Contents lists available at ScienceDirect



Journal of Affective Disorders





**Research** paper

# The association of an inability to form and maintain close relationships due to a medical condition with anxiety and depressive disorders



Adam Simning<sup>a,\*</sup>, Christopher L. Seplaki<sup>b,c,1</sup>, Yeates Conwell<sup>a,c,2</sup>

<sup>a</sup> University of Rochester, Department of Psychiatry, USA

<sup>b</sup> University of Rochester, Department of Public Health Sciences, USA

<sup>c</sup> University of Rochester Medical Center Office for Aging Research and Health Services, USA

#### ARTICLE INFO

Received in revised form

Accepted 31 December 2015

Available online 6 January 2016

Article history Received 6 August 2015

Keywords:

Epidemiology

Community surveys

Social psychiatry

Social support

Comorbidity

2 December 2015

ABSTRACT

Background: While low social support is a risk factor for mental illness, anxiety and depression's relationship with social impairment specifically resulting from a medical condition is poorly understood. We hypothesize that when a medical illness makes it difficult for people to form and maintain close relationships with others, they will be at increased risk for anxiety and depression.

Methods: Two nationally representative surveys, the National Comorbidity Survey-Replication and National Latino and Asian American Study, included 6805 adults with at least one medical illness and information on social impairment attributed to a medical condition. The Composite International Diagnostic Interview evaluated a 12-month history of anxiety and depressive disorders.

Results: 8.2% of our sample had at least moderate difficulty in forming and maintaining close relationships due to a medical condition. In bivariate analyses, younger age, Latino ethnicity, less education, worse financial status, more chronic illnesses, physical health and discomfort, and problems with mobility, home management, and self-care were associated with this social impairment. In multivariable analyses accounting for possible confounders, there was a dose-dependent relationship between social impairment and the prevalence of anxiety and depression.

Limitations: Data are cross-sectional and our analyses are therefore unable to determine cause-and-effect relationships.

Conclusions: Among adults with one or more medical conditions, social impairment attributed to medical illness was associated with a significantly greater odds of anxiety and depression. Further clarification of this relationship could inform more targeted, personalized interventions to prevent and/ or alleviate mental illness in those with chronic medical conditions.

© 2016 Elsevier B.V. All rights reserved.

## 1. Introduction

Anxiety and depressive disorders are common and can be highly disabling. By 2030 depression is predicted to become the second leading contributor to disease burden as measured by disability-adjusted life years, behind only HIV/AIDS (Mathers and Loncar, 2006). Prevalence estimates from the 2005 to 2008 National Health and Nutrition Examination Survey data found that

christopher\_seplaki@urmc.rochester.edu (C.L. Seplaki),

yeates\_conwell@urmc.rochester.edu (Y. Conwell).

20.1% of the adult United States population has at least mild depression (Shim et al., 2011). Using a psychiatric diagnostic interview of adults in the United States, the National Comorbidity Survey Replication (NCS-R) determined that the 12-month and lifetime prevalence of major depression was 6.7% and 16.6%, respectively (Kessler et al., 2005a, 2005b). About half of untreated depression will persist at one year (47%) and remission is less likely in those experiencing more severe depression (Whiteford et al., 2013). Anxiety frequently co-occurs with depression with 67% of those with a current depressive disorder also experiencing an anxiety disorder (Lamers et al., 2011). NCS-R estimates the 12month and lifetime prevalence of anxiety disorders to be 18.1% and 28.8%, respectively (Kessler et al., 2005a, 2005b). Similar to depression, anxiety frequently persists with only about 1 in 5 people with generalized anxiety disorder and a little less than 1 in 2 with panic disorder achieving complete remission after about five years of follow-up (Woodman et al., 1999). The societal cost of psychiatric disorders is substantial with the direct costs of major

<sup>\*</sup> Correspondence to: Department of Psychiatry, University of Rochester School of Medicine and Dentistry, 300 Crittenden Boulevard, Rochester, NY 14642, USA. E-mail addresses: adam\_simning@urmc.rochester.edu (A. Simning),

<sup>&</sup>lt;sup>1</sup> Department of Public Health Sciences, 265 Crittenden Blvd., Rochester, NY 14642, USA. <sup>2</sup> Department of Psychiatry, University of Rochester School of Medicine and

Dentistry, 300 Crittenden Boulevard, Rochester, NY 14642, USA.

depression in the United States estimated to be \$98.9 billion in 2010 (Greenberg et al., 2015). Anxiety and depression are also associated with increased disability, decreased well-being, mortality, and suicidality (Alexopoulos, 2005; de Beurs et al., 1999; Fiske et al., 2009; Lenze et al., 2000; van Hout et al., 2004).

There are many factors associated with an increased risk for developing anxiety and/or depression such as age, marital status, financial status, education, gender, race and ethnicity, and poor social support (Holzel et al., 2011; Kessler et al., 2003; Kessler et al., 2005a; Teo et al., 2013; Vink et al., 2008). One of the most well-known risk factors is chronic medical illness (de Graaf et al., 2002; Meader et al., 2011; Vink et al., 2008). For some medical illnesses, the etiological link with psychiatric disorders is at least modestly understood. For example, a cerebrovascular ischemic event damages the brain parenchyma, potentially causing disruptions to neurocircuitry pathways that could contribute to depression (Alexopoulos, 2005). Treatments for medical conditions also may result in depression and anxiety (e.g., the use of barbiturates, corticosteroids, efavirenz, and interferon- $\alpha$  has been associated with inicident depression (Celano et al., 2011)). For many chronic medical illnesses, however, the pathways by which medical illness leads to anxiety and depression are poorly characterized.

In contrast, there is an extensive literature linking poor social support (e.g., social isolation, loneliness) with anxiety and depression (Teo et al., 2013; Vink et al., 2008). Therefore, because we also know that chronic illness can worsen feelings of social isolation and loneliness (Hinojosa et al., 2011; Ohman et al., 2003), we propose that one potential pathway by which medical illnesses contribute to common mental disorders is by causing social impairment and limiting an individual's ability to participate in community, social, and civic life. For example, advanced COPD can potentially limit a person's ability to engage socially, which in turn could increase feelings of social isolation and burdensomeness and place an individual at increased risk for anxiety and depression on that basis.

To evaluate this potential pathway between medical illness, social impairment, and risk for anxiety and depression, we use data from the NCS-R and National Latino and Asian American Study (NLAAS), two nationally representative surveys conducted from 2001-2003. More specifically, we aim to characterize the association that social impairment secondary to a medical condition has with a 12-month history of anxiety and/or depressive disorders. We hypothesize that anxiety and depressive disorders are more prevalent in adults endorsing social impairment that they ascribe to a medical condition and that this association persists even after accounting for the sociodemographic risk factors listed previously and other direct and indirect physical health markers. We will account for many of these risk factors listed because they may confound the relationship between medical illness and psychiatric disease (e.g., increasing age is associated with a larger medical disease burden but a lower prevalence of anxiety and depressive disorders (Fiske et al., 2009; Lenze et al., 2000)). As medical illnesses likely have multiple pathways leading to psychiatric disorders, we are including separate markers of physical health in an attempt to isolate the effect of social impairment from other potential consequences of poor physical health. Characterization of the association of social impairment attributed to a medical illness with anxiety and depression has the potential to meaningfully guide the treatment and/or prevention of anxiety and depression, which could lessen their burden on society and the millions of adults with chronic medical illnesses.

#### 2. Methods

#### 2.1. Participants

The NCS-R and NLAAS were two nationally-representative, cross-sectional surveys conducted from 2001–2003 of non-institutionalized adults aged 18 years and older living in the United States (the NLAAS was representative of Asian Americans and Latinos). These surveys evaluated mental illness with an expanded version of the World Mental Health Composite International Diagnostic Interview (Heeringa et al., 2004; Pennell et al., 2004). The NCS-R interviewed English speakers while the NLAAS included both English and non-English speakers (Alegria et al., 2004; Heeringa et al., 2004). For the NCS-R, 5692 adults completed the full interview with a 70.9% response rate among primary respondents, and the NLAAS interviewed 2554 Latinos and 2095 Asians for a 73.2% response rate (Alegria et al., 2015; Heeringa et al., 2004). The combined NCS-R and NLAAS sample included 10,341 participants that completed the full interview.

#### 2.2. Social impairment

Social impairment attributed to a medical illness was evaluated with a question that was asked of participants with a chronic or recent medical condition (6805 of the combined NCS-R and NLAAS sample had this information). When participants had more than one medical condition, a condition was selected randomly: "Think about the month or longer in the past 12 when [(RANDOM CONDI-TION)] consequences were most severe. Using the 0 to 10 scale, where 0 means <u>no</u> interference and 10 means very <u>severe</u> interference, what number describes how much [(RANDOM CONDITION)] consequences interfered with each of the following activities during that time? Your ability to form and maintain close relationships with other people?" The response anchors are None, Mild, Moderate, Severe, and Very Severe for scores of 0, 2, 5, 8, and 10, respectively (Alegria et al., 2015).

## 2.3. Psychiatric diagnoses

DSM-IV criteria-based algorithms determined the presence of a 12-month history of anxiety and/or depressive disorders (Alegria et al., 2015). Anxiety disorders consisted of generalized anxiety disorder, panic disorder, agoraphobia with and without panic disorder, social phobia, and posttraumatic stress disorder whereas depressive disorders included dysthymia and major depression without hierarchy. Our analyses had four groupings of 12-month psychiatric disorders: (1) anxiety disorder(s), (2) depressive disorder(s), (3) any anxiety or depressive disorder(s), and (4) comorbid anxiety and depressive disorders. These four psychiatric disorder groupings served as dependent variables in each of four separate binary logistic regression models.

### 2.4. Covariates

As guided by the literature, we include in our models age, gender, race and ethnicity, education, marital status, and house-hold income to poverty ratio. Indicators of physical health included chronic illnesses (higher quartiles correspond to increased number of illnesses) and the presence of an accident, injury, or poisoning that required medical attention in the past year as well as several questions that assessed physical health and functioning within the 30 days prior to being interviewed: (1) "How often did you experience physical discomfort, such as pain, nausea, or dizziness in the past 30 days-all the time, most of the time, some of the time, a little of the time, or none of the time?" (2) "Was your overall physical health during the past 30 days better, worse, or about the same as

Download English Version:

https://daneshyari.com/en/article/6230444

Download Persian Version:

https://daneshyari.com/article/6230444

Daneshyari.com