

Health insurance for informal workers: What is hindering uptake? Perspectives from female food vendors in Kinondoni District, Tanzania

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BACKGROUND

Health insurance among people of low income, such as female food vendors and others in the informal sector, is one of the vital steps towards universal health coverage in Tanzania. Little is known to explain reasons for low enrolment of informal workers in health insurance schemes. We studied what is hindering uptake of health insurance among female food vendors in Kinondoni district in Dar es Salaam.

METHODS

The study took place from January to March 2018. A mixed methods design was employed using a quantitative questionnaire and qualitative interviews. We included 75 respondents of which 70 were female food vendors selected using the snow-balling method. Five respondents were officials from the National Health Insurance Fund, who were purposefully selected.

RESULTS

Almost half of respondents (45.7%) were earning less than TZS 100,000 (equivalent to US \$44.80) a month. Most (82.9%) could not afford health insurance. Attitudes did not affect uptake of health insurance as the majority (60.0%) agreed that health insurance is vital for their survival. However, a majority (63.4%) of respondents did not know how health insurance works.

CONCLUSION

The low level of income and limited awareness of health insurance options limited enrolment into health insurance. Interventions should ensure that everyone is enrolled irrespective of economic status. Moreover, the government should design innovative strategies to increase awareness about health insurance.

Key words: Health Insurance, Informal workers, Female food vendors, Tanzania

BACKGROUND

Universal health coverage is critical to delivering better health and is a unifying goal for health system development. Several low- and middle-income countries, including Brazil, China, Ghana, Indonesia, Rwanda, Sierra Leone and Thailand, have taken steps to modify their health systems to move closer to universal coverage (World Health Organization, 2013; World Health Organization, 2015). However, despite global consensus and pressure on governments to undertake universal health

coverage, it is estimated that 1000 million of the world's poor still do not receive the health services they need (Car-rin and James, 2005; World Health Organization, 2005).

Having recognized the problems in health financing, Tanzania created the National Health Insurance Fund (NHIF) (NHIF, 2005). The government had set a target of enrolling 45% of the population in prepayment schemes by 2015 (Haazen, 2012). Currently, only 27% of Tanzanians are covered by various forms of health insurance. These include the NHIF, for the formal sector, but it is

open to voluntary enrolment from formal and informal private sectors; the Community Health Fund (CHF)/ Tiba kwa Kadi (TIKA) for the informal sector in rural areas and urban areas respectively; and the private health insurance sector (Tanzania health financing profile, 2016). The current national CHF/TIKA coverage remains very low at about 8% of the total population, with enormous regional variations (National Health Account, 2012).

In the Third Health Sector Strategic Plan 2009–2015, the government of Tanzania committed to universal health-care via social health insurance. However, very few Tanzanians enrolled in social, community, or private health insurance. The remaining population, including those working in the informal sector or who are very poor, is dependent on the public sector; they don't have insurance and are not served by any other risk-pooling mechanism (Tanzania Health Financing Profile, 2016).

Female food vendors fall in the category of those that work in the unregulated subsector (informal sector), which represent more than 70% of the entire population and contributes more than 40% of the gross domestic product of Tanzania (The Economic and Social Research Foundation, 2010; Bultman, et al., 2012). The majority of people working in the informal sector have a low level of education or no education, and women are overrepresented (Akson and Masabo, 2013).

Female food vendors are an increasingly common sight in many of Tanzania's cities, especially in Dar es Salaam, where formal jobs are scarce. Through the proceeds of their trade, these female food vendors have become the main sources of household livelihoods, helping to educate their children, look after the families and undertake other duties that were traditionally for their male counterparts (Tan, et al., 2016). While these women provide for the basic family needs such as food, shelter, clothes and school fees, most of them do not have access to health insurance schemes, making them vulnerable and exposing them to potential impoverishment as a result of having to pay high hospital bills in case someone in the family gets sick.

Although several studies in Tanzania (Akson and Masabo, 2013; Kapologwe, et al., 2017) have focused on health insurance issues, there is limited information on what contributes to low uptake of health insurance in the informal sector, which employs more than 75% of the population (URT, 2015). Studies from other countries have found that education and cultural factors (Acharya, et al., 2012) and awareness and perception among market women (Adewole, et al., 2017; Mathauer, Schmidt and Wenyaa, 2008) are associated with uptake of health insurance. Little is known of what contributes to low uptake of health insurance in the informal sector in Tanzania. Our study sought to explore whether income, awareness and attitude variables hinder the uptake of health insurance among female food vendors, given the importance of the informal sector.

METHODS

Study design

We conducted a descriptive cross-sectional study incorporating both quantitative and qualitative research approaches. The study was carried out in Kinondoni municipality, one of the five urban municipalities in Dar es Salaam region. The estimated population of Kinondoni in 2016-17 was 1,231,516 (Tanzania National Bureau of Statistics, 2017). The area was chosen because it is one of the busiest districts, with many building sites and other construction sites where female food vendors work. We estimated income using Tanzania Shilling (TZS) and converted to US dollars with the official 2017 exchange rate published by The World Bank (1 US \$ = 2228.86 TZS).

Study subjects and sampling

The study included a total of 75 respondents and was conducted from January to March 2018. Seventy respondents were female food vendors, who are local entrepreneurs with small businesses selling cooked food on street corners or in temporary shelters or construction sites. A snow-balling technique was used to locate other women who vend food in Kinondoni; after one vendor was identified, we requested information about locations of other food vendors. We also conducted in-depth interviews with five officials from NHIF, who were purposefully selected because of their knowledge about health insurance.

Subjects were included if they were female food vendors age 18 years and above vending in Kinondoni district. Exclusion criteria included those below 18 years of age, males, and female food vendors who vended outside Kinondoni district. Informed consent was obtained from study subjects before we administered questionnaires and interviews.

Measurements

The study examined three variable categories (income, attitude and awareness) to understand their influence on the uptake of health insurance by female food vendors. A series of questions was asked to measure income, defined as both earned and unearned income (Barr, 2004). Attitude was measured by asking whether they thought enrolling in health insurance was important and who makes decisions to be enrolled. A Likert scale was used to measure attitudes. Awareness was measured by asking whether they knew about health insurance and whether it has any benefit to them. Furthermore, some people, especially those in the informal sector, tend to associate free health insurance services with people who are infected and affected by HIV and AIDS. Therefore, we sought to determine whether female food vendors had such views. Respondents were asked whether they associated enrolment into health insurance, especially the NHIF (since it is the cheapest), with having HIV/AIDS.

A semi-structured questionnaire with close-ended questions was used to collect information on income, attitude and awareness of the subjects. We pilot-tested the

questionnaire with key informants to get feedback and improve the instrument. A trained interviewer administered the questionnaire to study participants in a private setting. Both English and Swahili languages were used for those who might not be conversant with one of the two languages. The questionnaire took 20 minutes to complete.

For the qualitative component, an in-depth unstructured key informant interview guide was used to collect information from NHIF officers, including income, attitudes and awareness of female food vendors and uptake of insurance. The interviews took place in the office settings and were conducted by a trained interviewer who took detailed notes. The interviews typically lasted for 15 minutes.

Data analysis

Quantitative data was entered manually in Microsoft Excel and checked for accuracy and completeness. Data were later transferred into SPSS 20 for statistical analysis. Frequency tables and figures were used to present the results. Qualitative data were coded, categorized and grouped into themes to enable construction of meaning based on respondent's expression. The findings are presented in the forms of quotes and descriptions.

Ethical issues

The research was approved by Mzumbe University. Subjects filled in a consent form before being interviewed. All information collected was kept confidential and used only for the intended objective of the study.

RESULTS

Demographic characteristics

Of 80 female food vendors approached for the study, 70 enrolled. More than half of the respondents (58.5%) were aged 18-39 years; less than a third (28.6%) were between 40-54 years, while only (12.9%) were 55 and above (Table 1). Most (64.3%) had completed primary level education, 28.6% had completed secondary education, and 7.2% above secondary level of education. Just over 40% (41.4%) of the subjects were married, 25.7% were single, 14.3% were widowed and 18.6% were divorced. More than half of female food vendors (58.6%) had two or more dependents.

Income and uptake of health insurance

The study sought to understand whether income of female food vendors could affect uptake of health insurance. Monthly income of vendors was between 100,000 to 290,000 Tsh (equivalent to 44.8 to 130.1 US\$) for 44.3% of respondents and under 100,000 Tsh for 45.7% of respondents (Table 2). When it came for paying health care bills, half (50.0%) of the respondents said they would opt for alternative treatments such as self-diagnosis, a third (32.8%) said they paid out of pocket, and 12.9% indicated that they would get money from their relatives or next of kin.

Table 1. Sociodemographic characteristics of female food vendors Kinondoni district, Tanzania, 2018.

Characteristics	N=70	%
Age (years)		
18-39	41	58.5
40-54	20	28.6
55+	9	12.9
Education completed		
Primary	45	64.3
Secondary	20	28.6
Certificate/diploma	2	2.9
University	3	4.3
Religion		
Christian	29	41.4
Muslim	31	44.3
Others	10	14.3
Marital status		
Married	29	41.4
Single	18	25.7
Widowed	10	14.3
Divorced	13	18.6
Number of dependents		
None	9	12.9
1	20	28.6
2 to 4	29	41.4
Above 5	12	17.2

We also asked whether they set aside a budget for health expenditure in their families; 64.3% indicated that they did not. One NHIF official said:

"Premiums for informal sector is very unlikely to prevent people from joining insurance scheme, poor financial management does. People are not saving their money for unexpected events such as illness."

Awareness of health insurance

We sought to know whether female food vendors were aware of health insurance. The majority (63.4%) were not aware of health insurance, as regards to where, who, and how it is provided (Table 3). When asked the level of their awareness, a majority (67.1%) of the respondents indicated that they were aware of health insurance services to a small extent, while 30.0% were aware to a moderate extent, and 2.9% were aware to a great extent. Regarding where they seek medical care when they fall ill, many respondents (41.4%) went to a pharmacy or drug store; 25.7% went to traditional attendants, and 17.1% went to conventional medical facilities. We were also interested to know whether fear of HIV screening hinders subjects from taking up health insurance. We found that the majority (54.3%) of respondents were afraid to enroll in health insurance due to fear of being screened for HIV.

Table 2. Income of female food vendors in Kinondoni district, Tanzania, 2018.

Category of variable	N=70	%
	N=70	%
Income category (Tsh)*		
Above 500,000	1	1.4
300,000-490,000	6	8.6
100,000-290,000	31	44.3
Under 100,000	32	45.7
Income hinders enrollment in health insurance		
Strongly agree	30	42.9
Agree	28	40.0
Neither agree nor disagree	1	1.4
Disagree	5	7.1
Strongly disagree	6	8.6
Payment method for health insurance		
Pay in cash (out of pocket)	23	32.8
Use alternative medicine	35	50.0
Get money from relatives/next of kin	9	12.9
None	3	4.3
Allocated funds for healthcare in case of illness		
Yes	25	35.7
No	45	64.3
Additional sources of income		
Yes	10	14.3
No	60	85.7

*One US\$ is equivalent to 2228.86 TZ sh (World Bank, 2017)

Regarding awareness of health insurance, the NHIF officers felt that people are not aware of health insurance. One officer said:

"We normally encounter a lot of problems. Many people in the country, including those in the formal sector, do not properly understand how health insurance works. For example, there is a mistaken belief that health insurance is for the rich... something which is not true. Nevertheless, we have been using agency to train people about health insurance."

Attitudes about health insurance

We sought to understand attitudes of female food vendors toward health insurance. The results showed that a majority (60.0%) strongly agreed and 20.0% agreed that health insurance is important for themselves and their families (Table 4). Only 8.5% disagreed or strongly disagreed. In addition, we examined reasons for not joining health insurance services like those provided by NHIF. The most common reasons were: limited income (35.7%); cultural beliefs (25.7%); and limited knowledge about the existence of such services (17.1%). Fewer (12.9%) thought that health insurance is a waste of money, and 8.6% felt that insurance should be provided by the government.

Table 3. Awareness of health insurance among female food vendors in Kinondoni district, Tanzania, 2018.

Category of variable	N=70	
	N=70	%
Some reported knowledge of health insurance		
Yes	18	25.7
No	45	63.4
Can't tell	7	10.0
Self-reported level of awareness about health insurance		
Small	47	67.1
Moderate	21	30.0
Great	2	2.9
Venues frequented for treatment		
Hospital/health facility	12	17.1
Traditional means	18	25.7
Pharmacy/drug shop	29	41.4
Do not use any of the above	11	15.7
Fear of HIV screening hinders insurance uptake		
Yes	38	54.3
No	32	45.7
Most female food vendors do not know the benefit of health insurance		
Strongly agree	35	50.0
Agree	22	31.4
Neither agree nor disagree	6	8.6
Disagree	4	5.7
Strongly disagree	3	4.3
Knowledge of any innovative health insurance product in Tanzania		
Yes	7	10.0
No	59	84.2
Can't tell	4	5.7

Another important issue is who makes the decision to join health insurance. Almost half of respondents (42.9%) indicated that joining health insurance could be decided by either spouse. Other respondents indicated that a wife (21.4%), a husband (20.0%), or both a wife and husband (15.7%) make the decision. When we asked whether these female food vendors could enroll for health insurance without consulting their husband, more than half (55.7%) said they could not.

Regarding attitudes toward uptake of health insurance, one NHIF official said:

"Certainly, attitudes of informal sector workers has hindered uptake of health insurance, but this is contributed by poor sensitization. Meaning that increasing more advertisement through media and the use of brochures to broaden knowledge and reduce negative attitudes towards health insurance."

Table 4. Attitudes of female food vendors towards health insurance in Kinondoni district, Tanzania, 2018.

Category of variable	N=70	
	N=70	%
Enrollment in health insurance is important for you and your family		
Strongly agree	42	60.0
Agree	14	20.0
Neither agree nor disagree	8	11.4
Disagree	2	2.8
Strongly disagree	4	5.7
Main barriers to enrollment		
Cultural beliefs	18	25.7
Limited income	25	35.7
Limited knowledge about existence of such services	12	17.1
Belief that health insurance is a waste of money	9	12.9
Belief that health insurance should be provided by government	6	8.6
Decision-maker for enrollment in health insurance		
Both wife and husband	11	15.7
Husband alone	14	20.0
Wife alone	15	21.4
Either husband or wife	30	42.9
Able to enroll in health insurance without husband		
Yes	19	27.1
No	39	55.7
Can't tell	12	17.1
Health insurance is necessary when family is at higher risk of disease		
Strongly agree	8	11.4
Agree	24	34.2
Neither agree nor disagree	31	44.3
Disagree	3	4.2
Strongly disagree	4	5.7

DISCUSSION

Our findings show that limited awareness and the level of income were both barriers to enrolling in health insurance. Despite these barriers, we identified positive attitudes towards enrolling in health insurance since most female food vendors thought health insurance was important to them and their families. From the providers' point of view, awareness was a big challenge because insurance uptake cannot increase as long as there is limited awareness about how health insurance works. Studies in Nigeria and Bangladesh have also found that there is a low level of awareness of health insurance in the informal sector (Adewole, et al., 2015; Sarker, et al.; 2017, Adewole, et al., 2017).

Many of the female food vendors in the current study were earning less than US\$ 44.8 a month, which is insufficient to cover healthcare-related bills such as transportation to health facilities, hospital bills, drugs and other related services. This makes them vulnerable to poverty if they or their families become ill. OECD reported that workers in the informal sector tend to be most vulnerable, resulting in a situation where those who most need the protection offered by social insurance are least able to access it (OECD, 2017). Moreover, in many developing countries in sub-Saharan Africa, social protection mechanisms are weak or non-existent, leaving the burden on families and communities, particularly women, to protect themselves from social and economic risks (Myamba, 2017).

We also found that female food vendors in our study had low education and several dependents, putting more strain on their financial situations. A majority of study participants had only primary and secondary education. Studies in Tanzania and by the International Labour Organization also reported that the majority of those in the informal sector are women with low education or no education (Akson and Masabo, 2013; ILO, 2013). Furthermore, the majority of study participants had two or more dependents. A study in Nigeria also found that more than half of market women in the informal sector claimed to have three or more dependents (Adewole, et al., 2017). In Tanzania, Stoermer, Kessy and Widmer, (2013) reported that families with low-income levels tend to have more children.

Our study had several limitations. Although responses from female food vendors suggested that most of them had no health insurance, our study did not specifically ask whether they had health insurance, either themselves or through their spouses, so this could not be measured as an outcome variable. However, based on conversations it was clear that almost all of the respondents were not covered by any type of health insurance. Moreover, although the NHIF officials interviewed were responsible for the roll-out of NHIF to the majority of Tanzanians and therefore had in-depth experience, they had to generalize their experiences when answering qualitative questions about women's experiences. The limited sample of this study makes our results not generalizable to others in the informal sector or other countries.

CONCLUSION

Despite the limitations, this study showed that limited awareness of health insurance, as well as low income of the female food vendors, kept them from enrolling in health insurance. These results imply that Tanzania will have trouble achieving the goal of universal health coverage without addressing these challenges. Social insurance policymakers should consider appropriate interventions that ensure that everyone, regardless of income, receive needed health care without suffering

in health insurance. These results imply that Tanzania will have trouble achieving the goal of universal health coverage without addressing these challenges. Social insurance policymakers should consider appropriate interventions that ensure that everyone, regardless of income, receive needed health care without suffering undue financial hardship. Moreover, the government of Tanzania should design innovative strategies that will increase awareness about health insurance.

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

PM designed the study and collected, cleaned and analysed data. LM critically reviewed the study, contributed significantly to the development of the study and drafted the manuscript. All authors read, revised and approved the final manuscript.

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