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The role of common mental and physical disorders in days out of role in the Iraqi general population: Results from the WHO World Mental Health Surveys

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ABSTRACT

In an effort to support mental health policy planning efforts in conjunction with the reconstruction of Iraq, a nationally representative face-to-face household survey was carried out that assessed the prevalence and correlates of common mental disorders in the Iraqi population. A total of 4332 adult (ages 18+) respondents were interviewed (95.2% response rate). The current report presents data on the role impairments (number of days out-of-role in the past 30 days) associated with the nine mental disorders assessed in the survey in comparison to the impairments associated with ten chronic physical disorders also assessed in the survey. These disorders were all assessed with the WHO Composite International Diagnostic Interview. Days out-of-role were assessed with the WHO Disability Assessment Schedule. Both individual-level and societal-level effects of the disorders were estimated. Strongest individual-level predictors were bipolar and drug abuse disorders (176–195 days per year), with mental disorders making up five of the seven strongest predictors. The strongest population-level predictors were headache/migraine and arthritis (22–12% population proportions). Overall population proportions were 57% of days out-of-role due to the chronic physical disorders considered here and 18% for the mental disorders. Despite commonly-occurring mental disorders accounting for more individual-level days out-of-role than the physical disorders, mental disorders are much less likely to receive treatment in Iraq (e.g., due to stigma). These results highlight the need for culturally tailored mental health prevention and treatment programs in Iraq.

1. Introduction

Iraq has been greatly affected by violence and economic strain over the past 30 years (e.g., Iran–Iraq war in the 1980s; first Gulf War and economic sanctions in the 1990s). More recently, it is estimated that armed violence resulted in nearly 350,000 deaths and injuries between 2003 and 2010 (Hicks et al., 2011) and that the unemployment rate was as high as 28% in 2004 (Trading Economics, 2013). Given the widely recognized associations between violence exposure, unemployment, and adverse mental and physical health outcomes (Boynton-Jarrett et al., 2008; McKee-Ryan et al., 2005; Linn et al., 1985; Murthy, 2007; Murthy and Lakshminarayana, 2006; Shaw and Krause, 2002), researchers have recently started examining the prevalence and correlates of mental and physical disorders in Iraq. In the Iraqi Mental Health Survey, for example, Alhasnawi et al. (2009) found that anxiety disorders were the most common class of disorder and major depression was the most common individual disorder. Younger age was associated with greater risk of having a disorder, and only 2.2% of the sample reported receiving mental health treatment over the prior year. Similar studies of physical disorders have found hypertension and musculoskeletal disorders (e.g., pain) to be particularly common among Iraqis. However, this research has been limited by relying on refugee samples living in neighboring countries rather than nationally representative samples living in Iraq (Doocy et al., 2013; Mateen et al., 2012).

Nonetheless, the extant literature provides important descriptive information that can be used to inform health care decisions in

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Iraq, an area of reform that has been prioritized during the reconstruction. The general consensus is that Iraq has a need for public health preventative interventions and primary care-based screening and treatment (Al Hilfi et al., 2013; Ministry of Health, Government of Iraq, 2008), particularly in the area of mental health (Fleck, 2004; Humphreys and Sadik, 2006). Given the limited resources available, it is important to make decisions about developing and implementing such programs based on information about comparative disease burden and comparative treatment effectiveness (Davis et al., 2005; Loeppke et al., 2009; Special Committee on Health and Productivity Management and National Health Care Financing, 2009; Suhrcke et al., 2012). In addition to defining burden in terms of condition-specific rates or morbidity and mortality (Special Committee on Health and Productivity Management and National Health Care Financing, 2009), recent research has also considered information on the impairments associated with different health problems, such as the effects of these problems on days out of role (Davis et al., 2005; Suhrcke et al., 2012) and role performance (Andlin-Sobocki et al., 2005; Loeppke et al., 2009; Merikangas et al., 2007; Stang et al., 2006; Von Korff, 2009). It is useful to evaluate relative impairments of specific conditions using epidemiological data rather than data collected in treatment samples in order to deal with the fact that severity of disorder is associated with seeking treatment (Ormel et al., 2008) and the possibility that barriers to seeking treatment can vary across conditions.

Although nationally representative samples have been used to estimate disorder impairments in several countries (Alonso et al., 2013; Merikangas et al., 2007; Stang et al., 2006), no study to our knowledge has examined the burden associated with different mental and physical disorders in post-autocratic Iraq. One advantage of the direct assessment of both prevalence and impairment in the same epidemiological survey is that it allows an important problem with the use of health valuations by expert raters to be addressed: that the latter ratings do not take into consideration the fact that health problems are often highly comorbid and the possibility that the burdens of individual conditions vary as a function of comorbidity (Stang et al., 2006; Von Korff, 2009). Accordingly, the purpose of the current report is to inform health care reform in Iraq by estimating the individual- and societal-level burden (i.e., days out of role) of commonly occurring mental disorders and chronic physical conditions.

2. Methods

2.1. Sample

The Iraqi Mental Health Survey is a nationally representative epidemiological survey of 4332 adults (18 years +) that was carried out in Iraq in 2006–2007 under the direction of the Iraq Ministry of Health, the Iraq Central Organization for Statistics, and Information Technology (COSIT), the Ministry of Health of the Kurdistan region (MoHK), and the Kurdistan Regional Statistics Office (KRSO) in conjunction with the WHO World Mental Health Surveys (www.hcp.med.harvard.edu/wmh). A stratified multistage clustered area probability sample of household residents was selected in the central and southern governorates during August and September, 2006, in Anbar during October and November, 2006, and in the Kurdistan region during February and March, 2007. All interviews were administered face-to-face by trained lay interviewers using training and field quality control procedures described elsewhere (Harkness et al., 2008; Kessler and Üstün, 2008; Pennell et al., 2008). Informed consent was obtained before beginning interviews. Procedures for obtaining informed consent and protecting individuals were approved and monitored for compliance by the Institutional Review Boards of the organizations coordinating the survey. The survey response rate was 95.2%. More details about sampling are provided elsewhere (Alhasnawi et al., 2009).

2.2. Measurements

2.2.1. Mental disorders

Mental disorders were assessed with Version 3.0 of the WHO Composite International Diagnostic Interview (CIDI), a fully structured lay-administered interview designed to generate research diagnoses of commonly occurring mental disorders according to the definitions and criteria of both the DSM-IV and ICD-10 diagnostic systems (Kessler and Üstun, 2004). The nine mental disorders considered here include mood disorders (major depressive disorder, bipolar I-II disorder), anxiety disorders (panic disorder and/or agoraphobia, specific phobia, social phobia, generalized anxiety disorder, post-traumatic stress disorder) and substance disorders (alcohol abuse with and without dependence, drug abuse with and without dependence). Only disorders present in the 12 months before interview were considered. DSM-IV criteria were used to define prevalence. A clinical reappraisal study with blinded clinical follow-up interviews using the Structured Clinical Interview for DSM-IV (SCID) has found generally good concordance between diagnoses based on the CIDI and those based on the SCID (First et al., 2002; Haro et al., 2006).

2.2.2. Chronic physical disorders

Physical disorders were assessed with a standard chronic disorders checklist adapted from the U.S. Health Interview Survey (World Health Organization, 2013). Checklists of this sort yield more complete and accurate reports about chronic conditions than do open-ended questions (Center for Disease Control and Prevention, 2004; Schoenborn et al., 2000). Methodological studies have documented moderate to good concordance between checklist reports and medical records (Baker et al., 2001; Knight et al., 2001). The ten disorders considered here are: cardiovascular disease (hypertension, and other heart diseases), cancer, arthritis, chronic pain, diabetes, frequent or severe headache or migraine, insomnia, neurological disorders (multiple sclerosis, Parkinson's, and epilepsy or seizures), digestive conditions (stomach or intestine ulcer or irritable bowel condition), and respiratory diseases (asthma, or other respiratory diseases). For the symptom-based conditions like arthritis, chronic pain and headache, heart attack or stroke, respondents were asked to report whether they had experienced these conditions. For the remaining conditions the question was prefaced by the phrase "*have you ever been told by a doctor or health professional that you had any of these conditions?*" and, if so, whether they had experienced them in the past 12 months before interview.

2.2.3. Days out of role

A modified version of the WHO Disability Assessment Schedule (WHO-DAS) was used to evaluate impairments in role functioning (Vazquez-Barquero et al., 2000; Von Korff et al., 2008; World Health Organization, 2013). A key component of the WHO-DAS is a question about number of days in the 30 before interview respondents were "totally unable to work or carry out your normal activities" because of their physical or mental health, or use of alcohol or drugs. Good concordance of these reports have been documented both with payroll records of employed people (Kessler et al., 2003; Revicki et al., 1994) and prospective daily diary reports (Kessler et al., 2004).