Health Insurance Ownership: Evidence from Myanmar Women[1]

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Synopsis

- The government of Myanmar is making plans to implement health insurance programs into a universal health coverage program. However, health insurance in Myanmar is negligible, which leaves many citizens at risk of financial hardship in case of a serious illness.
- This study aims to examine the determinants of health insurance possession by using a binary logistic regression model.
- It can be found that women's age, education, occupation, household size, and wealth index are the major determinants of health insurance ownership.
- The government should inform the public about the possible benefits of health insurance and implement a universal health program to raise equity and access to healthcare services, especially among the poor and vulnerable groups.

Introduction

Myanmar is a country in transition. Although socio-political changes have been made during the past decade, Myanmar is still one of the least developed countries in the Southeast Asian region. In addition, Myanmar's Human Development Index (HDI) value for 2019 is 0.583 — which put the country in the medium human development category — positioning it at 147 out of 189 countries and territories (UNDP, 2020). The socio-political and economic situation in Myanmar has affected its health system as well.

In 2018, health expenditure in Myanmar amounted to approximately 4.79% of the country's gross domestic product (GDP). This was a dramatic increase from 2008, in which health expenditure in Myanmar amounted to approximately 1.85% of the country's GDP. However, it is lower compared to the surrounding countries. Cambodia spent 5.92% and Vietnam 5.53% of GDP on healthcare in the same year (Statista Research Department, 2020).

The 70% of the healthcare provision in Myanmar is paid through out-of-pocket payments (OOPPs) (FIND, 2020). In 2015, the Myanmar Ministry of Health estimated that the amount of government funding is only 22% of the total spending on healthcare in addition to 8% from foreign donors (FIND, 2020). Compared to the neighboring countries, such as Thailand, Vietnam and India, the government spending on healthcare comes up short.

The Ministry of Labour, Immigration, and Population currently provides the only type of health insurance in Myanmar, the so-called Social Security Scheme (SSS), which was put in place in 1956. Out of the 54.4 million citizens in Myanmar, only about 700,000 individuals (1.3% of the population) are covered by the SSS, on individual account, meaning that these people contribute

[1] The authors of the study, which was ongoing at the time of the RIN Workshop, are Professor Dr. Mya Thandar as lead investigator and Professor Dr. Hlaing Hlaing Moe as co-investigator.

a percentage of their earnings. Eligibility is restricted to certain groups of state enterprise employees, civil servants and employees of public and private firms with five or more employees (de la Puente, 2014; WHO, 2012). The low population is covered by a health insurance administered by the Social Security Board, far from the 2017–2021 National Health Plan's objective of universal access to basic health services.

The OOPPs create a financial burden for households. Because of the high percentage of OOPPs in Myanmar, the poor and other disadvantaged groups who frequently use healthcare are especially vulnerable to catastrophic financial outcomes once they are in need of healthcare. To protect these groups as well as the middle-income groups, there is an urge to design and implement a nationwide health insurance mechanism that can assure universal coverage.

The public health system needs a boost to meet the increasing pressure for services and attain the Sustainable Development Goal (SDG) 3 of the Universal Health Coverage (UHC) (UN, 2021). The government of Myanmar has committed itself to attain the UHC by 2030 (WHO, 2011). There are many challenges to achieve this target, such as insufficient resources, supplies, and health staff. To achieve UHC, Myanmar needs to reduce the OOPPs to less than 30% of total health expenditure as recommended by the WHO.

The need to design and implement a nationwide health insurance system with an adequate benefit package and adequate level of cost sharing is one of the strategies to be considered. The establishment of a universal risk pooling mechanism to share healthcare costs and reduce the OOPPs will help to prevent catastrophic health expenditures among the poor and disadvantaged people and to safeguard access to healthcare services (Smith and Witter, 2004; Majumder, 2012).

While the need for universal health coverage in Myanmar is recognized, the aims of this study are to overview the health insurance coverage and to explore the determinants of health insurance ownership among women. The results of this study would provide a base for policy debates not only in Myanmar but also in other developing countries struggling with the establishment of a nationwide health insurance system.

Materials and methods

Measures

The outcome variable is whether a woman is covered by any health insurance (yes or no). The explanatory variables are selected based on previous literature and included women's age (15–19, 20–34 and 35–49); education level (no education, primary, secondary and higher education); marital status (single and married); employment status (unemployed and employed); occupation (unskilled, skilled, professional, agricultural, others and unemployed); having children under five (yes and no); number of household members (1–4 and 5 or more); female-headed household (yes and no); household wealth quintiles (poorest, poorer, middle, richer and richest); and place of residence (urban and rural).

Data analysis

A total of 12,885 sample women from the 2015-2016 Myanmar Demographic and Health Survey (MDHS) are included in the analysis. Descriptive statistics is used to describe the characteristics of the sample women, and Pearson's Chi-square test is used to test the association between health insurance ownership and the explanatory variables. A binary logistic regression

analysis is applied to identify the factors associated with health insurance ownership. Data analysis is performed using STATA version 15.

Results

Descriptive analysis

About 1% of the women have health insurance, and among these, a higher proportion are covered by community-based health insurance (0.4%) and social security schemes (0.4%), while less than 0.2% are covered by employer-based health insurance. Many of the women are employed, while 23% are unskilled, and 20% are clerical, sales, services and household and domestic, 17% are agricultural workers and 7% are skilled and professional. The majority of the women are married, have a primary level of education, do not have children under five, have a larger family, have rich wealth index, live in male-headed households and reside in rural areas.

Bivariate analysis

This study examines the association between health insurance ownership and explanatory variables by using Pearson Chi-square test. The results of the Chi-square test are shown in Table 1. Women's age, education level, employment status, occupation groups, household size, residence, and wealth quintile are significantly related to health insurance ownership.

Table 1: The relationship between health insurance ownership and independent variables

Independent variables	Classification	Chi-square value	P-value
Age	Below 20 years	13.87***	0.001
	20–34		
	35–49		
Education	No education	65.79***	0.000
	Primary		
	Secondary		
	Higher		
Marital status	Single	0.0004	0.983
	Married		
Employment status	Unemployed	2.68*	0.1
	Employed		
Occupation	Unemployed	25.07***	0.000
	Unskilled		
	Skilled		
	Professional		
	Agricultural		
	Others		
Having children under five	No	2.28	0.131
	Yes		
Household size	1–4	5.45**	0.02
	5 and above		
Female-headed household	No	1.25	0.264
	Yes		
Wealth quintile	Poorest	19.5***	0.001
	Poorer		
	Middle		
	Richer		
	Richest		
Residence	Rural	6.2**	0.013
	Urban		

Note: ***, **, * represent 1%, 5% and 10% level of significance, respectively.
Source: Myanmar Demographic and Health Survey (2016)

Multivariate analysis

The results of the binary logistic regression analysis for determinants of health insurance coverage are shown in Table 2. Regarding these results, women's age, education, occupation groups, household size, and wealth index are influencing factors of health insurance ownership.

Table 2: Results of binary logistic regression model for health insurance ownership

Independent variables	Classification	Odds ratio	z	P-value	95% CI	
					Lower	Upper
Constant		0.001***	−10.19	0.000	0.0004	0.005
Age	Below 20 years (ref)					
	20–34	3.30**	2.47	0.013	1.28	8.51
	35–49	2.51*	1.81	0.070	0.93	6.78
Education	No education (ref)					
	Primary	1.03	0.08	0.939	0.51	2.09
	Secondary	1.05	0.14	0.892	0.49	2.27
	Higher	3.67***	2.99	0.003	1.57	8.62
Marital status	Single (ref)					
	Married	1.18	0.71	0.476	0.75	1.85
Employment status	Unemployed (ref)					
	Employed	0.67	−1.33	0.184	0.37	1.21
Occupation	Unemployed (ref)					
	Unskilled	2.13*	1.93	0.054	0.99	4.62
	Skilled	3.81***	3.13	0.002	1.65	8.80
	Professional	1.88	1.42	0.154	0.79	4.46
	Agricultural	2.27*	1.90	0.049	0.97	5.28
	Others	1.69	1.32	0.186	0.78	3.70
Having children under five	No (ref)					
	Yes	0.87	−0.65	0.516	0.57	1.33
Household size	1–4 (ref)					
	5 and above	0.72*	−1.72	0.085	0.49	1.05
Female-headed-household	No (ref)					
	Yes	1.10	0.43	0.664	0.72	1.67
Wealth quintile	Poorest (ref)					
	Poorer	1.79	1.54	0.124	0.85	3.76
	Middle	1.65	1.30	0.193	0.78	3.51
	Richer	1.72	1.37	0.170	0.79	3.72
	Richest	2.24**	1.90	0.050	0.97	5.14
Residence	Rural (ref)					
	Urban	0.93	−0.30	0.761	0.58	1.49

Note: ***, **, * represent 1%, 5% and 10% level of significance, respectively.
Source: Myanmar Demographic and Health Survey (2016)

Women's age groups 20–34 years and 35–49 years are about 3.3 and 2.51 times more likely to possess health insurance coverage compared to the age group 15–19 years. Women who had attained a higher level of education are about 3.67 times more likely to possess health insurance coverage compared to those with no education. Women with unskilled, skilled, and agricultural occupations are about 2.13, 3.81 and 2.27 times more likely to possess health insurance coverage compared to unemployed women. Women from the richest households are

about 2.24 times more likely to possess health insurance coverage compared to those from the poorest households. However, women living in a larger household size are about 0.28 less likely to possess health insurance coverage compared to those of a smaller household size.

Limitations

The study has some limitations that need to be acknowledged. Previous studies have shown that health status of women (presence of illnesses and frequency of illnesses), out-of-pocket payments and healthcare utilization are the important predictors of health insurance coverage. However, the study found it not possible to examine the effect of these variables on health insurance ownership because these data are not collected in MDHS. This study indicates health insurance ownership of women aged 15–49 years only due to the data availability of MDHS.

Conclusion

Addressing disparities in access to healthcare among the poor is a key agenda in the global health debate because it is a critical factor in accelerating the achievement of the SDGs. Our study has highlighted important issues that will inform the efforts aimed at establishing a social health insurance program by transforming the SSS into a universal health coverage program. The large proportion of women without health insurance and the lower likelihood of poor households to have health insurance highlight the need for a social health insurance program to ensure equitable access to healthcare. In addition, there is a need to implement targeted initiatives that will increase health insurance coverage among people working in the informal sector. As the government of Myanmar should transform the SSS into a universal health program, it is important to implement a program that will increase equity and access to healthcare services among the poor and vulnerable groups. Furthermore, the government should implement a special health insurance for civil servants.

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