For example, attention deficit hyperactivity disorder (ADHD) is associated with substantially elevated prevalence of learning disabilities, depression and speech problems (Larson, Russ, Kahn, & Halfon, 2011). Fibromyalgia is frequently comorbid with depression, headache, irritable bowel syndrome and chronic fatigue syndrome. These comorbid conditions tend to occur as constellations of “illness” which burden patients, but frequently defy medical description (Nettleton, O’Malley, Watt, & Duffey, 2004).

Social determinants of disease originate at the community level. Therefore understanding the determinants of the diabetes, depression and alcohol abuse triad require consideration of the community development process (Syme & Ritterman, 2009). There are many common definitions of community development. This paper will use a dynamic understanding of community development, defining community development as the result of the purposive interaction of community members. This process leads to the development of the community as measured by increased welfare, health and social cohesion (Luloff and Bridger, 2003).

Good health is linked to societal economic growth through higher work productivity, demographic changes, and higher educational attainment (WHO, 2001). In the same way, poor health undermines economic growth. Type 2 diabetes, depression and alcohol abuse each result in some degree of disability for those affected by it, resulting in compromised individual welfare, lost productivity (Boles, Pelletier, & Lynch, 2004) for the individuals and high costs of health care. These factors may inhibit community development as affected individuals are compromised in their ability to perform at work, and these conditions can lead to disability or stigmatization, such as social disqualification of individuals and populations who are identified with particular health problems and increased burden of disease (Weiss, Ramakrishna, & Somma, 2006). This triad of conditions can also lead to social isolation and could possibly limit interaction with other community members, in addition to mitigating involvement in community action which is a process that is essential for community development (Karelina & DeVries, 2011).

Understanding the epidemiology of each disease individually is the starting point in understanding their interaction and potential
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