



Article

Does gender inequity increase men's mortality risk in the United States? A multilevel analysis of data from the National Longitudinal Mortality Study



Shane A. Kavanagh*, Julia M. Shelley, Christopher Stevenson

School of Health & Social Development, Faculty of Health, Deakin University, Locked Bag 20000, Geelong, VIC 3220, Australia

ARTICLE INFO

Keywords:

Men's health
Gender inequity
Gender inequality
Masculinities
United States
National Longitudinal Mortality Study

ABSTRACT

A number of theoretical approaches suggest that gender inequity may give rise to health risks for men. This study undertook a multilevel analysis to ascertain if state-level measures of gender inequity are predictors of men's mortality in the United States. Data for the analysis were taken primarily from the National Longitudinal Mortality Study, which is based on a random sample of the non-institutionalised population. The full data set included 174,703 individuals nested within 50 states and had a six-year follow-up for mortality. Gender inequity was measured by nine variables: higher education, reproductive rights, abortion provider access, elected office, management, business ownership, labour force participation, earnings and relative poverty. Covariates at the individual level were age, income, education, race/ethnicity, marital status and employment status. Covariates at the state level were income inequality and per capita gross domestic product. The results of logistic multilevel modelling showed a number of measures of state-level gender inequity were significantly associated with men's mortality. In all of these cases greater gender inequity was associated with an increased mortality risk. In fully adjusted models for all-age adult men the elected office (OR 1.05 95% CI 1.01–1.09), business ownership (OR 1.04 95% CI 1.01–1.08), earnings (OR 1.04 95% CI 1.01–1.08) and relative poverty (OR 1.07 95% CI 1.03–1.10) measures all showed statistically significant effects for each 1 standard deviation increase in the gender inequity z-score. Similar effects were seen for working-age men. In older men (65+ years) only the earnings and relative poverty measures were statistically significant. This study provides evidence that gender inequity may increase men's health risks. The effect sizes while small are large enough across the range of gender inequity identified to have important population health implications.

1. Introduction

Gender inequity continues to be a reality across the globe (Social Watch n.d.; United Nations Development Program (UNDP), 2011; World Economic Forum (WEF), 2014; World Bank, 2011). With few exceptions, men are the beneficiaries of this inequity with advantages that accrue across the political, economic and social realms (Connell, 2002). Given the strong relationship between social position and health (Antonovsky, 1967; Glymour, Avendano, & Kawachi, 2014; Krieger, Williams, & Moss, 1997; Link & Phelan, 1995; Lynch & Kaplan, 2000; Marmot, 2010; Marmot & Wilkinson, 1999) it could be expected that this would translate into men experiencing better health.

However, overall men do not experience better health than women. This is most clearly illustrated by male mortality patterns. Men on average have a 5–7 year lower life expectancy than women (European Commission, 2011; Organisation for Economic Co-operation and Development (OECD), 2011; Wang et al., 2012). With regards to morbidity, the pattern is more complex. There are cases, such as

psychological distress and depressive disorders, where men's health appears to be better (Hyde, 2014; Macintyre, Hunt, & Sweeting, 1996; Piccinelli & Wilkinson, 2000; Seedat et al., 2009). However, for many other diseases a pattern of lower morbidity in men is not consistently seen (Macintyre et al., 1996). For example, in the cases of self-rated health and limiting longstanding illness, while there is a tendency for men to report better health, in many cases there is either no sex difference or men's health is worse (Bambra et al., 2009; Dahlin & Härkönen, 2013). Further, when it comes to the most serious illnesses men are often at greater risk (Courtenay, 2003; Courtenay, 2011). For example, within Europe men have a higher overall rate of hospital admission for all of the principal diseases and health problems (European Commission, 2011, p. 153).

Biological factors provide one obvious explanation for this pattern of poor health. Men display a range of differences from women that increase their susceptibility to many diseases (Austad, 2006; Eskes & Haanen, 2007; Seifarth, McGowan, & Milne, 2012). However, these differences, at least on their own, appear to explain only a relatively

* Corresponding author.

E-mail address: s.kavanagh@deakin.edu.au (S.A. Kavanagh).

limited part of the gendered health pattern (European Commission, 2011). This is most clearly illustrated by studies of exceptional communities in which male excess mortality relative to women is significantly reduced (Luy & Gast, 2014). For example, men residing in regional Sardinia and German monasteries have displayed life expectancies approaching that of women in similar communities (Luy, 2003; Poulain, Pes, & Salaris, 2011).

As such, the relationship between gender inequity and men's health presents as a paradox. Men receive a range of social, economic and political benefits from the privileged social position accorded them by gender inequity, yet they do not appear to receive commensurate health benefits (Dolan, 2014; Springer & Mouzon, 2011).

A possible explanation for this pattern that is receiving increased attention is that gender inequity itself contributes to men's poor health (Courtenay, 2000a; Holter, 2014; Sen & Östlin, 2008; Stanistreet, Bambra, & Scott-Samuel, 2005; Stillion, 1995). There are a number of plausible theoretical approaches that explain how this could occur. Perhaps the most developed of these is a masculinities and health approach. It argues that the social practices men use in acquiring power over women, and other men, are intertwined with behaviours that are harmful to their health (Courtenay, 2000a; Courtenay, 2000b; Courtenay, 2003; Courtenay, 2011; Evans, Frank, Olliffe, & Gregory, 2011; Pyke, 1996). For example, risk-taking and lack of care for health can be seen as ways that men attempt to demonstrate their superiority to women and maintain their ranking amongst other men (Courtenay, 2000a).

Another relevant approach, role expansion theory, suggests that men who undertake a greater number of social roles, such as household management and childcare, are able to access psychological and social resources that are protective for health (Barnett & Hyde, 2001). For example, men who can draw self-esteem from their involvement in childcare may be less impacted by threats to self-esteem that arise in the workplace environment or from unemployment (Barnett & Hyde, 2001).

A structural pluralist approach also suggests a plausible pathway between gender inequity and the poor health of men (Young, 2001; Young, 2009; Young & Lyson, 2001). It argues that the involvement of diverse segments of a community in political processes related to policy formation is important for health. In particular, the involvement of diverse groups, such as women, in these processes increases the likelihood of communities attaining appropriate medical related investments and also optimizes the biological functioning of the individuals within the community (Young, 2001; Young & Lyson, 2001). This approach, while distinct, has similarities with aspects of social capital theory (Young, 2009).

There has been some empirical work investigating the relationship between gender inequity and men's health. However, a relatively limited number of studies have investigated the influence of gender inequity on men's health when gender inequity is measured at the societal level. Yet, gender inequity inherently involves broad social processes. Importantly, feminist theorists have identified the existence of patriarchal power structures that serve as the basis for the institutionalisation of men's privileged social position (Lerner, 1986; Reeves & Baden, 2000). These processes have been identified in social institutions such as the state, the legislature, religion and legal systems (Connell, 1995; Connell, 2002; Ogle & Batton, 2009).

Studies that have examined this issue at the societal level provide evidence that aspects of gender inequity do increase health risks for men (Backhans, Burström, Ponce de Leon, & Marklund, 2012; Holter, 2014; Hopcroft & Bradley, 2007; Kawachi, Kennedy, Gupta, & Prothrow-Stith, 1999; Medalia & Chang, 2011; Niëns & Lowery, 2009; Preston, 1976; Reeves & Stuckler, 2016; Richardson et al., 2014; Roberts, 2012; Stanistreet et al., 2005; Van de Velde, Huijts, Bracke, & Bambra, 2013; Varkey, Kureshi, & Lesnick, 2010; Young, 2001). However, in some of these cases the evidence for an effect is relatively weak. Further, there are also some studies that are un-

portive (Bogdanovica, McNeill, Murray, & Britton, 2011; Hemström, 1999; Stanistreet, Swami, Pope, Bambra, & Scott-Samuel, 2007).

A limitation of many studies is that they have an ecological study design. The inferential strength of ecological studies is undermined by the existence of the ecological fallacy, which occurs when associations between an exposure and an outcome at the aggregated level are inferred to the level of the individual (Selvin, 1958). Such inferences are not necessarily valid (Robinson, 2009 (1950); Thorndike, 1939).

One statistical tool that overcomes this issue is multilevel modelling (Hox, 2010; Snijders & Bosker, 2012). Multilevel modelling allows for the investigation of the effects of variables measured at the group level as they impact on the health of individuals (Diez Roux, 2009; Subramanian, Jones, Kaddour, & Krieger, 2009; Subramanian, Jones, & Duncan, 2009). These effects have been referred to as 'contextual effects' (Diez Roux, 2002). A multilevel approach has only been applied in a few studies that examine the relationship between gender inequity at the broader social level and men's health at the individual level (Hopcroft & Bradley, 2007; Roberts, 2012; Van de Velde et al., 2013). None of these studies has investigated the effects of gender inequity on men's mortality.

This study examines the relationship between gender inequity and men's mortality with a multilevel approach. In particular, it investigates whether state-level measures of gender inequity are predictors of men's mortality in the United States (US). States in the US represent administrative units with distinct legal, political and socioeconomic cultures and policies. As such, they provide a clustering unit that is able to capture a degree of the variance of gender inequity across US society.

Previous studies at the state level in the US provide some evidence that gender inequity increases health risks for men. For example, in an ecological study, Kawachi et al. (1999) found that some state-level measures of women's status were predictors of lower mortality in men, but did not affect days of activity limitation. In a further ecological study, Holter (2014) found that measures of gender equality at the state level were associated with a lower risk of violent death in men. Finally, in a multilevel study, Roberts (2012) found that some measures of state-level gender equality were predictors of lower alcohol consumption and less risky alcohol consumption in men, though for most measures there was no association. The current study aims to build on these findings and contribute to understanding whether gender inequity contributes to men's health risks.

2. Methods

2.1. Study sample

The study was based on data from the National Longitudinal Mortality Study (NLMS) (US Census Bureau, 2013). This US national study is designed to examine the effects of differences in demographic and socioeconomic characteristics on mortality (US Census Bureau, 2013, p. 1). It combines a random sample of the US non-institutionalised population based on US Census Bureau data, including from the Current Population Surveys (CPS), with death certificate information to allow identification of mortality status and the cause of death (US Census Bureau 2013, p. 1). The current study uses File 6b of the NLMS Public Use Microdata Sample, which is an extract of the full NLMS study (US Census Bureau, 2013). The file incorporates data from the CPS in the early 1990s and has a six-year follow-up (US Census Bureau, 2013). Permission to use this data was provided by the US Census Bureau on completion of a user agreement.

2.2. Outcome measure

The outcome measure was dead or alive at the end of a six-year follow-up. This was ascertained from death certificates available through the National Center for Health Statistics (US Census Bureau, 2013, p. 1).

Download English Version:

<https://daneshyari.com/en/article/5123266>

Download Persian Version:

<https://daneshyari.com/article/5123266>

[Daneshyari.com](https://daneshyari.com)