Temporary Labor Migration and Self-Rated Health in South Africa

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Abstract

This paper examines internal labor migration in South Africa and its impacts self-rated health. Despite strong evidence that subjective assessment of health is a valid measure of health status, not much research is known of self-rated health in Sub-Saharan African setting. Using data from the National Income Dynamics Study (NIDS), we argue that self-rated health differs within and between temporary migrants and the native-born population. We find that controlling for other variables, migrants are no more likely than non-migrants to rate their health as poor. However, circular migrants who have lived in another province before their current residence were more likely to rate their health as poor compared to non-migrants. We also observe a marginally significant relationship between migration status and education and self-rated health. The implications of these results are discussed in the context of population health policy and the limitations of self-rated health in a sub-Saharan African setting

Introduction

Temporary labor migration continues to be the main migration stream in South Africa even after the dismantling formal restrictions against African mobility under the apartheid regime. Labor Migration connects rural communities to income and survival in urban centers and research has demonstrated the role of remittances to the socioeconomic status of households left behind by migrants (Collinson 2010). However, the period following the end of apartheid coincided with high and rising unemployment and an increase in HIV prevalence and AIDS incidence; this has impacted the dynamics of migration and health in sending and receiving communities. Thus a growing literature has emerged on the vulnerability of labor migrants to HIV (Lurie et al. 2003; Hirsch 2014), the links between migration and mortality (Collinson 2010) and the role of gender in temporary labor migration and heath (Camlin et al. 2010).

However, not much research has been devoted to self-rated health of migrants in South Africa, despite strong evidence that subjective assessment of health is a widely used and valid measure of health status. For example, studies have documented that that simple subjective assessment of global health status adequately predicts morbidity, disability, healthcare utilization and mortality in populations, in spite of known health risk factors (such as smoking) (Kaplan et al 1996; Fylkesnes 1993, Farmer and Ferraro 1997; Idler and Benyamini 1997). Although poorly understood, self-rated health holds psycho-physiological benefits (reflecting the state of the human body and mind) that influence health and predict death. Moreover, objective and external assessments of health (by health practitioners) have been criticized from anthropological standpoints for being less sensitive to the

meaning and interpretation of suffering and healing associated with illness (Sen 2002; Kleinman 1988; Kleinman 1995).

Understanding the health status and health needs of temporary migrants in South Africa is important for several reasons. First, several studies report an overall net increase in the proportion of African rural households with a migrant(s) (Posel and Casale 2003; Collinson and Wittenberg 2001). This increase has mainly been driven by a rise in female migration (Posel and Casale 2003; Collinson and Wittenberg 2001). Thus understanding the social processes through which migration differs by gender (and ethnicity) and how that impacts on self-rated health might provide insights for policy makers and population scientists to enhance the benefits that accrue from the migration and minimize its negative consequences. Second, self-perceived health has been used in some Western settings as a proxy for the health needs of minority populations (Hjern et al 2001). With a health transition underway in South Africa, adding the burden of non-communicable diseases to a health system already reeling from infectious diseases, there is the need to go beyond the usual socio-economic indicators of inequalities in access to care to include self-rated health. Thirdly, the literature has shown that selfrated health may capture the holistic perception of the health a population (including their physical, mental and social well-being) from an individual perspective. Studying self-rated health of migrants, therefore, may give us clues as to the overall health status of migrants knowing the crucial role labor migration plays in the economic development of South Africa.

The purpose of this paper thus is to investigate how temporary labor migration impacts selfrated health and how this is modified by structural and social factors such as gender, age, ethnicity, culture, access to health services and its limitations thereof in a sub-Saharan African setting.

Background Literature

The effect on health of being a migrant has been debated in studies in Western settings with some studies demonstrating a "healthy migrant effect" (Blair and Schneeberg 2013; Newbold 2005; Crimmins, Soldo, Kim, Alley 2005) while others have shown mixed or worse health outcomes among migrant groups (Stirbu et al 2006). The "healthy migrant effect" argues that migrants are self-selected for good health at the time of arrival but subsequently experience a decline in health compared to the native population (Newbold 2005). This is attributed to the uptake of unhealthy lifestyles such as alcohol consumption, smoking and poor diet. A recent study in Canada also found that after adjustment for time, recent immigrants were more likely to report better health status (Blair and Schneeberg 2013).

These findings mirror the argument for the so called "Hispanic paradox" in the United States, which suggests that although poverty rates among Hispanics are similar to that of African Americans, their health status and mortality outcomes are far better and comparable to non-Hispanic whites due to strong social ties and better health behaviors (Crimmins, Soldo, Kim, Alley 2005; Thomson et al. 2013).

However, a few studies have found the opposite; migrant populations have elevated risk of total avoidable mortality from all infectious and some chronic conditions (Stirbu et al 2006), even after risk adjustment for age, sex, and socioeconomic status (Borrell et al. 2008). A few other studies attribute migrants' disadvantage in self-rated health compared to the native population to socioeconomic inequality (Cooper 2002), poor acculturation and discrimination (Wiking et al. 2004). Others

find that these differences are greatly reduced after controlling for social networks, social support and social capital (Lindstrom et al. 2001; Hyppa and Maki 2001).

In the case of South Africa, there is evidence of an increase in circular or temporary migration from rural households to work or to find work in urban areas and semi-urban towns. However, most of these migrants continue to maintain strong economic ties with their household of origin either through remittances or as a place of refuge during high unemployment and for retirement (Posel 2003). Thus temporary migrants depending on their duration of residence and frequency of return to places of migration origin may be protected from unhealthy lifestyles in urban areas and have access to social support and social capital drawn from rural areas. For example, Collinson (2010) finds migrants who return more frequently may be less exposed to outside partners and therefore less at risk of HIV.

Our knowledge on gender differences in migration and self-rated health, although increasing is still limited. One study found that migrant men and not women had worse self-rated health compared to the native-born population, the poor health of men was not explained by social class or working or living conditions (Borell et al 2008). Similarly, a study of migration and health of women of reproductive age, found that women from Southern Europe, female refugees and Finnish women were at higher risk of poor self-reported health and psychosomatic complaints than native Swedish women (Iglesias 2003). Thus, migration seems to be an independent risk factor for poor health in women of reproductive age.

In South Africa, the labor migration literature show that although the majority of labor migrants are men, there has been a shift in the gender composition of labor migrants mainly due to a rise in female migration (Collinson and Wittenberg 2001; Posel 2003). For example, Posel (2003) reports that

between 1993 and 1999 the proportion of female African migrant workers increased from 30 percent to approximately 34 percent of migrant workers. Wilkinson et al. 1998, on their study of migration from the Hlabisa District of northern KwaZulu-Natal, found that female labor migrants stay closer home than male labor migrants and were more likely to be found in rural, semi-urban areas rather than in urban destinations or big cities due to higher living costs and perceptions of crime and violence. Thus their proximity and social ties to home provide insurance in times of unemployment or illness. Furthermore, considering that female unemployment is higher than male unemployment and still rising; female temporary migrants are more likely to be shielded from the risks of poor self-rated health compared to men. Also, traditional gender roles show that women may be more restricted by the will of a man (either a parent or a partner) in their intentions to migrate and may be constrained by household roles such as care-givers for children, the sick, disabled and aging parents (Dodson 2000; Todes 2001). Thus marital status is important in the relationship between gender, migration and selfrated health as women who are not married or do not live with a man, may have the freedom to migrate and to look for work.

On other social factors such as socio-economic status (SES), age, education and self-rated health, previous research has demonstrated quite clearly a socio-economic gradient with health in general; this seems to be replicated with self-rated health. In a Finnish study, women with low SES had poor self-rated health compared with women with high SES (Sihvonen et al. 1998). Thus, returns to migration in terms of wages seem to have an impact on poor self-rated health. With the decline in the labor absorption capacity of the formal sector in South Africa, and the increase in insecure and informal forms of employment and high unemployment, circular migrants who are economically successful will report better self-rated health than less successful migrants.

Similarly, educational status is known to have the most consistent association with health, as it improves access to employment and better health. Education also enhances good reproductive choices for women and reduces fertility, prevent premature death and suicide (cite). Thus migrants with several years of schooling and educational attainment will report better self-rated health (Subramanian, Huijts, Avendano 2010).

Lastly, previous studies have shown that the ability of self-rated health to predict mortality declines with age (Doorslaer and Gerdtham 2003). This means older people are known to assess their health more positively than younger people. Controlling for other factors, a negative correlation is observed between age and poor health (Jylha et al. 2001). Since migration is selective on age, migrants are usually younger than non-migrants and more likely to rate their health negatively. However, the situation in South Africa might be different as a growing proportion of migrants are older (35 and above) due to rising unemployment (Posel 2003).

Conceptual Framework

Following the background literature briefly reviewed, this paper argues that self-rated health measures something different from most indicators of health. Self-assessed health reflects an individual cognitive process in which all available sources of information (both subjective and objective) are combined into a summative statement of the health status of an individual. This differs within and between temporary migrants and the native-born population or long-time residents of the city. Understanding this individual cognitive process may provide useful clues for policy and population science.

The conceptual framework thus rests on the social and biological pathways that mediate information from human organisms to individual consciousness that results in an expression of the subjective state of one's health. Jylha (2009) suggests an individual's physiological state consists of bodily sensations, feelings and emotions that are transmitted from the body to the mind and this reflects important health conditions such as inflammatory processes that an individual may be dealing with. This bio-social mechanism, it is suggested, explains the consistent association between self-rated health and mortality. Although, we cannot test these mechanisms directly, we first argue that migration status provides a means to cognitively evaluate one's health and is associated with a unique set of sensations arising from the context and circumstances of migration. Circular migrants for example, typically move from one set of health risks in rural areas to another set of risks in urban centers that probably has an impact on their health. Thus migrants' ratings of health depend on what constitutes "health" in their context and present circumstances and what sensations, feelings and emotions are associated with that assessment.

Second, self-ratings of health will depend on one's reference group, earlier health experiences and expectations and individual characteristics (Jylha 2009). These factors will defer by migration status and will depend on social factors such as age, gender, education, employment status, social networks, social capital in the community etc. and their interrelationships. Furthermore, migrants' experiences with the urban health services system will also be crucial in self-ratings of health. If access to services is limited for marginalized groups, then migrants may be particularly disadvantaged in terms of their health.

Lastly, culturally acceptable conventions in expressing negative and positive impressions about individual health and the suspicions and norms surrounding such expressions is important in evaluating one's health (Jylha 2009). Are there differences by migration status in acceptable ways of expressing sensations, feelings and emotions depending on ethnicity or provinces of migration of origin? Are rural dwellers more comfortable with expressing excellent or good health any more than urban dwellers from different provinces?

Methods

This study used data from the National Income Dynamics Study (NIDS), wave 3 of 2012 which is a longitudinal survey of individuals and households living in the nine provinces of South Africa. The survey which was conducted between April and December 2012 re-interviewed respondents from NIDS waves 1 and 2. For this study, a total of 18,701 respondents comprising of 15, 804 non-migrants, and 2,897 internal migrants were used. This study excluded the international migrants who are less than 200. The data used are socio-demographic characteristics, internal migration characteristics and perceived health indicators of the study population.

The socio-demographics are age, sex, population group, education, marital status, income, and place of residence. The migration variables are migration status (migrant or non-migrant) excluding international migrants, year and duration of migration, and repeat migration by the migrants. The inter-provincial migration characteristics were used because the study is concerned with internal migration only, and secondly, there is no data on rural-urban or urban-rural migration.

To generate, the migration status variable, all the international migrants were first excluded from the dataset. Subsequently, we divided the remaining respondents into either migrants or non-

migrants using the provinces of birth and provinces of present residence, in this regard, any respondent that still lives in the province of birth is classified as a non-migrant but if a respondents province of birth is different from the province of residence, such a respondent is classified as an internal migrant. From among the migrants, migration duration, which indicates the number of years the migrant has lived in the place of residence, was generated. Finally the repeat migration variable was gotten from asking the migrants if they have lived in another place before coming to live in their present places of residence.

The perceived health variable used respondents to describe how they feel about their health in the week preceding the survey. The responses ranged from excellent to poor perceived health. These responses were then recoded as into two categories namely perceived health and perceived health status. Perceived health was further categorized into "poor, good, and excellent health". On the other hand, perceived health status was categorized into "positive and negative" perceived health.

Data analysis involved description of the socio-demographic characteristics of the study population, bivariate analysis of perceived health and perceived health status, and logistic regression of the predictors of perceived health, and perceived health status predictors. The units of all analyses were migrants versus non-migrants through a dummy variable in which non-migrants are coded 0 and migrants coded 1. In addition, the regression analyses have two major models, A (representing perceived health as the dependent variable) and B (representing perceived health status as the dependent variable) while perceived health is a multiple dependent variable, perceived health status is a dummy variable where 0 represents negative health status and 1 represents positive health status.

Limitations

The study faced several limitations such as the paucity of data on international migrants and as such international migrants were excluded in the study. This could have led to a comparative analysis of the non-migrants, internal migrants, and the international migrants. Also, there was no data on either rural-urban or urban-rural migration, which could also have provided a basis for a more robust comparison. The data on internal migration also has the deficiency of not providing information on the number of repeat or circular migration while there are cases of missing values where respondents did not answer correctly to the questions. The inclusion of these missing variables in future surveys, will go a long way in ensuring the comprehensiveness of further studies on the relationships between migration, and perceived health in South Africa

Results

Table 1 presents odds ratios of multivariate logistic regression of migration and perceived health status. In Model 1, the baseline model, the likelihood of reporting good or excellent health by migration status and repeat migration (whether migrants have lived in another province before their current place of residence) is estimated. It can be observed from the table that the odds of reporting excellent or good health by migrants are lower (Odds Ratio=0.9) than that of non-migrants. For respondents who have lived in another province before their current place of residence, the odds of reporting excellent or good health are also lower (Odds Ratio =0.82) both results are statistically significant at P<0.05.

In Model 2, the full model, where all covariates are included, only the odds of repeat migrants are statistically significant and remain negative. That of migrants is no longer significant. Thus

controlling for other variables migrants are no more likely than non-migrants to rate their health as poor. However, controlling for other variables, migrants who lived in another province before their current province were more likely to rate their health as poor. Among others, the odds of rating their health as excellent or good by men were 1.3 times that of women. Thus a statistically significant gender effect was observed.

In model 3, we include interaction terms between our two migration variables and socioeconomic characteristics to explore how the effect of migration depends on the level/value of socioeconomic characteristics such as education, gender and income. We observe only a marginally significant relationship between migration status and education (P<.10). The odds of rating their health as excellent or good by migrants who were educated at the primary level were three times that of migrants with no education.

The preliminary results reveal a migrant disadvantage in self-rated health; this disadvantage is amplified for circular or repeat migrants.

Further Analysis

Due to perceived differences in self-ratings of health, multinomial models will used in an attempt to overcome the weaknesses of binary categories. Other important covariate such as the duration of migration, access to health services or health seeking behavior will be exploited further to help clarify migrant disadvantage in self-rated health.