How race, internal migration and gender are associated with consistency in healthcare-seeking behaviour in South Africa: Nationally representative longitudinal evidence from 2008 to 2015

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Background. In South Africa (SA), consistently seeking out primary healthcare is more important than ever as the country ages and undergoes epidemiological transition. SA's most racialised individuals – those identifying as black and coloured – often need to migrate within the country to ensure their families' economic stability, and internal migrants often experience difficulties in accessing healthcare compared with non-migrants. But gender matters too, as women tend to seek out healthcare more than men throughout the world, and internal migration affects women's and men's lives differently in SA.
Objectives. To examine differences in the consistency of healthcare-seeking behaviour between internal migrants and non-migrants, among black and coloured residents of SA, by gender. No study in SA to date has been able to examine all three of these elements, despite their important confluence stemming from apartheid and before.
Methods. To do so, this article uses data from the first four waves (2008, 2010 - 2011, 2012, and 2014 - 2015) of the National Income Dynamics Study. A total of 6 131 black and coloured men and women aged ≥18 years in 2008 form the analytical sample. Logistic regressions, with panel weights adjusted for respondent loss to follow-up, predict the likelihood that individual respondents will be consistent in seeking health consultations over the four waves as a function of their racialised identity, internal migrant status, and gender.
Results. Black residents (compared with coloured) and men (compared with women) have the lowest chances of consistently seeking out healthcare. There is no direct internal migration difference in seeking healthcare, but it is conditional upon racial and gender identity.
Conclusion. Black South Africans – especially, but not exclusively, migrant men – do not have the same chances of seeking primary care as their also-racialised coloured counterparts. For population health and clinical efforts, identifying who is at risk of not seeing a doctor is crucial, and this article provides a key update on earlier striking differences in healthcare access between SA's most racialised groups.

Keywords. Gender identity, healthcare, longitudinal analyses, racial identity, migration, South Africa

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Despite the availability of a public healthcare system – the first choice of care for ~71% of South Africa (SA)'s population[1] within a parallel private/public health system – there is vast unmet need for, and barriers to, primary care to treat infectious diseases and chronic conditions, for young and old individuals and across urban and rural spaces.[2-10] SA's history of racial inequality, combined with the HIV epidemic, has hindered the development of a more efficient public primary healthcare system.[11-16] Primary care can also be costly owing to transportation costs for individuals to get to clinics, which are largely understaffed and mismanaged.[17] A taxpayer-provided National Health Insurance plan to alleviate some of these costs and improve primary care access has long been in development, but was still not implemented as of 2025.[18,19] Nevertheless, as SA experiences population and health transitions, it will be increasingly necessary to promote healthcare-seeking behaviour – in whatever ways are possible. It is crucial to identify who is at risk of not regularly seeing a doctor.

SA's black and coloured residents comprise 81.0% and 8.8% of the country's population, respectively,[20] and have less access to high-quality healthcare services[21] than the economically privileged white minority population (7.7%).[20] A few studies have shown that coloured South Africans have greater access to healthcare than black South Africans,[22-24] but this body of evidence is surprisingly underdeveloped compared with research on white v. non-white healthcare access.[25-27] Part of this disparity in healthcare access between black and coloured South Africans is plausibly linked to the

pre-apartheid and apartheid eras, during which black South Africans were effectively pushed to internally migrate to urban areas (with strict residential laws) or to mines in remote areas. In the post-apartheid era (1994 - present), internal migration is still a necessary survival strategy for many black South Africans.[28-31] Internal migrants also experience difficulties in accessing healthcare, compared with people who do not move.[32,33] Although internal migration among coloured South Africans occurs, there is little evidence denoting the continuation of apartheid-era migration patterns and healthcare consequences for this racialised minority population.[34] There is therefore an open question as to whether there are healthcare access differences between black and coloured South Africans, in combination with internal migration experiences. While racial identity is the ubiquitous marker of inequity in SA, gender identity and internal migration experiences matter greatly for health too. Women are more likely to have higher demand for public healthcare than men and to utilise a wider range of services;[35-39] this could in part be due to more frequent interactions with the healthcare system for reproductive, maternity and neonatal healthcare, as well as their facing greater risks of HIV infection than men.[40] Of course, there is gendered variation in health-seeking behaviour due to type of treatment, geographical location, and age of individuals.[11,41-43] Rural women began to engage in labour migration to a large extent towards the end of apartheid,[44] often taking on dangerous, low-paying informal work in urban areas to support their families back home.[28,32,45-47] Unfortunately, black, female, rural-urban migrants also face increased risks of hypertension and non-optimal sleep.[48-50] These findings stand on top of well-known HIV and interpersonal violence risks that rural-urban female migrants have long faced in SA.[51-54] It is reasonable to infer that gender and internal migration experiences play an important part in determining healthcare-seeking behaviour at the national level among racialised minority groups.

Objectives

This article uses longitudinal, nationally representative data to examine differences in the consistency of healthcare-seeking behaviour between black and coloured residents of SA, internal migrants and non-migrants, and men and women. No study in SA to date has been able to simultaneously examine all three of these characteristics (race, migrant status, and gender) – and over time – despite their high relevance in the country. When considering the available evidence, one could expect that women are more consistent in seeking out healthcare than men, and that coloured South Africans would be likely to seek out healthcare to a greater extent than black South Africans. However, it is unclear whether gender and racial differences will persist when factoring in internal migration experiences. This study begins to fill these important gaps in public health knowledge in identifying the groups most at risk of not consistently seeking out healthcare.

Methods

Study design and setting

South Africa's National Income Dynamics Study (NIDS) is one of only a few longitudinal (cohort), nationally representative datasets in sub-Saharan Africa with high-quality migration and health data. The first four waves of the publicly available NIDS data are used in this article: 2008 (wave 1), 2010 - 2011 (wave 2), 2012 (wave 3), and 2014 - 2015 (wave 4).[55-58]

Participants

Participants are included in the analyses only if they participated in all four waves (therefore not lost to follow-up); population weights provided by NIDS correct for bias, stemming from excluding those lost to follow-up over the four waves, in order to maintain the population representativeness of the sample.[59] The inclusion criteria for black and coloured men and women, aged ≥18 years in 2008, result in a maximum sample of 7 897 respondents. Owing to various methodological choices, described in the 'Statistical analysis' subsection, the analytical sample is 6 131 respondents.

Variables

The two outcome (dependent) variables in the analyses – **consistency in seeking health consultations every 2 years ('health consult every 2 years') and consistency in seeking health consultations every year ('health consult every year')** – are derived from one item asked repeatedly across NIDS waves: 'When did you last consult someone about your health?' (In the past 30 days, 1 - 5 months ago, 6 - 12 months ago, >1 and <2 years ago, 2 - 4 years ago, 5 - 10 years ago, Never, and Don't know). This variable is operationalised in two different ways for the purposes of this article. In the first iteration – **health consult every 2 years** – 'consistent' (= 1) is for respondents who sought health consultations within the previous 2 years, across all four waves; respondents who indicated that they sought health consultations within the previous 2 years but only in three waves (or fewer) would be 'inconsistent' (= 0) in their healthcare-seeking behaviour. The second iteration of this outcome variable – **health consults every year** – is a stronger test of consistency owing to a narrower window of seeking out healthcare. Therefore 'consistent' (= 1) is for respondents who sought health consultations within the previous year, across all four waves; respondents who indicated that they sought health consultations within the previous year but only in three waves (or fewer) would be 'inconsistent' (= 0) in their healthcare-seeking behaviour.

The main predictor (independent) variables are: being identified as an **internal migrant** over the course of the four waves (moved at least once over the four waves = 1; did not move = 0); **racial identity** (coloured = 1; black = 0); and **gender identity** (male = 1; female = 0).

Control variables in all models include factors closely linked to seeking healthcare. First, the need to seek out healthcare is influenced by age and at least one pre-existing health condition. Second, financial means to access healthcare itself are jointly influenced by educational attainment, employment status and household wealth. Third, marital status is also included, since married couples (nearly universally across global settings) tend to hold each other accountable for their health relative to unmarried individuals.[60-63] The control variables are respectively operationalised as follows: age in 2008 (as well as age squared); having a pre-existing health condition as of wave 1 (pre-existing

health condition in wave 1 = 1; no pre-existing health condition in wave 1 = 0 (pre-existing conditions listed were tuberculosis, HIV, high blood pressure, diabetes, stroke, asthma, heart problems, cancer, a physical handicap, problems with sight, hearing or speech, a psychological or psychiatric disorder, epilepsy, emphysema, Alzheimer's disease, or another condition)); educational attainment (more than grade 12 = 2; only grade 12 = 1; less than grade 12 = 0); consistent employment across four waves (employment in each wave = 1; employment in some, or no, waves = 0); household assets at baseline, wave 1, calculated as a 0 - 27 score of durable goods (1 point for each) such as a radio, television, cell phone, gas stove, private motor vehicle, and other standard household items; and marital consistency across four waves (married/living with partner = 0; divorced/widowed/separated = 1; never married = 2; changed marital status = 3). In combination, these control variables reduce bias in the estimates uncovering the intimate connections between racial identity, migration experiences and gender identity, and their association with seeking health consultations.

Statistical analysis

Unweighted descriptive statistics of the analytical sample are presented in Table 1a under 'Results'. Bivariate inferences are presented in Table 1b. Bivariate sensitivity analyses (χ^2 tests and *t*-tests) comparing the analytical sample with those excluded – on the basis of not participating in the four waves – are presented in Supplementary Table 1. These analyses are included for transparency and reference; population weights in the regression analyses already adjust for differences between those who participated in all four waves and those lost to follow-up. Furthermore, eligible analytical sample respondents who had at least one missing response over the four waves on the health consultation question (*n*=1 766) are excluded from analyses, and bivariate differences between those and the included respondents are found in Supplementary Table 2. Some of these missing values were by survey-module design, while others were due to refusal or 'don't know' responses; multiple imputation on the dependent variable is not advisable in this case.

Table 1a. Unweighted descriptive statistics for the National Income Dynamics Study analytical sample (*N*=6 131)

	%*	*n*
Health consult every 2 years (in each of waves 1 - 4)		
Yes	35.1	2 152
No	64.9	3 979
Health consult every year (in each of waves 1 - 4)		
Yes	11.6	708
No	88.5	5 423
Internal migrant (any wave)		
Yes	24.9	1 524
No	75.1	4 607
Racial identity (wave 1)		
Black	86.2	5 286
Coloured	13.8	845
Gender identity (wave 1)		
Male	31.5	1 931
Female	68.5	4 200
Age (years), mean (SD) (wave 1)	41.0 (15.9)	6 131
Educational attainment (wave 1)		
Less than grade 12	80.0	4 904
Grade 12 only	14.5	891
More than grade 12	5.5	336
Consistent employment (across 4 waves)		($n_{missing}$=8)
Yes	16.6	1 014
No	83.4	5 109
Pre-existing health condition (wave 1)		
Yes	32.6	2 001
No	67.4	4 130
Marital consistency (across 4 waves)		($n_{missing}$=21)
Married/living with partner	32.7	1 998
Divorced/widowed/separated	11.4	698
Never married	34.8	2 124
Changed marital status	21.1	1 290
Household assets (score 0 - 27), mean SD (wave 1)	6.1 (3.5)	6 131

*Except where otherwise indicated. Note: Percentages may not add up to 100 owing to rounding.

Logistic regressions, with panel weights adjusted for respondent loss to follow-up, predict the likelihood that individual respondents will be consistent in seeking health consultations over the four waves. There are two different sets of regressions, with the first predicting having a **health consult every 2 years** in each wave (Table 2) and the second predicting having a **health consult every year** in each wave (Table 3). In

Table 1b. Chi-square tests of health-seeking behaviour by race, internal migrant status, and gender

	Men, %			Women, %		
	All	Black	Coloured	All	Black	Coloured
Health consult every 2 years (= 1 consistent)						
Non-migrants	25.9	23.5	39.5	41.9	41.6	43.7
Migrants	16.9	14.3	44.0	36.0	34.3	49.1
χ^2 test	***	***	NS	**	***	NS
Health consult every year (= 1 consistent)						
Non-migrants	7.3	7.2	8.3	15.6	15.8	14.5
Migrants	3.4	2.8	10.0	8.7	7.6	16.7
χ^2 test	**	***	NS	***	***	NS
Observations	1 931	1 676	255	4 200	3 610	590

***p<0.001; **p<0.01; *p<0.05; *p<0.10; NS = not significant.

Tables 2 and 3, the first of five models includes the main predictors and controls: internal migrant, racial identity, and gender identity. However, models 2 through 5 are each stratified by internal migrant status and gender to estimate the full interaction between these characteristics and racial identity. Post-regression Chow tests on fully interacted, pooled models are employed to distinguish between the magnitude of coefficients based on the subsample combinations of migrant status, racial identity and gender found in models 2 - 5 of Tables 2 and 3.

Ethical considerations

Informed consent to participate was obtained by non-author investigators through the University of Cape Town for primary data collection beginning in 2008.

Results

Descriptive and outcome data

Table 1a depicts the outcome, predictor and control variables for the full analytical sample of respondents. Notably, ~35% reported consistently seeking health consultations within the previous 2 years (health consult every 2 years), and 12% reported seeking a consultation within the previous year (health consult every year). A quarter of respondents had engaged in an internal migration at least once in the four NIDS waves. Approximately 86% of the analytical sample self-identified as black, while the remaining 14% self-identified as coloured. There is an uneven gender balance, largely owing to gendered differences in availability to respond to the survey, with over two-thirds self-identifying as female. Differences between respondents lost to follow-up during the four NIDS waves (predominantly internal migrants) and those with missing health consult values, compared with the analytical sample, are presented in the supplementary tables.

Bivariate inferential statistics (χ^2 tests, presented in Table 1b) show that consistently seeking out health consultations (both outcome measures) and migration are dependent upon one another, for men and women; migrants tend to seek health consultations less often. The logistic regressions presented in Tables 2 and 3 offer a more robust assessment of these relationships.

Key findings

The results presented in Table 2 most notably show that coloured migrant men have more than double the log odds of seeking health consults every 2 years than black migrant men (models 2 and 3; p<0.001); these cross-model, subsample differences appear substantive too (p<0.05, Chow test). Furthermore, coloured migrant women have substantially higher log odds of health consults every 2 years than black migrant women (model 5; p<0.05), but there are no differences in healthcare-seeking behaviour between non-migrant coloured and black women (model 4); however, the differences between coloured and black women's log odds of consistent health consults every 2 years, by migrant status (across models), does not appear substantive (p≥0.10, Chow test).

Additional post-regression tests offer even more insight into racial differences in seeking health consults every 2 years across, and by, gender and migrant status. Above all else, the contrasts between coloured male migrants, relative to black male migrants, regarding the log odds of seeking health consults every 2 years are higher and stronger than the differentials of all other groups (p<0.05, Chow test). The racial contrasts among non-migrants between men and women are notable too (models 2 and 4, p<0.05, Chow test), as well as those among migrants (p<0.05, Chow test).

The logistic regressions presented in Table 3 test whether the relationships in Table 2 endure, when considering a shorter window for reporting routinely seeking health consults every year. The results from the confluence of race, gender and internal migration status in models 2 - 5 are quite different in Table 3 compared with Table 2. In Table 3, only coloured male migrants (model 3) and coloured female migrants (model 5) are more likely than their black male and female (respectively) migrant counterparts to consistently have a health consult in the previous year – and these effects are marginal (p<0.10). There are no differences in health consultation-seeking behaviour every year by racial identity among male non-migrants (model 2) or female non-migrants (model 4). One cross-gender substantive contrast exists: the strong positive coefficients for coloured male migrants compared with black male migrants differ from the racial differences among female non-migrants (models 3 and 4; p<0.10, Chow test).

Table 2. Logistic regressions predicting the log odds of consistent health consults every 2 years

	Model and respondent inclusion criteria				
	1	2	3	4	5
	All	Male, non-migrant	Male, migrant	Female, non-migrant	Female, migrant
Internal migrant	0.13				
(any wave; ref. Not)	(–0.09 - 0.35)				
Male (ref. Female)	–0.85***				
	(–1.04 - –0.67)				
Coloured	0.57***	0.85**	2.32***	0.19	0.74*
(ref. Black)	(0.29 - 0.86)	(0.31 - 1.39)	(1.27 - 3.37)	(–0.16 - 0.54)	(0.05 - 1.44)
Age (continuous)	0.02	0.09*	0.12	0.01	–0.01
	(–0.01 - 0.05)	(0.01 - 0.17)	(–0.04 - 0.29)	(–0.03 - 0.05)	(–0.08 - 0.05)
Age^2	0.00	–0.00#	–0.00	0.00	0.00
	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)
Educational attainment					
(ref. Less than grade 12)					
Grade 12 grade only	0.07	0.48	0.93*	0.03	–0.34
	(–0.19 - 0.32)	(–0.12 - 1.09)	(0.12 - 1.73)	(–0.32 - 0.38)	(–0.87 - 0.19)
More than grade 12	0.65***	0.89*	0.97	0.83**	–0.05
	(0.27 - 1.02)	(0.07 - 1.70)	(–0.42 - 2.35)	(0.30 - 1.36)	(–0.76 - 0.66)
Consistent employment	0.25*	0.38	0.29	0.08	0.16
(across four waves; ref. Not)	(0.01 - 0.49)	(–0.10 - 0.85)	(–0.47 - 1.05)	(–0.27 - 0.43)	(–0.45 - 0.77)
Pre-existing health condition	0.95***	0.87***	0.19	1.05***	1.06***
(wave 1; ref. None)	(0.77 - 1.13)	(0.46 - 1.28)	(–0.52 - 0.90)	(0.83 - 1.27)	(0.56 - 1.56)
Marital consistency					
(across four waves; ref. Married/living with partner)					
Widowed/divorced/separated	0.05	0.60	0.62	0.08	–0.02
	(–0.23 - 0.33)	(–0.24 - 1.43)	(–1.68 - 2.93)	(–0.24 - 0.40)	(–1.31 - 1.26)
Never married	–0.24*	–0.54#	–0.11	–0.01	–0.37
	(–0.48 - –0.00)	(–1.16 - 0.07)	(–1.04 - 0.83)	(–0.32 - 0.31)	(–0.96 - 0.22)
Changed marital status	–0.32**	–0.65*	–0.65	-0.11	–0.39
	(–0.55 - –0.09)	(–1.25 - –0.04)	(–1.55 - 0.25)	(-0.42 - 0.21)	(–0.93 - 0.15)
Household assets	0.01	0.00	0.02	–0.00	0.04
(wave 1; score 0 - 27)	(–0.02 - 0.03)	(–0.05 - 0.06)	(–0.08 - 0.12)	(–0.03 - 0.03)	(–0.02 - 0.10)
Constant	–1.78***	–4.17***	–5.30**	–1.58**	–0.69
	(–2.57 - –1.00)	(–6.20 - –2.14)	(–8.56 - –2.04)	(–2.67 - –0.49)	(–2.17 - 0.80)
Observations, *n*	6 102	1 369	551	3 221	961
Pseudo r^2	0.108	0.135	0.130	0.079	0.072

***p<0.001; **p<0.01; *p<0.05; #p<0.10; 95% confidence intervals in parentheses.

Discussion

Key results

These results offer crucial insight into health access inequities among SA's most racialised groups, between men and women, and between those who have recently engaged in an internal migration and those who have not. Broadly, black South Africans are less likely to be consistent in seeking out health consultations than coloured South Africans, and men are less likely than women to do the same. These effects are most pronounced among internal migrant men and women, where black South Africans are substantively less likely than coloured South Africans to be consistent in seeking out health consultations. On the whole, one can infer that the group most at risk of being inconsistent in seeking out healthcare is black internal migrant men (reflected in bivariate tests and post-regression tests) – those upon whom SA has long relied to produce its mineral wealth.[64-67] Despite being the majority population group, black South Africans – especially, but not exclusively, migrant men – do not have the same chances of seeking primary care as their also-racialised coloured counterparts.

The above health access inequities must be viewed against a background of rampant unemployment and inequality, especially among black South Africans[68-70] and as SA continues through its epidemiological transition and navigates the problems of a diminished fresh (and clean) water supply[71] and nation-wide severe, now-routine power outages.[72] Being able to access primary care amid a potential multitude of adverse conditions – for many of SA's most vulnerable residents – would allow individuals to be diagnosed more quickly for chronic issues, as well receive professional advice on how to stay healthy in various challenging circumstances. Undoubtedly, population health is deeply

Table 3. Logistic regressions predicting the log odds of consistent health consults every year

	Model and respondent inclusion criteria				
	1	2	3	4	5
	All	Male, non-migrant	Male, migrant	Female, non-migrant	Female, migrant
Internal migrant	–0.10				
(any wave; ref. Not)	(–0.47 - 0.27)				
Male	–0.81***				
(ref. Female)	(–1.12 - –0.51)				
Coloured	0.17	0.38	1.33#	–0.13	0.78#
(ref. Black)	(–0.26 - 0.60)	(–0.45 - 1.21)	(–0.09 - 2.74)	(–0.74 - 0.47)	(–0.10 - 1.65)
Age (continuous)	0.07**	0.17	0.14	0.06#	0.07
	(0.02 - 0.13)	(–0.03 - 0.37)	(–0.10 - 0.39)	(-0.01 - 0.14)	(–0.03 - 0.16)
Age^2	–0.00#	–0.00	–0.00	–0.00	–0.00
	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)	(–0.00 - 0.00)
Educational attainment					
(ref. Less than grade 12)					
Grade 12 only	–0.18	0.21	2.03**	–0.34	–0.26
	(–0.66 - 0.30)	(–0.92 - 1.33)	(0.51 - 3.55)	(–0.93 - 0.26)	(–1.42 - 0.90)
More than grade 12	0.41	0.30	0.36	0.78	–0.41
	(–0.25 - 1.06)	(–0.91 - 1.52)	(–2.03 - 2.73)	(–0.16 - 1.72)	(–1.63 - 0.81)
Consistent employment	0.05	0.19	0.41	–0.49	1.09**
(across four waves; ref. Not)	(–0.36 - 0.46)	(–0.69 - 1.07)	(–1.08 - 1.90)	(–1.18 - 0.19)	(0.27 - 1.91)
Pre-existing health condition	1.51***	1.20***	1.87**	1.65***	1.53***
(wave 1; ref. None)	(1.24 - 1.78)	(0.61 - 1.78)	(0.66 - 3.07)	(1.32 - 1.98)	(0.76 - 2.30)
Marital consistency					
(across four waves; ref. Married/living with partner)					
Widowed/divorced/separated	0.16	0.02	1.49	0.28	0.07
	(–0.19 - 0.51)	(–1.05 - 1.08)	(–0.75 - 3.72)	(–0.13 - 0.69)	(–1.42 - 1.55)
Never married	–0.31	–0.94	–0.45	0.10	–1.05*
	(–0.71 - 0.09)	(–2.21 - 0.33)	(–2.04 - 1.13)	(–0.43 - 0.62)	(–1.98 - –0.13)
Changed marital status	–0.28	–0.74#	–0.36	–0.20	–0.17
	(–0.61 - 0.05)	(–1.52 - 0.04)	(–1.86 - 1.15)	(–0.63 - 0.24)	(–1.09 - 0.74)
Household assets	0.02	–0.00	0.05	0.01	0.02
(wave 1; score 0 - 27)	(–0.02 - 0.05)	(–0.09 - 0.09)	(–0.19 - 0.28)	(–0.03 - 0.06)	(–0.09 - 0.13)
Constant	–4.84***	–7.91**	–9.88***	–4.70***	–4.54***
	(–6.26 - –3.43)	(–13.81 - –2.02)	(–15.24 - –4.53)	(–6.65 - –2.74)	(–6.85 - –2.24)
Observations, *n*	6 102	1 369	551	3 221	961
Pseudo r^2	0.179	0.175	0.241	0.156	0.166

***p<0.001; **p<0.01; *p<0.05; #p<0.10; 95% confidence intervals in parentheses.

connected to the extent to which individuals seek out primary care, especially when factoring in these major, national issues; continuing to identify where inequities lie in healthcare access is essential. The SA government has long recognised this too and has engaged in sustained efforts to make primary care accessible for everyone, including in the remote areas. The government understands that people throughout the country face exposure to a wide variety of diseases and health challenges that can be mitigated by the presence of health infrastructure; in 2018 it devised a Policy Framework and Strategy for Ward-Based Primary Healthcare Outreach Teams[73] to achieve this. However, the government is keenly aware of the difficulties in doing so resulting from lack of training to develop the necessary human capital, lack of funding for physical space, and lack of management, in addition to the difficulty in convincing registered nurses and doctors to work in rural areas, where roughly one-third of South Africans live.[74] The government has been proactive, nonetheless, by hiring 'enrolled nurses' where necessary in the absence of registered nurses to at least provide some primary care where desperate need was identified.[73]

Study limitations

This study focuses on the key differences in consistent healthcare-seeking behaviour among SA's two most racialised groups, at the expense of an analysis examining differences between white and Asian/Indian/other racialised South Africans; this was in part done because of the relatively high prevalence of migration among black and coloured South Africans, and cell sizes issues if including other groups. Furthermore, these analyses emphasise consistency

in seeking health consultations over time, but do not utilise fixed effects regressions to understand factors that lead to changes in healthcare-seeking behaviour; this is outside the scope of this study, yet important to contextualise what this article does not do. Then, there remain issues of respondent loss to follow-up and survey design choices leading to missingness in the dependent variables (which should not be imputed, above and beyond concerns about the randomness of these missing values) of the analyses. Analytical issues pertaining to the differences in the types of individuals who are excluded from these analyses are laid out in the supplementary tables (and adjusted for in regressions through panel weights if lost to follow-up); the ideal analyses would not be missing any of these data, which would minimise error.

Conclusion

Ultimately, the objectives of this article make it the first longitudinal, national-level evidence that racial identity, migration experiences, and gender identity simultaneously matter in seeking out healthcare; it is therefore generalisable to the SA population between 2008 and 2015. In sum, black residents (compared with coloured), men (compared with women), and black internal migrant men (relative to non-migrant men, coloured migrant men, and women) have the lowest chances of consistently seeking out healthcare. These intersections are robust and meaningful. Considering the salience of these stratifying characteristics in SA society, and the large differences found between the country's two most racialised groups, amid still extreme inequality, it remains important to empirically pinpoint key factors differentiating access to healthcare. SA policy-makers and scholars ought to use these new findings as a baseline to determine how to improve access to primary healthcare, especially as a National Health Insurance plan becomes fully realised.

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