# Healthy life expectancy differences between older migrants and nonmigrants in three European countries

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Migration, ageing and health are on the political agenda in all European countries, but so far little attention has been devoted to the health among older migrants in Europe. At the same time, the share of older migrants in European countries is rising steadily and there are reasons to believe that substantial differences in health exist between older migrants and non-migrants in Europe. Our aim is to analyse health differences between older migrants and non-migrants in three European countries (Belgium, the Netherlands, and the England and Wales) and to assess how these potential differences in health vary over time. Population and mortality data are derived from official statistics, and health data are derived from either surveys or censuses, depending on the country. Healthy life expectancy is calculated for older migrants and non-migrants for different time periods. Decomposition techniques are applied to identify to what extent differences in healthy life expectancy are attributable to differences in mortality or rather to differences in morbidity. We expect that older migrants have poorer health compared to older non-migrants, regardless of whether their life expectancy is higher or lower than that of non-migrants, although this will differ particularly by area of origin. The results will show whether there is a trend towards morbidity compression or expansion over time among older migrants and non-migrants. Knowledge about the health of older migrants is crucial when judging the future health care demand in culturally diverse and ageing populations, and to inform policies and interventions. The study is innovative by focusing on health differences specifically between migrants and non-migrants at older ages, by considering both the country of origin and destination, and by analysing whether there is a trend towards morbidity compression or expansion over time.

# **Extended** abstract

## Introduction

Migration, ageing and health are on the political agenda in all European countries, but so far little attention has been devoted to the health among older migrants in Europe (Rechel et al., 2011).

Studying the health among older migrants in Europe is important though, firstly because the share of older migrants in European countries is rising steadily. Most of the older migrants today were young and healthy workers from Mediterranean countries, and migrants from colonies, who came as guest-workers to Western and Northern European countries from the 1950s until the early 1970s. Given the current size of younger migrant populations, it is expected that the share of older migrants in Europe will grow considerably in the future (Lanzieri, 2011).

Moreover, there are reasons to believe that substantial differences in health exist between migrants and non-migrants in Europe, especially at older ages. Previous research shows that health inequalities between migrants and non-migrants differ across the life course. At younger ages and midlife, migrants in Europe usually have health advantages (Kunst et al., 2011; Boulogne et al., 2012). At older ages, however, migrants in most European countries tend to have poorer health and higher mortality (Kibele et al., 2008; Solé-Auró and Crimmins, 2008; Boulogne et al., 2012; Lanari and Bussini, 2012).

Differences in health between older migrants and non-migrants may depend on the migrants' origin as well. Several studies have shown that Eastern European migrants usually display relatively poor health conditions as they generally entered Western Europe under highly adverse conditions, usually as refugees, asylum seekers, or displaced persons (Boulogne et al., 2012; Lanari and Bussini, 2012). Health differences between older migrants and non-migrants may also differ between destination countries, depending on attitudes and policies towards migrants and migrant health (Rechel et al., 2011).

### Objective

Our aim is to analyse which differences in health can be identified between older migrants and nonmigrants in three European countries (Belgium, the Netherlands, and England and Wales) and to assess how these potential differences in health vary over time. The study is innovative by focusing on health differences specifically between migrants and non-migrants at older ages, by considering both the country of origin and destination, and by analysing whether there is a trend towards morbidity compression or expansion among older migrants and non-migrants over time.

The destination countries analysed (Belgium, the Netherlands, and England and Wales) have been chosen due to the fact that they currently have similar life expectancies at birth, and a similar migration history, although specific migrant groups who came from former colonies vary depending on the destination country. Migration and integration related policies may vary as well. In addition, the availability of reliable data was an important factor when choosing the destination countries to be analysed.

### Theories on migrant health

Several theories have been proposed to explain health differences between migrants and non-migrants.

Migrants in Europe generally have a lower socioeconomic status than natives, poorer employment opportunities and physically more demanding jobs, and have less financial security at older ages (De Valk and Schans, 2008; De Valk et al., 2012). An inverse relationship between socioeconomic status and health has been shown (Mackenbach et al., 2008). Despite their low socioeconomic status, the

health of migrants is not always worse than that of non-migrants (Deboosere and Gadeyne, 2005; Razum, 2006; Kunst et al., 2011). Therefore, socioeconomic status cannot be the only factor explaining health differences between migrants and non-migrants.

Social ties appear to be a key to understanding health differences between older migrants and nonmigrants. Social networks and support are crucial in maintaining good health (Berkman and Syme, 1979). Family norms and bonds are found to be stronger among first-generation immigrants (De Valk and Schans, 2008).

The "healthy migrant effect" claims a positive selection on health as predominantly young and healthy people migrate (Razum et al, 1998), either due to self-selection or due to health checks before migration, as was the case for migrants coming to Western and Northern Europe between the 1950s and 1970s (Razum et al, 1998; Kibele et al., 2008). Some authors renamed the effect as the "healthy worker effect", and demonstrated that this health advantage of migrants is mainly seen among males, as many females migrate for other reasons than job opportunities (Boulogne et al., 2012). Negative health selection occurs when migrants return to their home country later in life when health declines ("salmon bias"), leaving a healthier migrant population in the destination country (Palloni and Arias, 2004; Razum, 2006). However, studies have shown that other factors must be taken into account, and that health selection, either positive or negative, cannot fully explain health differences between migrants and non-migrants (Abraído-Lanza et al., 1999).

In any case, health advantages among migrants appear to remain at least until midlife (Razum et al., 1998; Boulogne et al. 2012). With increasing length of stay, and hence at older ages, however, the effect seems to weaken owing to accelerated ageing (Abraído-Lanza et al., 2005; Kunst et al., 2011; Boulogne et al. 2012). Theory suggests that migrants undergo an acculturation process, adopting particularly health-damaging behaviours of the host society, such as smoking or drinking (Abraído-Lanza et al., 2005; Kunst et al., 2011).

The "health transition theory" (Razum and Twardella, 2002) combines the healthy migrant effect and the acculturation process. Migrants may initially benefit from better nutrition and medical treatment, which leads to a reduction in mortality due to infectious diseases. On the contrary, even when health-damaging behaviours of the host society are adopted, their effects on health are only visible at older ages due to the long latency periods of diseases associated with these health-damaging behaviours.

### Data and methods

The study focuses on individuals aged 50 and over in Western Europe. A distinction is made between non-migrants and migrants from the first generation. The latter group is defined as those born abroad and who migrated to current countries of residence at some point in time. According to their origin, migrants are subdivided into western and non-western migrants, as defined by Statistics Netherlands (CBS, 2014).

Different indicators for morbidity are considered (i.e. self-perceived health, prevalence of chronic diseases, and limitations in activities of daily living), as previous studies have shown that health differences between migrants and non-migrants vary according to the morbidity indicator considered (Solé-Auró and Crimmins, 2008; Kunst et al., 2011; De Grande et al., 2013).

Population and mortality data derive from the population register for Belgium and the Netherlands, and from the census and vital register for England and Wales. Health data derive from the Belgian Health Interview Survey and the census for Belgium, the Dutch Permanent Research Life Situation (POLS) for the Netherlands, and the census for England and Wales.

Healthy life expectancy is calculated for older migrants and non-migrants for different time periods, distinguishing between western and non-western migrants. This is done using the Sullivan method (1971), as specified by the EHEMU team (Jagger et al., 2006). Decomposition techniques are applied

to identify to what extent differences in healthy life expectancy are attributable to differences in mortality or rather to differences in morbidity (Nusselder and Looman, 2004).

### **Expected results**

According to previous literature review and theory, we expect that older migrants have poorer health compared to older non-migrants, regardless of whether their life expectancy is higher or lower than that of non-migrants. These differences in health are expected to vary depending on the country of origin and destination. The results will show whether there is a trend towards morbidity compression or expansion over time among older migrants and non-migrants.

#### Relevance of the study

Knowledge about the health of older migrants is crucial when judging the future health care demand in culturally diverse and ageing populations (International Organization for Migration, 2009) and to inform policies and interventions. At the same time, the integration of migrants into destination societies is an important policy aim of many European countries (De Haas et al., 2012). Therefore, it is important to determine potential health inequalities between older migrants and non-migrants, as well as to identify whether these inequalities expand or compress over time.

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