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Assessing the influence of working hours on general health by migrant status and family structure: the case of Ecuadorian-, Colombian-, and Spanish-born workers in Spain

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ABSTRACT

Objectives: The purpose of this study was to analyze the relationship between working hours (WHs) and the likelihood of poor self-reported general health (SRGH) in the first data wave from a cohort of immigrant and native workers in Spain.
Study design: Cross-sectional analyses from a prospective cohort study.
Methods: Data were drawn from the first wave of the Platform of Longitudinal Studies on Immigrant Families. The selected sample was composed of 217 immigrant workers and 89 native-born workers. We explored differences by immigrant status and family structure, assessing prevalences and Poisson regression models; an additional analysis explored statistically optimized work hour cut points.
Results: Highest prevalence of poor SRGH (72.7%) was reported by immigrant, single-parent workers working >40 WH/week. Immigrant single-parent families were more likely to report poor SRGH for three WH categories: ≤20 WH/week (prevalence ratio [PR] = 3.3, 95% confidence interval [CI] 1.6–7.2), >30-≤40 WH/week (PR = 2.8, 95% CI 1.3–6.4), and >40 WH/week (PR = 4.2, 95% CI 1.8–10.1). In two-parent families, immigrants working standard hours (i.e. >30-≤40) and native-born workers in the highest and lowest categories of WHs (i.e. ≤20 and >40) had similar PRs for poor SRGH compared with native-born workers working standard hours. Findings suggested that native-born workers residing in two-parent families were able to work more than 10 h longer per week than immigrant workers before reporting equivalent prevalences of poor SRGH.

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Conclusions: Differences in the association of WHs and poor SRGH among immigrants in Spain seem to be explained by family structure, which suggests that the influence of WHs on health differentially affects vulnerable groups, such as immigrant workers residing in single-parent families.

Introduction

A number of studies have demonstrated that immigrant workers are disproportionately exposed to adverse occupational conditions, including long working hours (LWHs).[1,2] Working hours (WHs) is an employment condition usually measured as the average time spent working per week, whereas LWHs is an adverse employment condition that exceeds some standard work hour duration. Previous studies have shown associations between LWHs and a number of health-related behaviors (i.e. hazardous alcohol abuse, smoking, sleep disruption) and poor health outcomes (i.e. depressive symptoms, coronary heart disease, metabolic syndrome), but associations are particularly strong in 'subjective health' outcomes (i.e. fatigue, physical ill health, psychological ill health).[3,4] Given this, self-reported general health (SRGH) outcome provides a high-level indicator of an individual's overall health and is a good predictor of mortality, useful in public health research.[5]

Few studies have focused on LWHs and health by immigrant status. Conway et al. (2016)[6] compared working hours and SRGH among immigrant and native-born workers in the United States (US) and Spain and demonstrated that the odds of poor SRGH among those working long hours (defined as ≥51 h per week) were significantly increased among native workers in both countries but not among immigrant workers. When the analysis was further stratified by gender as well as immigrant status, significant associations were seen between LWHs and poor SRGH among immigrant females and native-born workers (both male and female) in Spain, with no significant associations found in any category of the US workers.[6] These equivocal results may be at least partially explained by the use of a single, binary definition of LWHs, which was based on previous research carried out among the US workers,[7] as well as differences in work hour patterns, in general, between the two countries. To our knowledge, there is no accepted practice for defining LWHs among immigrant workers.

The relationship between WHs and health is complicated by numerous potential factors that are external to the work environment but that may influence the LWH–health association, such as caregiving (e.g. childcare, eldercare) and domestic responsibilities (e.g. unpaid housework, meal preparation).[4,8–10] Differing WH thresholds have been associated with reduced mental wellness among women (38.0 WH/w) and men (43.5 WH/w), with increased vulnerability shown among women with substantial domestic responsibilities (31.3 WH/w).[8] Additionally, being the primary contributor of household income (e.g. the 'breadwinner') increases the probability of LWHs being associated with lower levels of psychological well-being and poorer SRGH.[9,10] Adults in single-parent households, who are overwhelmingly female, are far more likely to be both the primary household breadwinner and to have substantial domestic responsibilities than either adult in a two-parent household. This could be an especially vulnerable situation for immigrant workers, given that other social support networks (e.g. family support, community support) have likely been altered by the migratory process itself.

Beginning in the 1990s, Spain transitioned from being a country of emigrants to a country of immigrants over a period of about 10 years. Since that time, a number of studies in Spain have demonstrated that immigrant workers experience greater occupational health risks than Spanish-born workers.[11] At present, employed immigrants represent 10.8% of the total legally employed workforce and at least 11.9% of the total labor force.[12] Ecuador and Colombia are among the leading non-European Union countries from which workers immigrate to Spain,[13,14] and the two countries share similar emigration patterns, including large proportions of female emigrants for whom Spain is the primary country of destination.[15,16] The presence of immigrant families has been increasing through regrouping processes, and approximately 50% of immigrants to Spain currently live in households with their children.[17]

Publicly available data sets on general populations typically have limited immigrant recruitment and may not adequately capture the issues facing immigrant households, given that they are not validated specifically for such a purpose.[18] To address these limitations, we used data from the Platform of Longitudinal Studies on Immigrant Families (PELFI) that focuses on the study of migratory process and health.[14] We hypothesized that immigrant worker health would be more sensitive to WH levels than that of native-born workers; we further hypothesized that worker family structure would influence individuals' responses to WH levels. The purpose of this study was to analyze the relationship between WHs and the likelihood of reporting poor SRGH in a cohort of immigrant and native workers in Spain.

Methods

We used data from the PELFI project, a multisite project of the Immigration and Health Subprogram from the Biomedical Research Consortium Network in Epidemiology and Public Health (CIBERESP SIS) in Spain.[19] This project began in the cities of Badalona, Alicante, and Barcelona. We used the