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Social determinants of psychological distress in a nationally-representative sample of South African adults☆

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Abstract

There is substantial evidence from developed countries that lower socioeconomic status (SES) is associated with increased occurrence of mental illness, and growing interest in the role of social support and social capital in mental health. However, there are few data on social determinants of mental health from low- and middle-income nations. We examined the association between psychological distress and SES, social support and bonding social capital in a nationally-representative sample of South African adults. As part of a national survey of mental health, a probability sample of 4351 individuals was interviewed between 2002 and 2004. Non-specific psychological distress was measured using the Kessler K-10 scale. SES was assessed from an aggregate of household income, individual educational and employment status, and household material and financial resources. Social support, bonding social capital and traumatic life events were measured using multi-item scales. The mean age in the sample was 37 years and 76% of participants were black African. Measures of SES and social capital were inversely associated ($p < 0.001$). Both recent and traumatic life events were more common among individuals with low levels of SES and social support. After adjusting for participant demographic characteristics and life events, high levels of psychological distress were most common among individuals with lower levels of SES and social capital. There was no independent association between levels of social support and psychological distress. The occurrence of recent life events appeared to partially mediate the association between SES and psychological distress ($p = 0.035$) but not the association involving social capital ($p = 0.40$). These data demonstrate persistent associations between levels of SES, social capital and psychological distress in South Africa. The increased frequency of recent life events appears to only partially explain higher levels of psychological distress among individuals of lower SES. Additional research is required to understand the temporality of this association as well as mechanisms through which SES and social capital influence mental health in low- and middle-income settings where high levels of poverty and trauma may contribute to excess burden of mental illness.

Keywords: Psychological distress; Mental health; Socioeconomic status (SES); Social support; Social capital; South Africa

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Introduction

The study of social factors, and socioeconomic status (SES) in particular, as determinants of mental health has a long history in psychiatric epidemiology. Throughout the 20th century, epidemiological research investigating the distribution of mental health in European and North American populations found an increased burden of disease in groups of lower SES (Faris & Dunham, 1939; Hollingshead & Redlich, 1958; Kesser, 1982). Today, there is general consensus that SES plays a significant role in the aetiology of depression, through mechanisms of both increased individual vulnerability and reduced access to protective resources (Muntaner, Eaton, Miech, & O'Campo, 2004). Prospective studies from Britain (Power, Stansfeld, Matthews, Manor, & Hope, 2002) and the United States (Johnson, Cohen, Dohrenwend, Link, & Brooks, 1999) have found the incidence of depression higher among individuals of lower SES, and meta-analysis has suggested that individuals from the lowest socioeconomic stratum of society are at 1.5–2.0 times the risk of a major depressive episode compared to individuals from the highest socioeconomic stratum (Lorant et al., 2003). There is less evidence regarding the association between SES and different anxiety disorders (Muntaner et al., 2004). Multiple studies have suggested that anxiety disorders may be more common in groups of low socioeconomic status, including posttraumatic stress disorder, generalized anxiety disorder and different phobias (Eaton, Kessler, Wittchen, & Magee, 1994; Foa, Stein, & McFarlane, 2006; Magee, Eaton, Wittchen, McGonagle, & Kessler, 1996; Wittchen, Zhao, Kessler, & Eaton, 1994). However, much of the data on this question come from cross-sectional studies and the selection-causation issue remains unresolved.

While the role of SES in shaping the population mental health is widely recognized, the possible role of other social factors is less well understood. There is evidence to suggest that individual social networks may decrease individual susceptibility to anxiety and depression (Kawachi & Berkman, 2001; Kendler, Myers, & Prescott, 2005; Kessler, Kendler, Heath, Neale, & Eaves, 1992). More recently, the concept of social capital has become popular in mental health research with several studies suggesting that there may be qualities of communities and neighborhoods that contribute to the aetiology or prevention of common mental illnesses (Almedom, 2005), although any causal relationship is likely to be highly context-specific (Caughy, O'Campo, & Muntaner, 2003). Again, insight into these issues comes almost exclusively from high-income countries. One study of women in Lusaka, Zambia and Durban, South Africa suggested that membership in community groups (in this study, primarily church groups) was associated with better self-rated mental health, although adjustments for individual socioeconomic position are not reported (Thomas, 2006). Furthermore, there have been few studies examining the influence of social networks and/or social capital on mental health after adjustment for measures of socioeconomic status; given the potential interrelationships between these constructs, failure to account for their covariance may lead to an overestimation of the association between any one social determinant and mental health outcomes.

Evidence for the association between mental health and SES or other social determinants comes largely from developed countries (Patel, 2001). Several cross-sectional studies have demonstrated associations between different measures of mental health and various markers of socioeconomic status (Patel, Araya, de Lima, Ludermir, & Todd, 1999; Patel & Kleinman, 2003), although few studies have had access to comprehensive measures of SES. One of the only prospective studies of this association conducted to date found that household income was a persistent predictor of incident common mental disorders during 12 months of follow-up of Indian women (Patel, Kirkwood, Pednekar, Weiss, & Mabey, 2006). And, while there are few data on the population prevalence of mental disorders in developing countries, their public health burden is likely to be substantial (WHO, 2001). The focus of research on the social determinants of mental health on high-income countries is part of a broader neglect of mental illness as a public health issue in many low- and middle-income countries (Saraceno et al., 2007). Compared to high-income countries, low- and middle-income countries may have different prevalences of mental disorders (Demyttenaere et al., 2004), as well as different socio-cultural systems and population levels of SES; together, these may point to differences in the major aetiologies of common mental disorders. For instance, one comparison of depression and anxiety levels among women living in Harare, Zimbabwe and London, England suggested that the strength of association between specific types of life events and mental disorders differed in the two countries (Broadhead & Abas, 1998), suggesting that the social determinants of mental health may vary between developed and developing countries.

Despite the importance of social factors, and socioeconomic status in particular, as determinants of mental health, there have been few population-based studies of