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Health Status of Migrants in Australia By Arusyak Sevoyan University of Adelaide

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#### Abstract

Although there has been a large body of research looking at migrant health issues, there is little understanding of migrant health in Australia due to limited research. Australia is among the top migration countries, where about half of the population is a first- or second-generation migrant, and where more than quarter of the labour force consists of migrants. This study adds to our understanding of migrant health in Australia by exploring the health status and health risk factors of migrants in comparison to the native-born population in Australia. It uses data from the Australian Health Survey conducted by the Australian Bureau of Statistics (ABS) in 2011-12. The analysis includes two measures of health: self-assessed health and Body Mass Index. Migrant status as the main predictor is broken into categories according to the year of arrival to explore the possible effect of assimilation on health outcomes. The preliminary results show that migrants in Australia report better health than the native born population controlling for other factors. However, the better health status is mostly attributable to the newly arrived migrants, as the health status of earlier waves of migrants is not significantly different from that of native Australians. Health risk factors are also found to be much lower among migrants of all categories compared to the native born. The further explore the health of migrants more measures of health and country of birth of migrants are intended to be added to the analysis in preparation for the conference.

# Introduction

Migrant health issues have been a focus of international research for decades (McKinley, 1975; Kasl & Berkman, 1983; Rust, 1990; Palloni & Arias, 2004). A large body of empirical evidence comes from studies conducted in the United States (e.g. Abraido-Lanza et al., 1999; Argeseanu Cunningham et al. 2008; Palloni and Arias, 2004; Rust, 1990), and more recently from Europe (e.g. Akhavan et al. 2004; Lindstrom and Sundquist, 2005; Razum et al. 1998;), Canada (e.g. Dunn and Dyck, 2000; McDonald and Kennedy, 2005; Newbold, 2005), and China (e.g. Chen, 2011), but findings have been inconsistent. It is difficult to determine trends and associations between migration and health based on these studies because they focus on certain health outcomes and certain migrant groups in particular populations. The inconsistency in outcomes is explained by the diversity of factors involved in the process of migration that, combined with individual factors, significantly affect the health and access to care of those involved in the process. These factors range from individual to environmental and structural-level determinants (Irving and Mosca, 2010).

Migrants often find themselves in a country with a different language, culture and behaviours, which directly or indirectly contribute to health disparities. International migrants are often obliged to live and work in marginal situations, and hence are more vulnerable to environmental disasters than non-migrants. Migrants are often systematically discriminated against in national health policies and are ignored in routine health data collection and research (Irving and Mosca, 2010), which are the necessary basic steps towards creating more inclusive and stronger national health policies. The latter is especially relevant to Australia. Although almost half the population are a first or second generation migrants (Hugo, 2010), little research has been conducted towards understanding the health risks and challenges faced by the growing community of migrants in the country. The evidence is either outdated (Krupinski, 1984), or is focused only on certain types of migrants (Khoo, 2010) and certain ethnic groups (Stanaway et al., 2010), or covers only certain medical conditions (Kennedy et al., 2006).

The global stock of international migrants was estimated at about 214 million in 2010 (UN, 2011): Australia was among the top 15 countries with the highest proportion of migrants in the population, and this number has been increasing in the last decade. Migrants make up about 27 percent of the total labour force in Australia (OECD, 2011), and play a crucial role in driving the economy for a society with an aging population. Meanwhile, it has been observed that poor health makes certain groups of migrants, such as refugees and humanitarian migrants less likely to participate in economic activities (Khoo, 2010). The inflow of young and healthy skilled economic migrants and international students is increasing, making the more vulnerable migrant groups invisible in national statistics of Australian migrant population. The migrant population has been growing in size and diversity, so that poor health among them will not only jeopardize the health of native-born Australians, prevent migrants from fully contributing to the economy, but also strain the limited resources of the government that will need to be directed towards the treatment of sick migrants. It is important, among other issues, to promote health policies that will guarantee migrants' equal access to health care services and help them maintain good health after their arrival in Australia. At the same time it is important that the health policies are based on rigorous research and clear understanding of migrant health issues. However, the current state of knowledge on migrant health in Australia leaves a large gap in our understanding of the social determinants creating and reproducing health disparities among migrants.

The current study aims at

 to understand the demographic and socio-economic factors creating health disparities among migrants; - to contribute to the international research by adding empirical evidence on migrant health issues in Australia.

### **Theoretical Background**

Much research on migrant health stems from structuralist and cultural approaches in Medical Sociology focused on understanding of social, economic and cultural determinants of health. This theory suggests that low socio-economic status of individuals leaves them with higher rates of morbidity and mortality. However, in migrant health research prevailing evidence suggests that migrants from developing countries enjoy better health and lower mortality rates than non-migrant populations in the destination, particularly in regard to cardiovascular conditions, obesity, mental and perinatal health and some types of cancers (e.g. Jasso et al., 2004; Singh and Hiatt, 2006; Singh and Siahpush, 2001; Razum et al., 1998). This health advantage of migrants over the native-born population despite the lower socio-economic status is known as the "healthy migrant" paradox. Chen (2011) has summarized the three possible reasons suggested in the literature to explain the "healthy migrant" effect: a) only healthy individuals are selected into migration; b) migrants are likely to under-report their health conditions due to limited use of or access to health care services; and c) "salmon-bias" effect – migrants return to their home countries in case of serious illness.

However, there has been strong evidence that migrant health advantage diminishes over time (Kennedy et al., 2006; Escobar, et al. 2000; McDonald and Kennedy, 2004). Some researchers suggest that it is explained by acculturation, as migrants assimilate to the lifestyle and habits of native-born population over time, but others argue that unfavourable socio-economic status and environment where migrants live and work negatively affect their health (Fennelly, 2007). There has also been evidence that the "healthy migrant" effect does not apply to all immigrant groups. Studies found increased rates of morbidity and mortality among migrant groups, especially for some chronic conditions such as diabetes, brain and stomach cancer, infectious diseases, injuries and self-rated health (e.g. Newbold and Danforth, 2003; Singh and Siahpush, 2001; Sinclair et al., 2006). This health disadvantage of migrants is usually explained by the stressful process of migration and the negative impact of disadvantaged socio-economic status of migrants in the destination (Argeseanu Cunningham et al., 2008).

The debate over migrant health remains open. While many studies have been able to establish whether certain migrant groups have an advantage over non-migrants in regard to certain health indicators or not, there is little consensus over the socio-economic factors and processes creating this advantage or disadvantage, or having the diminishing effect on migrants' health. Moreover overwhelmingly, the body of evidence is limited to US immigrants, and more recently to Europe and Canada, and it is needless to stress that migrant profiles vary widely within and between different countries. These differences have resulted in inconsistent findings and created a need for more research on migrant health issues from a wider range of countries.

In Australia national statistics on morbidity and mortality rates among foreign born in Australia, reported by the Australian Institute of Health and Welfare (AIHW), provide some evidence of migrant health advantage. According to 2010 report, foreign-born individuals score better on most of the health indicators than the native born population in Australia (AIHW, 2010). For example, in the period between 2005 and 2007 the overall death rate for overseas-born people was lower by 7 percent than that of the Australia-born, although the rates varied greatly by country of origin. Similarly, depending on the country of origin, some migrant groups scored better on various health risk factors, such as alcohol intake, smoking and exercise, and others scored worse than the native-born population. However, "healthy migrant" approach cannot be applied to migrant health advantage in Australia, as migrants here are of higher socio-economic status than the total population on average, unlike immigrants in the US. At the same time, migrant health reports in Australia present mortality and illness rates grouped into large clusters of origin countries, such as UK and Ireland, other Europe, Asia and "other" (AIHW, 2006; 2008). Although these statistics give us some idea of the health status of migrant groups in Australia, they do not explain the underlying socio-economic determinants and processes that might be creating health disparities between migrant groups. Averages also carry the danger of disguising the most vulnerable migrant groups, such as newly arrived refugees, due to their smaller numbers compared to economic immigrants. There has been some evidence that humanitarian migrants have poorer health than other immigrants in Australia, despite the settlement assistance and access to health care services provided to them by the government (Kennedy and McDonald, 2006). Nevertheless, research on migrant health in Australia remains very limited and most of it is related to health care service utilization and access among migrants (Chu, 2005; Dolman et al., 1996; Murray and Skull, 2004). There is lack of understanding of the social factors that cause health disparities among migrant groups such as humanitarian migrants in Australia. At the same time findings from other countries cannot be applied to migrant health issues in Australia due to the differences in migration systems and migrant profiles between them.

To add to the international literature and to our understanding of migrant health issues in Australia, the current study explores the health status of migrants in comparison to the native population in Australia and the socio-economic factors affecting them.

#### Data and methods

The study uses data from the Australian Health Survey conducted by the Australian Bureau of Statistics (ABS) in 2011-12. Face-to-face interviews were conducted with about 20 thousand usual

residents of about 15 500 private dwellings in urban and rural areas of Australia. The survey collected detailed information about health conditions, health risk factors, health related actions, and socio-demographic characteristics. For the purposes of this study, only individuals aged 18-65 are included in the analysis, because the health issues among the aged population are a separate subject for research.

To compare the health status of migrants and the native-born Australians the study uses two different measures of health, including: a) Self assessed health; and b) Body Mass Index. Self assessed health is an ordinal variable coded the following way: 1=Excellent, 2=Very good, 3=Good, 4=Fair, and 5=Poor. Body Mass Index (BMI) is also an ordinal variable coded as: 1=Normal, 2=Overweight and 3=Obese. Both models for the outcomes 'self-assessed health' and 'BMI' are fitted using logistic regression for ordered categories.

The main predictor in all models is individual's migrant status measured in two different ways. First, the person is considered a migrant if he/she was not born in Australia. Second, according to the year of arrival in Australia the migrant status was broken into dummy variables, such as 'born in Australia' (the reference category), 'arrived before 1985, 'arrived between 86-95', 'arrived between 96-05', and 'arrived between 2006-2011'. All models also control for basic socio-demographic and economic characteristics such as age, sex, registered marital status, highest year of school completed, whether or not they have a non-school qualification, whether or not they are employed, proficiency in spoken English, as well as three health risk factors, including: whether or not the person is a current smoker (on daily/weekly/monthly basis), ex-smoker, or has never smoked; whether or not the person's physical activity the previous week met 150 minutes of recommended guidelines; and whether or not the person's vegetable and fruit consumption met recommended guidelines.

#### **Preliminary results**

The results of the Logistic regression for ordered categories are presented as odds ratios in Tables 1 and 2: a value above one signifies a positive association, and a value below one means a negative association. Model A in each table presents the results where the main predictor is the binary measure of migrant status. Model B in each table shows the results using Migrant categories according to their year of arrival as the main predictor.

		Model A	Model B		
	Odds Ratio	Р	Odds Ratio	Р	
Migrant	0.889	0.0003			
Arrived before 1985			1.036	0.4295	
Arrived in 86- 95			1.096	0.1394	

Table 1. Logistic regression for ordered categories predicting Self -assessed Health by Migrant status.

Arrived in 96 - 05			0.780	<.0001
Arrived in 06 - 11			0.548	<.0001
Age	1.011	<.0001	1.009	<.0001
Male	1.209	<.0001	1.215	<.0001
Registered marital status	0.929	<.0001	0.933	<.0001
Highest year of school completed	0.824	<.0001	0.825	<.0001
Non school qualification	0.871	<.0001	0.884	<.0001
Employed	0.484	<.0001	0.476	<.0001
Proficiency in spoken English	0.913	0.0005	0.853	<.0001
Smoker	0.738	<.0001	0.741	<.0001
Recommended physical activity met	0.546	<.0001	0.544	<.0001
Recommended diet met	0.609	<.0001	0.610	<.0001
Number of cases	20013		20017	

Table 1 presents the results for the outcome of Self-assessed Health. The models predict the probability of being in a higher category, which means reporting worse health. Thus, we can see that the odds ratio for Migrant in Model A is 0.89 and is statistically significant at P<0.001 level, which means that the odds of migrants reporting worse health is about 11 percent lower than that of non-migrants controlling for other factors. However, when we look at Model B where migrant status is broken into categories by their arrival year, we can see that the effect of migrant on self-assessed health is significant only for the migrants that arrived after 1996, while the odds for those who have arrived before 1995 are not significantly different from those of the native born.

	Model A		Model B	
	Odds Ratio	Р	Odds Ratio	Р
Migrant	0.781	<.0001		
Arrived before 1985			0.843	0.0005
Arrived in 86- 95			0.815	0.0033
Arrived in 96 - 05			0.760	<.0001
Arrived in 06 - 11			0.634	<.0001
Age	1.022	<.0001	1.021	<.0001
Male	1.442	<.0001	1.444	<.0001
Registered marital status	1.052	<.0001	1.054	<.0001
Highest year of school				
completed	0.879	<.0001	0.881	<.0001
Non school qualification	0.931	0.0268	0.937	0.0442
Employed	1.018	0.8399	1.018	0.8412
Proficiency in spoken English	1.278	<.0001	1.242	<.0001
Smoker	1.012	0.5181	1.014	0.467
Recommended physical activity				
met	0.73	<.0001	0.729	<.0001

Table 2. Logistic regression for ordered of	categories predicting BMI by Migrant status.
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Recommended diet met	0.842	0.0089	0.846	0.0107
Number of cases	16604			16608

The results for BMI are presented in Table 2. The models here also predict the probability of being in a higher category, which corresponds to higher than normal BMI. Similar to the previous outcome the results in Model A show that the odds ratios of migrants being in a higher BMI category are significantly less than that of non-migrants, controlling for other factors. However, unlike the models fitting self-assessed health, the effect of migrant on BMI is significant for all migrant categories (Model B). The odds ratios of being in a higher BMI category for all migrant arrival groups are significantly lower that the odds for native born, however, the newer arrivals have much lower odds than earlier arrivals compared to native born Australians.

## Preliminary conclusions and future steps

The preliminary results show that migrants in Australia report better health than the native born population controlling for other factors. However, the better health status is mostly attributable to the newly arrived migrants, as the health status of earlier waves of migrants is not significantly different from that of native Australians. Health risk factors are also found to be much lower among migrants of all categories compared to the native born. Although these results give us a basic idea about where migrants in Australia stand in relation to their health status, we need to further understand what are the socio-demographic and economic factors affecting them.

To prepare this paper for the conference, the models will be further improved to include other important economic characteristics, such as household income, and relative socioeconomic index. The paper will also include other health outcomes, such as health conditions, health risk factors, and health actions to fully understand how the health of migrants compares to the native born Australians. The main predictor will also be further explored to include country of birth along with the year of arrivals.

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