Extended Abstract UAPS 2019

Title: Health care utilisation and internal migration in rural and urban South Africa

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Short Abstract

In South Africa, geographic mobility is high as people engage in both permanent resettlement, and temporary movement. Such mobility may compromise health care access and utilisation. The objective of this paper is to explore health care utilisation and its determinants in a cohort of internal migrants and permanent residents originating from the Agincourt study site in South Africa's rural northeast. A 5-year cohort study of 3800 individuals aged 18-40 commenced in 2017. Data have been collected from 1886 Agincourt residents and 1217 temporary, mostly urban-based migrants, and are analysed using descriptive statistics and logistic regression models. Results suggest that health service utilisation may differ by migrant status and gender. Participants residing in Agincourt are significantly more likely to have accessed health services in the preceding year as compared with temporary migrants, with females being more likely than males to have utilised health services.

Extended Abstract

Background

Urbanisation has been proceeding more rapidly in Africa than many other regions, with Africa's urban population expected to increase from 40% to 56% by the year 2050 (United Nations, 2014). Within South Africa, geographic mobility is high as people engage in both permanent resettlement, as well as circular and temporary movement. Circular migration was historically connected with the Apartheid system of movement control, and typically involved males oscillating between work places on the mines and rural homes (Wilson & Ramphele, 1989). In contemporary South Africa, internal migration is undertaken by a diverse range of individuals. Recent analysis of South Africa's 2011 population census highlights age, gender and education as key individual-level predictors of internal migration (Statistics South Africa, 2015). Internal migration is most commonly undertaken by young adults and internal migration streams, while still predominantly male, are becoming increasingly feminised (Statistics South Africa, 2015).

Mobility, which results in an altered set of circumstances, may compromise health care access and continuity of care for individuals requiring treatment for chronic conditions. South Africa is experiencing an ongoing infectious disease burden with an estimated 12.6% of the population HIV positive (Statistics South Africa, 2017), while a growing burden of non-communicable diseases has been observed (Mayosi et al., 2009; World Bank, 2013). In the context of this dual burden of disease, not enough is known about issues concerning health care access and utilisation amongst internal migrants in South Africa.

Objectives
The objective of this paper is to explore health care utilisation in a cohort of internal migrants and rural-based permanent residents originating from the Agincourt Health and Demographic Surveillance System (HDSS) in South Africa's rural northeast. The paper will examine the profile of migrants and non-migrants and identify patterns and determinants of health care utilisation in the cohort.

Methods
The Agincourt HDSS was established in 1992 and has monitored all births, deaths and in- and out-migrations taking place within the 400 square kilometre study site since inception (Kahn et al., 2012). The Agincourt HDSS is located in the sub-district of Bushbuckridge, Mpumalanga province and is situated about 500 kilometres north east from Johannesburg, South Africa's main metropolis. The surveillance population currently comprises 116000 people living in 31 villages (Kahn et al., 2012).

A 5-year cohort study, the Migrant Health Follow-up Study (MHFUS), commenced in 2017. A cohort of 3800 individuals aged 18 to 40 was randomly selected from the Agincourt HDSS longitudinal research platform and includes residents of the Agincourt sub-district and permanent as well as temporary migrants who maintain contact with their origin households. The first wave of the study yielded a response rate of 82% with data collected from 3103 individuals.

Results
The sample characteristics of the study are presented in Table 1. The majority of migrants (71%) are living at distances of 400km or more away from their original locations (mainly in urban areas of the Gauteng province). In the year before the survey, females of all ages (71%) were more likely than males (33%) to have utilised health care services (see Figure 1). Patterns of health service utilisation were further found to differ by migrant status (Figure 2). The majority of non-migrants who accessed health services visited government facilities (54%), while only 29% of migrants made use of government facilities. In addition, migrants were much more likely than non-migrants to have visited a private health clinic or traditional healer. The results of logistic regression analysis of health care service use are presented in Figures 3 and 4. Migrant males have higher odds (OR = 1.4, $p < 0.01$) and migrant females have lower odds (OR = 0.5, $p<0.01$) of accessing services compared with non-migrants. The same patterns were observed with the use of a migrant status variable categorised by distance from the place of origin. When added to the prediction equation, previous diagnosis of a chronic condition becomes the most powerful predictor of service use (the odds of males and females with chronic conditions having accessed services were 4 times and 9 times that of their non-diagnosed counterparts).

Discussion
Information on health service access and utilisation among internal migrants can greatly assist in developing meaningful public health interventions that seek to improve on the continuity of health care delivery across space. The MHFUS study suggests that patterns of service use differ by gender and migrant status. Further analysis of any differential migrant use of health services, conditional on diagnosis, would be of value.

Table 1: Sample Characteristics

		Non-Migrant (n = 1886)	**Migrant (n = 1217)**
Migrant distance	In study site	1886 (100%)	
	5-400km from study site		347 (29%)
	Over 400km from study site		870 (71%)
Age	Mean (SD)	28,9 (5,9)	29,8 (5,4)
Sex	Male	840 (45%)	722 (59%)
	Female	1046 (55%)	495 (41%)
	$\chi(2)1 = 64,7$; $p<0,001$		
Education	Lower than matric	924 (49%)	276 (23%)
	Matric or post school	962 (51%)	941 (77%)
	$\chi(2)1 = 215,9$, $p<0,001$		
Employment status	Unemployed	1272 (67%)	404 (33%)
	Employed	614 (33%)	813 (67%)
	$\chi(2)1 = 349,3$, $p<0,001$		

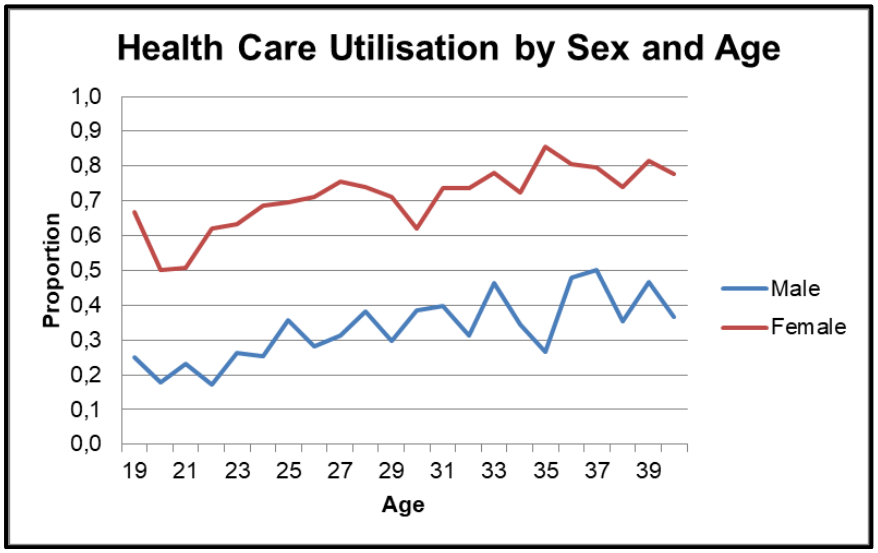

Figure 1: Health care utilisation by age and sex

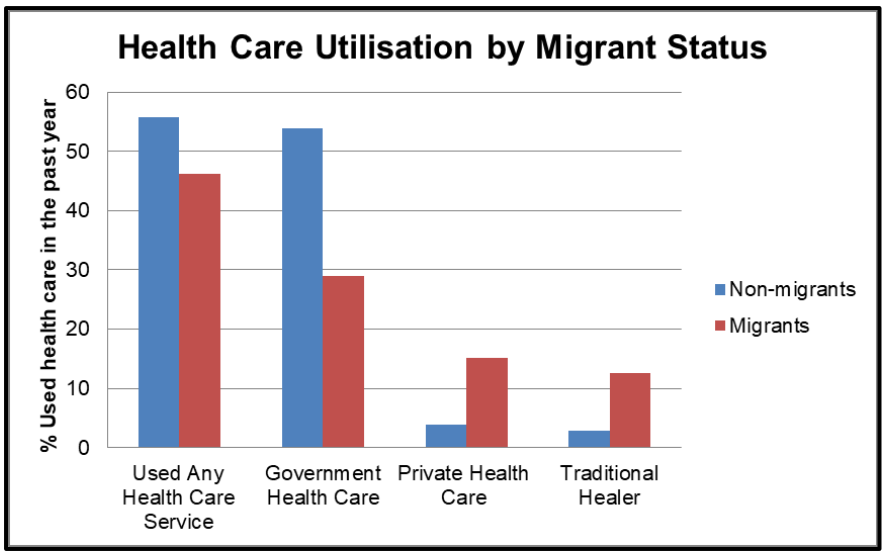

Figure 2: Health care utilisation by migrant status

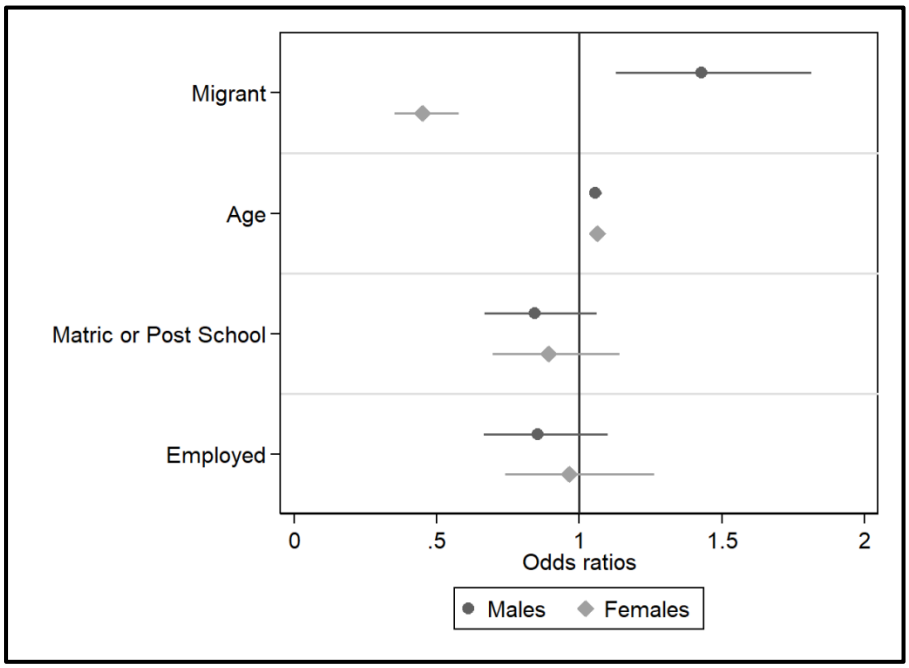

Figure 3: Logistic Regression: Used Health Care Services by Sex

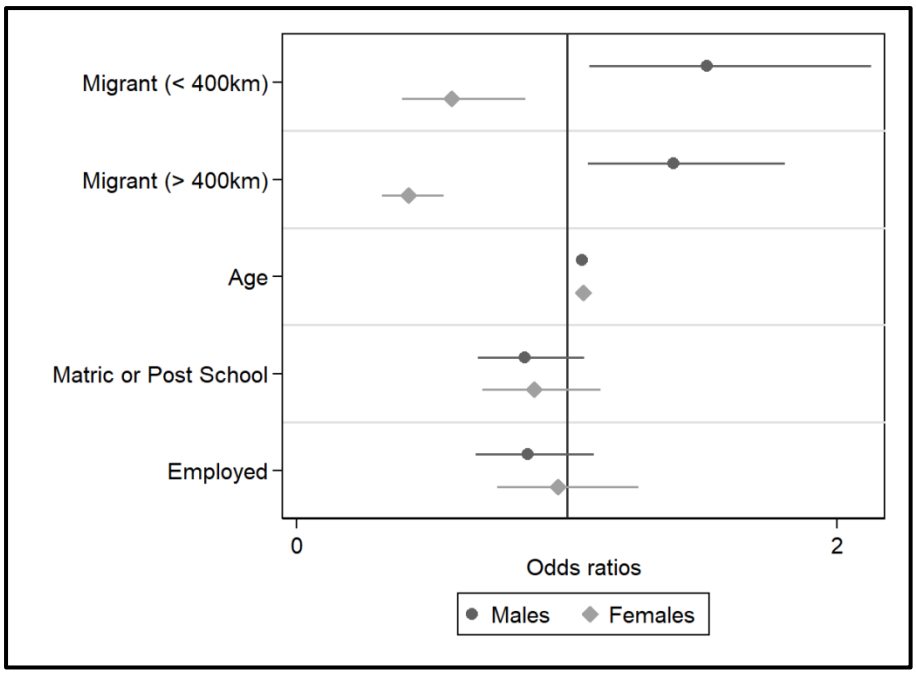

Figure 4: Logistic Regression: Used Health Care Services by Sex (Migrant Distance)

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