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Internal Migration and Access to Health Insurance in Ghana: A Gendered Perspective.

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abstract

Universal health coverage is a core strategy for attaining Sustainable Development Goal 3 of ensuring healthy lives and promoting wellbeing. Migration, like gender, is a social determinant of health and access to health insurance. Complementing recent studies on equitable access to health care, this paper examines the relationship between internal migration and access to health insurance in Ghana using a gendered lens. This study utilises data on 35302 persons (16685 men and 18617 women) aged 15 years and above from the Ghana Living Standards Survey Round 7. Using gender-stratified logit models, we assess the effects of migrant status on current health insurance enrolment adjusting for other background factors. Overall, about 56% of people are enrolled on health insurance, with higher enrolment among women (60%) than men (43%). Urban non-migrants and urban in-migrants have the highest proportions enrolled while rural in-migrants have the lowest. Apart from urban non-migrants, rural-urban migrants have a higher proportion enrolled than all other categories. Among women, rural-urban migrants are less likely than urban non-migrants to be enrolled but among men only this applies to urban-rural migrants. Rural-rural migrants are the least likely to be enrolled, compared with urban non-migrants among all groups. Internal migration is significantly associated with access to health; however, the patterns of association are different for men and women in Ghana. The findings highlight the unequal access by in-migrants to healthcare. Efforts to improve universal access to health care must strategically target migrants, using a gendered approach, to increase their health insurance coverage in Ghana.

Background

Out-of-pocket health expenditure is financially catastrophic for millions of people globally. It excludes many from accessing healthcare and impoverishing others across low and middle-income countries annually (Etienne et al., 2010; Sirag & Mohamed Nor, 2021). Out-of-pocket payment for health care services is a common system in many low-and-middle income countries (LMICs), which denies large parts of their populations access to quality healthcare because of the associated financial burden for many households each year (Mills, 2014; Xu et al., 2003). Catastrophic health expenditure is pervasive and impoverishes many across sub-Saharan Africa (Njagi et al., 2018).

The problems associated with out-of-pocket payment for health services, especially in developing countries have received international attention and support in recent years. This has consequently contributed to a shift in the global development paradigm. The Sustainable Development Goals (SDG) Target 3.8 aims to achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all (United Nations, 2015). Access to health insurance is vital to the provision of universal health coverage as it gives financial protection against high costs associated with health care. This notwithstanding, there is evidence of disproportionate access to health insurance across many LMICs where migrants face peculiar barriers towards accessing health insurance (Chen et al., 2017; Lattof, 2018; Zhang et al., 2017).

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There is also ample evidence of gender-related disparities in vulnerability to health conditions, access to health care and out-of-pocket payments in many LMICs (Onah & Govender, 2014; Srivastava et al., 2021). Some studies indicate gendered differences in access to healthcare, with different social determinants of access for men and women (Dixon et al., 2014).

Although migration seems to have positive and negative health outcomes for migrants, the 2020 World Migration Report indicates that migrants generally struggle to access healthcare due to discrimination, corruption and other social and legal barriers (Vearey et al., 2020). Nevertheless, generalizable research on this subject is scant (IOM, 2020). Furthermore, gender is a key ubiquitous issue in the SDGs. Migration on the other hand, is a key feature of the 21st century, which significantly affects socioeconomic development. There is a growing need to assess the 2030 Agenda for Sustainable Development through a multifaceted human rights lens that comprises gender and migration (Holliday et al., 2019). The SDG Target 3.8 and its corresponding indicators highlight the unequivocal contributions of gender and migration towards their attainment. The need to disaggregate sustainable development indicators by gender and migration status is explicit in the SDG Target 17.18, and is re-emphasised in the commitment by African nation states in the Addis Ababa Declaration on Population and Development in Africa beyond 2014 to disaggregate data by sex and population subgroups (ECA et al., 2013).

Relevant empirical insights are necessary to illustrate the significant contribution of migration towards the attainment of many spheres of sustainable human development (Adger et al., 2019). However, this is missing in the literature on healthcare financing. Moreover, there is little empirical work on gendered differences in the migration and health nexus. The gap in access to healthcare can be better explained by critically examining gendered issues in the sector and how migration influences these. A gendered assessment of migration-health nexus highlights the unique

access of individuals to universal health coverage by virtue of their being women and/or migrants (Holliday et al., 2019). This will provide an opportunity to assess the prospects and challenges for policies and programmes towards the realisation of health-related SDGs.

Health Insurance in Ghana

In 2004, Ghana was the first sub-Saharan African country to begin the experimentation and implementation of her National Health Insurance Scheme (NHIS). This policy was meant to eliminate out-of-pocket payment (popularly known as the cash-and-carry system) and to promote equitable access to health services for all Ghanaians (Rajkotia & Frick, 2012). The scheme is a social health intervention policy that allows people to contribute into a common fund to support poor households, and the vulnerable who are unable to afford out-of-pocket payments to access affordable health care at health facilities. The scheme has since been shown to have reduced out-of-pocket payment for primary health care and medications in public health facilities considerably (Kanmiki et al., 2019). Even though it does not absolve individuals of catastrophic costs for surgeries and operations, the NHIS is known to insulate insured patients better than the uninsured (Okoroh et al., 2018, 2020). From a less than one percent enrolment before the NHIS was rolled out in 2003, national enrolment increased to 33% in 2011, 34% in 2012 and about 54% in 2021 translating into about 16.75 million people. The NHIS was targeting an enrolment of 20 million at the end of 2023 (NHIA, 2011; Naatogmah, 2022; 2023).

Following the prospects and successes chalked by the Ghana National Health Insurance Scheme (NHIS), a number of studies have investigated the factors associated with its access as well as the impact it has made on reducing cost of healthcare (Awuah et al., 2018; Dake, 2018; Jehu-Appiah et al., 2011; Nsiah-Boateng & Aikins, 2018; Okoroh et al., 2020). The evidence indicates inequitable access to health insurance with higher coverage for the wealthy and urban populations (Amu & Dickson, 2016; Anamoa-Pokoo et al., 2020; Dake, 2018; Kumi-Kyereme & Amo-Adjei, 2013). NHIS coverage is acknowledged to have increased the utilisation of health facilities among the urban poor and slum dwellers in Ghana (Awuah et al., 2018; Owusu-Ansah et al., 2016). The implementation of the policy had initial challenges where health insurance cards could not be used across administrative boundaries. This excluded persons who had crossed district boundaries or inter-district migrants from accessing health care even when they had subscribed for the service and had valid cards. This earlier challenge has been largely addressed but another challenge emerged when persons register but are unable to claim their health insurance cards before migrating into other administrative areas (Fusheini et al., 2017). Importantly, there are still critical challenges with unequal universal health coverage in terms of the selected care and medications covered by the scheme. Even though the policy has been running for decades, there are threats to its sustainability because of the low doctor-to-patient ratio, fraud and abuse as well as the high number of health insurance holders who have to make out-of-pocket payments to receive health care on time.

To effectively expand enrolment onto the NHIS, there is a requirement for an assessment of multiple factors in multiple contexts (Jehu-Appiah et al., 2011). It is important to note that, besides the National Health Insurance Scheme, there are private health insurance schemes which are accessed largely by wealthy urban residents and workers in large corporate institutions. These private health insurance schemes mainly provide access to healthcare in designated top-tier health facilities. The purpose of this paper is to investigate, using a nationally representative sample, the impacts of migration status on health insurance coverage by gender.

Gender, Migration and Health

Migration and development research have largely focused on the developmental impacts of migrant remittances on migrant households and the contribution of migrants in the destination areas. In particular, there is scanty but diverse corpus of research focusing on health outcomes referring to mortality, morbidity and subjective health and well-being (Afrifa-Anane et al., 2020; de-Graft Aikins et al., 2019; Gkiouleka & Huijts, 2020; IOM, 2020) although these lack representativeness and generalizability (Afrifa-Anane et al., 2020; de-Graft Aikins et al., 2019; IOM, 2020). Furthermore, there is scanty research addressing the determinants of health outcomes for individuals based on an intersection of their migrant status and gender (Gkiouleka & Huijts, 2020).

The growing importance given to environmental migration, international migration and undocumented migration greatly dwarfs the relevance of internal migration which is rather more dominant in sub-Saharan Africa. Though historically dominated by single young males, internal migration in Ghana has increasingly been feminised (Awumbila, 2015; IOM, 2020). The 2021 Population and Housing Census has shown a decrease in overall lifetime migration (27%), but particularly, a higher proportion of lifetime migrants among females (28.1%) than males (25.8%) (Ghana Statistical Service, 2023). It is suggested that there was an increase from 30% in 2000 to 35% in 2010 (Ghana Statistical Service, 2014).

Migration can exacerbate the conditions for health risk factors such as reduced access to healthcare and increased exposure to health hazards (Vearey et al., 2020). Migrants face considerable challenges that restrict their access to sustainable health care (Chen et al., 2017; Zhang et al., 2017), including even in high-income countries with universal health care such as Canada (Richter et al., 2020). Migration is not only a direct social determinant of healthcare but also a determinant of other key factors that affect access to healthcare (Vearey et al., 2017).

The discourse around migration and health reveals that international migrants generally have better access to good health care services at their places of destination compared to that of origin (Vearey et al., 2020). However, the same cannot be said of internal migrants. Little is known empirically about internal migration and health wellbeing, but there is documented evidence of the poor conditions that internal migrants live in at their place of destination (Awumbila et al., 2014; Awumbila & Ardayfio-Schandorf, 2008). Migrant men and women are differently exposed to opportunities and vulnerabilities associated with health outcomes and access to health care (Gkiouleka & Huijts, 2020). There is a diverse but targeted focus on welfare among migrants, particularly, female migrants from Northern Ghana in urban areas in the south (Adjei et al., 2017; Awumbila & Ardayfio-Schandorf, 2008; Kwankye et al., 2007). In recent times, research on gender, migration and health have been more qualitative in approach and focused on smaller selected geographical areas in Ghana (Malagón et al. 2021; Spencer et al., 2022; Opuni et al., 2023). Studies on the gendered dynamics of migration impact on access to healthcare within the Ghanaian context using nationally representative dataset, which will allow for generalisation of findings are non-existent.

Methodology

Data: This study is based on data from the seventh wave of the Ghana Living Standards Survey (GLSS 7) conducted from October 2016 to October 2017 by the Ghana Statistical Service. The GLSS is a nationally representative survey, which collects information on household living conditions and general population wellbeing. The survey also collects detailed community, household and individual-level data pertaining to demographics, migration, education, health and employment among others. A two-stage sampling involved the selection of 1,000 enumeration areas from which households were subsequently sampled. Interviews were conducted for 14,009 households using Computer-Assisted Personal Interviewing (CAPI) (GSS, 2019). This current study involved data on 35302 persons (16450 males and 18617 females) aged 15 and above who were born in Ghana.

Variables: Table 1 presents details of the variables included in the study. The control variables are selected based on their relevance as socioeconomic and demographic determinants of access to health insurance and their availability in the GLSS 7.

Analyses

The associations between migration status and health insurance coverage were first examined at the bivariate level separately for men, women and the total population. The outcome variable, health insurance coverage, is dichotomous; hence, we employed binary logistic regression models using maximum likelihood estimation techniques. The regression coefficients are transformed into odds ratios for the observed associations between migrant status and health insurance coverage (Table 3). We estimated separate models for women, men and the total sample, adjusting for selected socioeconomic and demographic variables. The separate models for men and women examine the within-group differences while the model for the total population examines the difference between men and women controlling for other characteristics.

Table 1 Description and measurement of variables in the study

Type of variable	Variable name	Coding / Measures	Explanation
Dependent variable	Health insurance	Not covered	Current access to any form of health insurance
		Covered	
Independent variables	Migration status	Urban non-migrant	Definition of migration status is based on lifetime migrant i.e. place of birth differs from place of current residence
		Rural non-migrant	
		Urban-urban migrant	
		Urban-rural migrant	
		Rural-urban migrant	
		Rural-rural migrant	
	Gender	Men	Binary categorisation as per official Ghanaian classification
		Women	
Control variables	Educational status	No education/Primary	Highest educational level attained
		Junior High/Middle Level	
		Secondary/Tertiary	
	Age	<20	Age in groups
		20-39	
		40-59	
		60+	
	Marital status	Never married	Current marital status of individual.
		Currently married/in union	(Formerly married group include the separated/divorced/widowed)
		Formerly married	
	Poverty status	Very poor	
		Poor	
		Non poor	
	Economic activity	Employed	Individual's current economic activity status
		Not employed	
		Not in labour force	
	Religion	Orthodox Christian	Individual's religious affiliation
		Pentecostal/Charismatic	
		Other Christian	
		Muslim	
		Other	
	Ethnicity	Akan	Ethnic group to which individual belongs
		Ewe/Ga-Dangme	
		Mole-Dagbani	
		Gursi-Gurma-Mande	
		Other	
	Development Zone	Northern	Development zone where individual currently resides (Atiglo et al., 2020)
		Middle Belt	
		Coastal	

Results

Table 2a and 2b presents the background characteristics and the percentage distribution of health insurance coverage of the population aged 15 and above by gender, migrant status and selected socio-demographic characteristics. The results show that a little over half of the sample were covered by health insurance in Ghana in 2015. In line with results from the 2010 population and housing census, majority (57%) of the sample were lifetime non-migrants. Urban-rural migration is the least type of migration in Ghana. Migrants commonly originated from rural areas and there were more rural out-migrants with a rural destination (21%) than urban (15%). Generally, as shown in Figure 1, the proportion with health insurance coverage was higher for women (60%) than for men (44%). Among both men and women, health insurance coverage was highest among urban non-migrants (50% and 67% respectively)

and lowest among rural-rural migrants (35% and 53% respectively). Overall, urban in-migrants had higher proportions of health insurance coverage than rural in-migrants, particularly for men. In addition, migrants from urban origins had relatively higher coverage than their counterparts with rural origins. Among women, in particular, urban-rural migrants had a higher proportion covered than rural non-migrants but the reverse is true for men. The women's migrant category, i.e. rural-rural migrants, with the lowest health insurance coverage (53%) had a higher proportion covered than urban non-migrant men with the highest coverage (50%).

Health insurance coverage was highest among persons aged 60 and above (62%) and lowest among those aged 40-59 (50%). Among men only, the age group with the lowest proportion covered was 20-39. Notably, like for migrant status, the women's age group 40-59 with the lowest proportion covered (57%) was still higher than the men's group (60+) with the highest proportion (56%). As expected, the proportion covered by health insurance increased with level of education. As with migrant status and age group, women with no formal education who had the lowest proportion of coverage still had a little higher proportion covered than men with secondary/tertiary education. Overall, the formerly married population had the highest proportion (56%) covered while the never married population had the lowest proportion (52%). Among men, however, the formerly married had the least coverage (40%) while the never married had the highest proportion (47%), but among women, marital status did not have any significant statistical difference in health insurance coverage.

Table 2a. Percentage distribution of study sample by health insurance coverage, gender, migrant status and selected socio-demographic characteristics

	Total (n=35302)		**Men**	**Women**
	Frequency	Proportion covered (%)	Proportion covered (%)	Proportion covered (%)
Health insurance coverage				
No	16685 (47.3)	-	55.6	**40**
Yes	18617 (52.7)	-	44.4	60
Gender		***		
Men	16450 (46.6)	44.4	-	-
Women	18852 (53.4)	60	-	-
Migrant status		***	***	***
Urban non-migrant	7062 (20.1)	58.5	49.6	66.5
Rural non-migrant	13004 (36.8)	52.1	44.9	59.7
Urban-urban migrant	1448 (4.1)	57	49	63.7
Rural-urban migrant	5215 (14.8)	55.5	46.7	62.3
Urban-rural migrant	1050 (3.0)	52.6	41.5	62.6
Rural-rural migrant	7522 (21.3)	45.6	35.3	52.6
Age		*******	*******	*******
<20	6524 (18.5)	54.5	50.6	58.6
20-39	15389 (43.6)	50.8	40	60.4
40-59	8663 (24.5)	49.7	41.2	56.6
60+	4726 (13.4)	62.2	56	66.6
Educational Status[!]		*******	*******	*******
No education/Primary	14924 (42.3)	49.6	38.3	56.2
Junior High/Middle	11653 (33.0)	50.2	41.1	59.4
Secondary/Tertiary	8725 (24.7)	61.5	54.8	70.9

*p < .05 **p < .01 ***p<.001 n/a not applicable !variable has missing cases

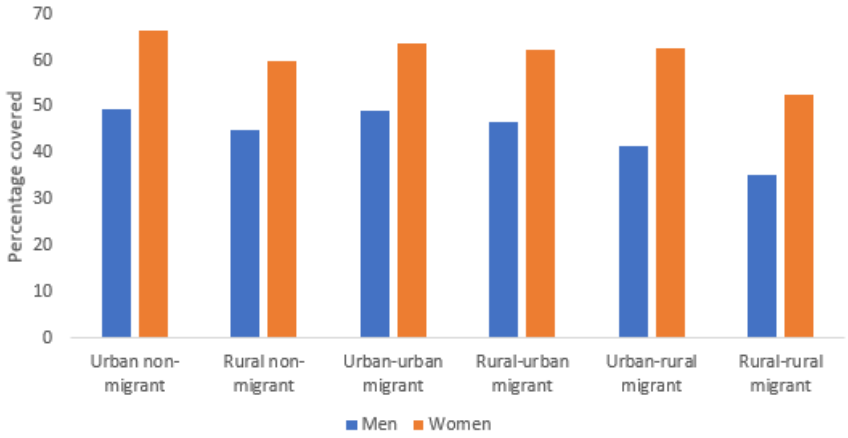

Figure 1 Migrant status and health insurance coverage by gender

Table 2b. Percentage distribution of study sample by health insurance coverage, gender, migrant status and selected socio-demographic characteristics

	Total (n=35302)		**Men**	**Women**
	Frequency	Proportion covered (%)	Proportion covered (%)	Proportion covered (%)
Marital status		***	***	
Never married	12812 (36.3)	51.8	46.6	58.8
Currently married	17823 (50.5)	52.5	42.8	60.9
Formerly married	4667 (13.2)	56.1	39.7	59.7
Poverty status		***	***	***
Very poor	5222 (14.8)	52.7	45.8	59
Poor	6473 (18.3)	49.1	41.1	56.1
Non-poor	23607 (66.9)	53.8	45	61.4
Economic activity		***	***	***
Employed	22299 (63.2)	48.9	39.6	57.4
Unemployed	4003 (11.3)	56	45.3	62.8
Not in labour force	9000 (25.5)	60.9	56.3	65
Development zone		***	***	***
Coastal	12767 (36.2)	47.5	39	54.8
Middle Belt	9720 (27.5)	50.4	40.8	58.9
Northern	12815 (36.3)	59.7	52.3	66.3
Religion		***	***	***
Orthodox Christian	10132 (28.7)	60.9	53.5	67.1
Pentecostal/Charismatic	10221 (29.0)	49.3	40.4	56.1
Other Christian	3629 (10.3)	49	41	55.4
Muslim	7441 (21.1)	55.5	46.3	64.3
Other	3879 (11.0)	38.6	32.6	46.6
Ethnicity		***	***	***
Akan	12665 (36.4)	49.1	40.3	56.6
Ewe/Ga-Dangme	5931 (17.1)	50.9	42.4	58.4
Mole-Dagbani	9404 (27.1)	59.4	51.0	66.9
Gursi/Gurma/Mande	4890 (14.1)	52.1	45.3	58.2
Others	1879 (5.4)	53.8	45.2	61.6

*p < .05 **p < .01 ***p<.001 n/a not applicable [l]variable has missing cases

Generally, proportion covered difffered with poverty status. Interestingly, the very poor had higher health insurance coverage than the poor though the non-poor had the highest proportions covered. Concerning economic activity, those not in the labour force (majority of whom are aged 60+ or <20) had the highest coverage across both the men and women groups while the employed had the lowest coverage.

The proportion with health insurance coverage was highest in the Northern Development Zone (60%) and lowest in the Coastal Development Zone (48%) with similar patterns for both men and women. Regarding religion, across men and women groups, the orthodox Christians had the highest proportions with health insurance coverage while those of the "other" minority religions had the lowest. Similarly, for ethnicity too, the patterns were similar for men and women with the Mole-Dagbani having the highest coverage while the Akan have the lowest.

Multivariate results

Table 3a and 3b presents results of binary logistic regressions of the effect of gender and internal migrant status on health insurance coverage. Overall, women were more than twice as likely as men to have health insurance coverage. The results show some similarities and differences across both gender groups. Among men and women, rural non-migrants and rural-rural migrants had significantly lower likelihood of being covered by health insurance than urban non-migrants. Among men, urban-rural migrants were less likely (0.74 times) than urban non- migrants to be covered by the health insurance, while among women, the rural-urban migrants were less likely (0.9 times) than urban non-migrants to have health insurance coverage.

There are also age disparities in health insurance coverage. For example, across both groups, compared with teenagers, those aged 60 and above were significantly more likely to be covered whereas, among men only, those aged 20-39 years were less likely to be covered. Concerning education, a similar pattern was observed among men and women. The likelihood of being covered increased from about 1.4 times among junior high and middle school leavers to more than twice among secondary and tertiary leavers compared with those with no education or only primary education.

Marital differences exist between men and women in health insurance coverage. While women in union and those formerly married were more likely than the never married to have health insurance only currently married men were more likely than their never married counterparts to be covered. Wealth inequity in health insurance coverage is evident across both groups where the non-poor are significantly more likely to be covered compared with the very poor. However, those not in labour force are more likely to be covered compared with the employed. Among women, even the unemployed are 16% more likely to be covered. Compared with residents in the Coastal Development Zone, those in the Middle Belt and the Northern Development Zones have a higher likelihood of enrolment onto the scheme. With regards to religion, all other groups are less likely than the orthodox Christians to be enrolled. Generally, in the whole population, all other ethnic groups are more likely than the Akan to be enrolled. However, among women, only the Ewe/Ga-Dangme and the Mole-Dagbani are over 20% more likely to be enrolled compared with Akan. Among men, the Ewe/Ga-Dangme, Mole-Dagbani and Gursi/Gurma/Mande have a higher likelihood (over 20%) of being enrolled compared with Akan.

Table 3a. Binary logistic regression analyses predicting health insurance coverage by migration, gender and background characteristics

	Women		**Men**		**Total**	
	Pseudo R^2=0.051		*Pseudo R^2=0.074*		*Pseudo R^2=0.074*	
	Prob>χ^2=0.000		*Prob>χ^2=0.000*		*Prob>χ^2=0.000*	
	Odds Ratio	**CI (95%)**	**OR**	**CI (95%)**	**OR**	**CI (95%)**
Intercept	0.6141***	0.5086, 0.7416	0.4647***	0.3838, 0.5626	0.1936***	0.1661, 0.2256
Gender						
Men (r)						
Women					2.1111***	[2.0127, 2.2143]
Migrant status						
Urban non-migrant (r)						
Rural non-migrant	0.7504***	[0.6822, 0.8254]	0.8080***	[0.7328, 0.8905]	0.7744***	[0.7237, 0.8286]
Urban-urban migrant	0.8984	[0.7606, 1.0612]	1.0252	[0.8564, 1.2271]	0.9562	[0.8467, 1.0798]
Rural-urban migrant	0.8920*	[0.8014, 0.9928]	1.0107	[0.9006, 1.1344]	0.9459	[0.8750, 1.0226]
Urban-rural migrant	0.8934	[0.7353, 1.0855]	0.7442**	[0.6072, 0.9119]	0.8241**	[0.7174, 0.9465]
Rural-rural migrant	0.6183***	[0.5588, 0.6842]	0.6713***	[0.5994, 0.7517]	0.6448***	[0.5985, 0.6947]
Age						
<20 (r)						
20-39	0.9668	[0.8650, 1.0805]	0.6552***	[0.5906, 0.7269]	0.7962***	[0.7380, 0.8590]
40-59	0.9598	[0.8395, 1.0974]	0.9604	[0.8365, 1.1025]	0.9092	[0.8266, 1.0001]
60+	1.5876***	[1.3607, 1.8523]	1.7484***	[1.4974, 2.0413]	1.5423***	[1.3840, 1.7188]
Educational Status						
No education/Primary (r)						
Junior High/Middle	1.4569***	[1.3445, 1.5786]	1.4313***	[1.3068, 1.5677]	1.4088***	[1.3275, 1.4951]
Secondary/Tertiary	2.3891***	[2.1504, 2.6544]	2.5020***	[2.2619, 2.7675]	2.3353***	[2.1750, 2.5075]

*** p<0.001 **p< 0.01 *p< 0.05

Table 3b. Binary logistic regression analyses predicting health insurance coverage by migration, gender and background characteristics

	Women *Pseudo R^2=0.051* *Prob>χ^2=0.000*		**Men** *Pseudo R^2=0.074* *Prob>χ^2=0.000*		**Total** *Pseudo R^2=0.074* *Prob>χ^2=0.000*	
	Odds Ratio	**CI (95%)**	**OR**	**CI (95%)**	**OR**	**CI (95%)**
Intercept	0.6141***	0.5086, 0.7416	0.4647***	0.3838, 0.5626	0.1936***	0.1661, 0.2256
Marital status						
Never married (r)						
Currently married	1.6639***	[1.5011, 1.8444]	1.1183*	[1.0102, 1.5677]	1.4071***	[1.3114, 1.5099]
Formerly married	1.3573***	[1.1917, 1.5459]	0.8656	[0.7226, 1.0369]	1.1240*	[1.0171, 1.2422]
Poverty status						
Very poor (r)						
Poor	1.0302	[0.9236, 1.1492]	0.9371	[0.8337, 1.0532]	0.9803	[0.9051, 1.0617]
Non-poor	1.2389***	[1.1136, 1.3783]	1.1535*	[1.0294, 1.2925]	1.1808***	[1.0925, 1.2762]
Economic activity						
Employed (r)						
Unemployed	1.1634**	[1.0574, 1.2800]	1.1117	[0.9909, 1.2472]	1.1691***	[1.0869, 1.2575]
Not in labour force	1.2571***	[1.1577, 1.3650]	1.5993***	[1.4666, 1.7441]	1.4281***	[1.3453, 1.5161]
Development zone						
Coastal (r)						
Middle Belt	1.2233***	[1.1306, 1.3236]	1.1482**	[1.0534, 1.2515]	1.1879***	[1.1212, 1.2585]
Northern	2.1958***	[1.9486, 2.4742]	2.4379***	[2.1475, 2.7676]	2.2934***	[2.1034, 2.5005]
Religion						
Orthodox Christian (r)						
Pentecostal/Charismatic	0.7060***	[0.6514, 0.7651]	0.6785***	[0.6203, 0.7421]	0.6958***	[0.6555, 0.7386]
Other Christian	0.7592***	[0.6803, 0.8471]	0.7392**	[0.6542, 0.8352]	0.7549***	[0.6960, 0.8189]
Muslim	0.7590***	[0.6866, 0.8390]	0.6370***	[0.5744, 0.7065]	0.6944***	[0.6464, 0.7460]
Other	0.4234***	[0.3747, 0.4783]	0.4377***	[0.3888, 0.4927]	0.4263***	[0.3917, 0.4640]
Ethnicity						
Akan (r)						
Ewe/Ga-Dangme	1.2599***	[1.1500, 1.3803]	1.2176***	[1.1029, 1.3443]	1.2386***	[1.1586, 1.3241]
Mole-Dagbani	1.2365**	[1.0963, 1.3947]	1.2032**	[1.0583, 1.3679]	1.2106**	[1.1094, 1.3210]
Gursi/Gurma/Mande	1.1137	[0.9817, 1.2634]	1.2280**	[1.0724, 1.4061]	1.1602**	[1.0583, 1.2720]
Others	1.1612	[0.9983, 1.3507]	1.1485	[0.9794, 1.3468]	1.1544*	[1.0353, 1.2873]

*** p<0.001 **p< 0.01 *p< 0.05

Discussion

Health insurance coverage is a critical requirement for improving access to health care in Ghana; however, health insurance coverage is limited particularly for vulnerable groups. Previous studies in many parts of Ghana have demonstrated disparate access to health insurance in many different parts of the country (Akazili et al., 2014; Amu et al., 2021; Dake, 2018; Jehu-Appiah et al., 2011; Van Der Wielen et al., 2018). As already pointed out, the aim of this study was to demonstrate how access to health insurance in Ghana is differentiated by migrant status from a gendered perspective. From the results of the bivariate and multivariate analyses, it is evident that there is an intersectionality between gender and migration based on the differential impacts of migration on access to health insurance between men and women.

First of all, corroborating findings from earlier studies about health insurance coverage in Ghana (Dake, 2018; Jehu-Appiah et al., 2011; Nsiah-Boateng & Aikins, 2018), a higher proportion of women than men were currently enrolled on a health insurance scheme. In fact, the rural-rural migrants with the lowest coverage among women had higher coverage than urban non-migrant men. There are various reasons for the higher likelihood of women accessing health insurance compared with men. This link with gender may be explained by the poorer health conditions for women triggered by reproductive health challenges, resulting in relatively higher costs of health care (Dake, 2018; Gkiouleka & Huijts, 2020; Kumi-Kyereme & Amo-Adjei, 2013). Also, the traditionally gendered social roles and resource allocation manifest in higher income for men while women have the responsibility of social reproduction including daily household consumption and health expenditure (Dixon et al., 2020; Wrigley-Asante, 2008).

Generally, compared with urban non-migrants, all migrants with a rural origin and rural non-migrants are less likely to have health insurance. This validates earlier findings of geographical disparities that urban populations have better access to health insurance than their rural counterparts do. Among women, however, rural-urban migrants are less likely to be enrolled when compared with urban non-migrants indicating reduced health insurance coverage among migrant women in urban destinations. This highlights the peculiarity of women rural-urban migrants' access to healthcare relative to their urban counterparts. With the recent feminisation of rural-urban migration in Ghana and the attendant lack of adequate social protection for women migrants in this stream (Awumbila, 2015; Pickbourn, 2018), the empowerment potential of migration for women can be significantly enhanced with improved access to such interventions as the health insurance. The National Migration Policy acknowledges the need to mainstream migration into health policy planning (National Migration Policy for Ghana, 2014), thus there is the need to incorporate gendered migration experiences into executing the national health insurance scheme to improve access by all. The results show higher odds of coverage for rural-urban migrant women than for their rural non-migrant counterparts and rural-rural migrants. Thus, rural-urban migration improves access to health care for women, but does not necessarily help them attain the levels of urban non-migrants or migrants from urban origin.

Education empowers people with knowledge to understand the need for health insurance and to be able to afford it, hence the implementation and sustainability of compulsory free senior high school programme promises to have health access benefits. The finding that the poor are less likely to have health insurance coverage than the non-poor reinforces the assertion that there is inequitable coverage in Ghana in favour of the wealthy (Akazili et al., 2014; Dake, 2018; Van Der Wielen et al., 2018). The rich are able to dispose of some income to pay for health insurance while the poor barely have enough income to feed the family. This highlights the need for further targeting to enrol the poor under the national health insurance scheme. A notable finding from this study is that residents in the Northern Development Zone are about twice as likely as their counterparts in the Coastal Development Zone to enrol on the scheme. This seems counterintuitive as Northern Ghana has historically been among the poorest parts of Ghana and a major area of origin of migrants in the middle belt and coastal zones. This notwithstanding, previous studies have found higher than average NHIS enrolment rates in Northern Ghana with over 6 out of every 10 person being covered (Dalinjong et al., 2017; Dixon et al., 2014).

Limitations

A notable limitation is the omission of other variables that potentially influence access to health insurance including supply side factors such as distance to health facilities and demand driven factors like self-assessed health condition among others. The omission of potential determinants of access to health insurance can slightly overestimate the magnitude or distort the direction of the effect of the other determinants included in these models. In spite of this, access to health insurance provides protection from out-of-pocket payment for mainly primarily healthcare. The goal is for all persons to be enrolled onto the national scheme or private health insurance schemes in order to avoid catastrophic payments. In addition, some respondents classified as non-migrants could be return-migrants. This is not accounted for in the study as the questions used to determine migrant status only provide information on lifetime migration i.e., place of birth being different from place of enumeration. That notwithstanding, the focus of the study is current migration status of individuals and its relationship with current health insurance enrolment. In any case, health insurance enrolment is not perfunctory but subject to renewal, which reduces the role of return-migration.

Conclusion

Globally, and particularly in sub-Saharan Africa, intricate factors interact to affect the access to affordable primary and universal health care. This study espoused the relationship between internal migration and access to health insurance from a gendered perspective. The study reveals clear gender differences in how migration status can contribute to health insurance coverage or exclusion. The findings indicate that women are more likely to be currently enrolled onto health insurance schemes than men. Also, migrants have reduced access to health insurance than their respective non-migrant counterparts. This study has clear policy implications for Ghana to initiate steps towards attaining the universal health coverage, i.e. targeting rural areas and rural migrant hotspots in urban areas with health insurance enrolment efforts. The national health insurance scheme should develop and implement gender-tailored and migration or mobility-sensitive policies to improve upon equitable enrolment onto the scheme.

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