Factors associated with partial health insurance coverage among households in Malawi.

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Introduction

- Health insurance has proven ideal to curb increasing health expenditure in households. However, despite efforts to expand health insurance in Sub Saharan Africa, coverage has remained low and favouring high-income groups.
- Malawi is among the countries that face this low uptake with only 3% of the total population insured, and varying levels of coverage among members of the same household which often leads to an increase in out-of-pocket expenditure for health care services, a financing mechanism that is regressive in nature.
- A low and partial uptake of health insurance in Malawi suggests that several factors impede all individuals in a household from enrolling. However, there is a dearth of evidence on factors associated with this phenomenon among households in Malawi, necessitating a need to explore these determinants

Methodology

- Data from the 2019-2020 Multiple Indicator Cluster Survey was used in this study.
- Descriptive statistics among the fully insured (all household members insured), partially insured (at least one but not all household members insured) and uninsured households (no household member insured) were first explored.
- Focusing on partially insured households, the second stage applied multivariate binary logistic regression to identify factors associated with health insurance coverage within partially insured households.
- Analysis was done using STATA statistical package version 18.

Results

- Of the 64,615 individuals in the sample, only 0.6% had health insurance.
- Among the 22,886 households, only 9(0.04%) were fully insured with 228(1%) households being partially insured.
- Among individuals from partially insured households, insured members were slightly older, had higher education levels, and greater media access compared to their uninsured counterparts.
- Age of household head [AOR 1.025 (1.000-1.050); p-value=0.045], higher education level of an individual [AOR 4.470 (1.519-13.154); p-value=0.007], individual's access to media [AOR 2.276 (1.050-4.931); p-value=0.037] and higher dependency ratio [AOR 1.655 (1.111-2.466);p-value=0.014] were positively associated with being an insured individual within a partially insured household while household size [AOR 0.813 (0.682-0.969); p-value=0.022] was negatively associated with the outcome.

Results cont.

Table 1: Demographic and socioeconomic characteristics of households by health insurance status

Characteristic	Overall, N = 22,886	Fully Insured, N = 9	Partially Insured,	None Insured N = 22,649	p-value
			N = 228		
Median Age of household	39 (30, 51)	35 (30, 44)	40 (33, 46)	39 (30, 51)	0.7
head (IQR), years	, , ,	, , ,	, ,	, , ,	
Sex of household head, n					<0.001
(%)	45 502 (67)	2 (22)	404 (70)	45 400 (60)	
Male	15,593 (67)	3 (33)	181 (79)	15,409 (68)	
Female Namebon of	7,293 (31)	6 (67)	47 (21)	7,240 (32)	10.001
Median Number of	4.00 (3.00, 6.00)	1.00 (1.00, 2.00)	5.00 (4.00,		<0.001
household members(IQR)			6.00)	6.00)	<0.001
Area of residence, n (%)					<0.001
Rural	3,327 (15)	8 (89)	135 (59)	3,184 (14)	
Urban	19,559 (85)	1 (11)	93 (41)	19,465 (86)	
Median Dependency ratio	1.00 (0.50-2.00)	0.00 (0.00-0.00)		1.00 (0.50-2.00)	<0.001
(IQR)	1.00 (0.30-2.00)	0.00 (0.00-0.00)	0.07 (0.33-1.00)	1.00 (0.30-2.00)	\0.001
Household Media access,					<0.001
n (%)					
No	14,048 (61)	0 (0)	30 (13)	14,018 (62)	
Yes	8,838 (39)	9 (100)	198 (87)	8,631 (38)	
Household head					<0.001
education level, n(%)					
No education	3,040 (13)	0 (0)	5 (2.2)	3,035 (13)	
Primary	13,474 (59)	0 (0)	28 (12)	13,446 (59)	
Secondary	5,348 (23)	1 (11)	73 (32)	5,274 (23)	
Higher	890 (3.9)	8 (89)	115 (50)	767 (3.4)	
Vocational	134 (0.6)	0 (0)	7 (3.1)	127 (0.6)	
Household					<0.001
Socioeconomic status, n					
(%)	4 = 40 (05)	0 (0)	2 (2 2)	4 5 45 (0.5)	
Poorest	4,549 (20)	0 (0)	2 (0.9)	4,547 (20)	
Poorer	4,477 (20)	0 (0)	8 (3.5)	4,469 (20)	
Middle	4,606 (20)	0 (0)	13 (5.7)	4,593 (20)	
Wealthier	4,677 (20)	0 (0)	18 (7.9)	4,659 (21)	
Richest	4,577 (20)	9 (100)	187 (82)	4,381 (19)	

Table 2: Descriptive statistics of individuals from partially insured households

Characteristic	Overall, N = 768	Uninsured, N = 421	Insured, N = 347	p-value
Median Age of an individual (IQR), years	18 (7, 31)	18 (8, 27)	19 (7-35)	0.026
Sex of an individual, n (%)				<0.001
Male	277 (36)	149 (35)	128 (37)	
Female	491 (64)	272 (65)	219 (63)	
Media access, n (%)				0.020
No	99 (13)	65 (15)	34 (9.8)	
Yes	669 (87)	356 (85)	313 (90)	
Education level of an individual, n (%)				<0.001
No education	18 (2.9)	10 (2.9)	8 (2.9)	
Primary	218 (35)	138 (41)	80 (29)	
Secondary	220 (36)	138 (41)	82 (30)	
Higher	152 (25)	51 (15)	101 (37)	
Vocational	8 (1.3)	3 (0.9)	5 (1.8)	

Conclusion

- The findings emphasize socioeconomic and informational disparities, revealing policy gaps in affordability and awareness that hinder comprehensive coverage.
- This underscores the need for targeted policies and efforts to enhance education, reduce financial barriers for larger households, and leverage media campaigns to raise awareness about the benefits of comprehensive health insurance coverage.

