



**ROLE OF MOBILE MONEY TRANSFER ON THE RATE
OF PREMIUM REMITTANCE OF HEALTH INSURANCE
FROM SELF-EMPLOYED NHIF MEMBERS IN KENYA:
(A CASE STUDY OF NHIF MERU BRANCH)**

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Abstract:

National health insurance is health insurance that insures a national population for the costs of health care and usually is instituted as a program of healthcare reform. In Kenya, the only National Health Insurance Fund is the NHIF. The study's specific objectives are; To establish the influence of transaction cost on premium remittance, to determine if convenience of using M-Pesa influence the collection of contribution payments, to determine the influence of level of premium and collection mechanisms on the rate of collection of premium payments, and to determine if accessibility of mobile money services influence the collection of contribution premium payments to the NHIF a case study of NHIF Meru branch. The Kenya National Health Insurance Fund has deploying the use of mobile payments to enhance the quality of their services and increase growth. In this study, a survey research design technique was used to collect data which involved the use of both primary and secondary data sources. Structured questionnaires are used to collect primary data. The target population consist of 70 informal sector members who include the self-employed and unemployed members of NHIF particularly residents of Meru county. A sample size of 35 respondents from Meru town in Meru County is drawn. The study established that mobile money had made a significant contribution to the way the NHIF members from the informal sector make their monthly premium remittance. Majority of the NHIF members from informal sector rely on it as opposed to the formal sector for their monthly premium remittance. Thus, this study achieved its objectives and obtained detailed information arising from the use of mobile money services by NHIF members. In respect to the conceptual framework, mobile money transactional costs, convenience and financial accessibility have all been shown to affect prompt premium remittance through the service leading to increased enrolment in mobile money services therefore leading to low rate of NHIF defaulters.

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1. Introduction

National health insurance is one which insures a national population for the costs of health care and usually is instituted as a program of healthcare reform. It is enforced by law. It may be administered by the public sector, the private sector, or a combination of both. Funding mechanisms vary with the particular program and country. National or Statutory health insurance does not equate to government run or government financed health care, but is usually established by national legislation (New York Times, 2012).

NHIF Kenya is a state parastatal that was established in 1966 as a department under the ministry of health. NHIF Kenya conducts NHIF Registration for all eligible members from both the formal and informal sector. For those in the formal sector, it is compulsory to be a member. For those in the informal sector and retirees, membership is open and voluntary.

Financing and providing affordable, accessible and quality healthcare is one of the key health policy problems currently facing communities, governments, policy makers and international development institutions. Worldwide, 1.3 billion people in developing countries do not have access to adequate and affordable healthcare due to the high cost of using medical services WHO (2005). Other access barriers include; the high cost of out-of-pocket payments for care, long queues, unavailability of health facilities and few health workers.

According to WHO World Health Statistics (2010), low and middle income countries bear 93% of worlds disease burden yet account for only 11% global health spending. In developing countries, the low economic growth, limited capacity to collect tax revenues and competing priorities limit the tax revenue available for the health sector. Poor health prevails in many developing countries. World Bank (2005) attributed this state of affairs to underfunding of health, poor management of public health services and the inability of public primary care services to match the demands of the growing populations. In the year 2000, the global community committed to eradicate extreme poverty and improve the health and welfare of the world's poorest countries through eight time-bound goals known as the Millennium Development Goals (MDGs), with health at the heart of the MDGs due to the recognition of its role in reducing poverty and also as a measure of human well-being.

Interest is growing among policy makers on the importance of establishing sustainable health insurance programs as a way of increasing access to health care and protecting families from catastrophic healthcare costs. Health insurance is a mechanism for setting aside financial resources to meet costs of medical care in the event of illness. Health shocks diminish the capacity of a household to generate income when key family income earners are unable to continue with productive activities due to ill health and subsequent inability to pay medical bills. Health insurance reduces financial

burden of purchasing healthcare by pooling funds and sharing the risks of unexpected health events, and its attractiveness lies in risk sharing between the well and the sick and reducing out-of-pocket expenses (Xu *et al*, 2003)

Some developed countries including Denmark, France, Germany, Portugal and the United Kingdom have achieved universal coverage. According to Wang *et al* (2012) African countries have spent scarce time, money and effort on health insurance initiatives but most of the schemes cover only a small proportion of the population mainly working in the formal sector. Extending health insurance to the informal sector in many developing countries has been a challenge partly due to poverty and difficulty in collecting premiums from the informal sector workers, most of who are geographically dispersed but a few African countries have however been successful in increasing access to healthcare through health insurance. According to the World Health Report (2010), Rwandan government has supported creation of over 1000 mutual health insurance schemes and by 2007, 74% of the population had some form of health insurance cover. Under the insurance scheme, premiums are collected by community health workers and transferred to a district level fund and then used to pay for health services.

Kenya has had the National hospital insurance fund, since its establishment in 1966 through an Act of Parliament, Cap 255 laws of Kenya, which has been revised to NHIF Act No. 9 of 1998. It was designed to offer inpatient insurance cover to formal sector workers only. However, changes in regulations over the years have allowed informal sector contributors to enroll into the scheme, with their contributions set at Ksh 500 per month or Ksh 6000 per year. The members are able to access in-patient insurance cover through the NHIF accredited facilities distributed in all 47 counties in the country. Attempts to promote universal health coverage in Kenya through the proposed National social health insurance fund have faced challenges, including resistance from trade unions and other stakeholders in the health sector. The bill which was to introduce social health insurance failed to go through all the approval stages following resistance from many fronts. The low penetration of health insurance in Kenya has meant that many poor people in rural and urban areas are denied access to quality healthcare due to their inability to meet the high out-of-pocket payments that characterize the healthcare financing system.

2. Statement of the problem

The use of mobile payment technology requires basic knowledge to operate. As a result, majority of the micro business operators in Kenya have embraced its use in their daily business operations and are registered users of M-Pesa. Consequently, they carry out various transactions using their mobile phones within and around their business surroundings such as paying suppliers for goods and services, paying bills, sending money to friends and relatives, withdrawing cash and topping up airtime accounts. The national health insurance fund not being left behind has adopted the mobile payment

technology in its business transactions; therefore, the self-employed contributors can pay their contributions through M-Pesa.

Kenya is slowly but surely turning digital. Voluntary and self-employed contributors can be able to pay for their NHIF contributions through M-Pesa – Kenya's innovation mobile money transfer technology. This can be done in a very short time and it is much better than going to queue on any NHIF office.

This study investigates the factors that enhance the behavioral intention to use the mobile payment technology, M-Pesa and whether the actual usage results in the higher rate of collection of premium payments for NHIF from the voluntary and self-employed contributors. The study offers insight into the investment in this mobile payment technology by self-employed contributors and gives propositions for future research in this area.

2.1 General objective of the study

The aim of this study is to investigate the effect of mobile money transfer on the collection of health insurance premium payments from the voluntary and self-employed contributors. The specific objectives are:-

1. To establish the influence of M-Pesa transaction cost on premium remittance for the self-employed NHIF members.
2. To determine if convenience of using M-Pesa influence the collection of contribution payments from the self-employed NHIF members.
3. To determine the influence of level of premium rates and collection mechanisms on the rate at which NHIF self-employed members make monthly contribution payments: members make their contribution payments through M-Pesa.

3. Methodology

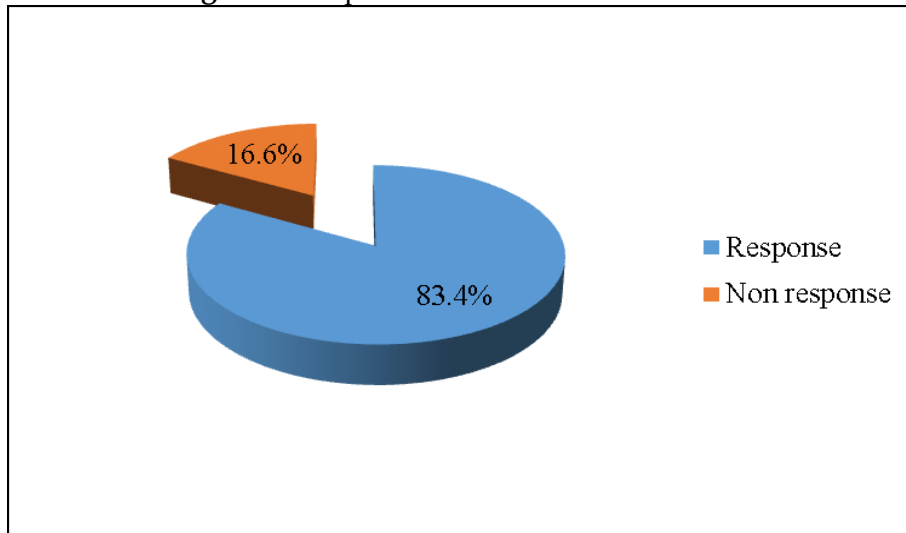
The research adopted a descriptive survey design. According to Mugenda and Mugenda (2003), a descriptive design allows the researcher to describe record, analyze and report conditions that exist without manipulation of variables. It also helps to determine specific characteristics of a large group (Kombo and Tromp, 2006). It involves collecting original data (often in the form of a questionnaire) for the purposes of describing a population which is too large to observe directly. The design was chosen because the study collected information from a large population and reported on their collection of premiums of health insurance in order to answer the research questions.

4. Findings of the study

A total of 36 questionnaires were issued and only 30 questionnaires were returned. From the data collected, the total actual response percentage was 83.33%. The table below showed a very positive response rates hence an indication that the responses reflected the views of the employees of the institutions and thus a reliable source of

information. It can be concluded that data obtained from those who responded was sufficient enough to answer research questions. The higher the response rates assures more accurate results.

Figure 1: Response rate General Information



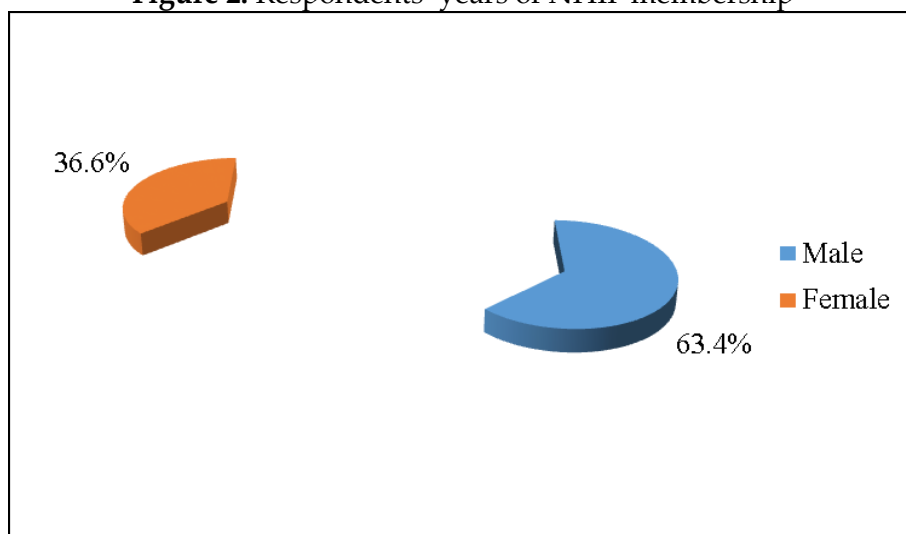
4.1 Response rate general information

Members were asked on their general information on different parameters of their gender, years in service, level of education, department in office as well as their marital status. This was important to ascertain important information on the research work.

4.2 Gender

Gender is the relations between men and women, both perpetual and material. It was important to assess the gender of the respondents because the NHIF is currently faced by a number of challenges like membership subscription thus knowing the gender of the current members is relevant.

Figure 2: Respondents' years of NHIF membership

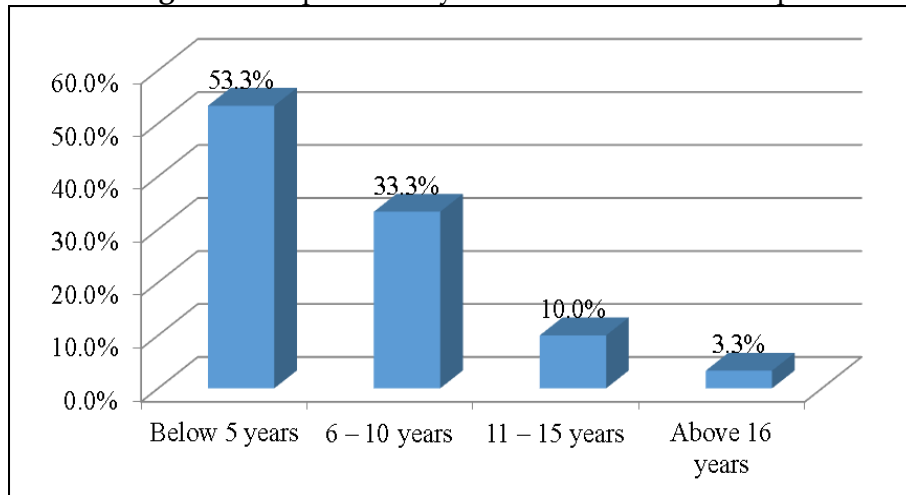


The table above shows that the findings on the gender of the response rate, found that majority of the respondents were male at 19 (63.3%) whereas 11 (36.66%) of the remaining respondents were female. This shows that the majority members of NHIF Meru branch were more men than women thus concluding to the fact that the most of the NHIF operations are carried out by male members hence the reason for high male turn up.

4.3 Years of NHIF membership

This was necessary to define when the respondents began being members of NHIF. This was important to the researcher in identification of the length the respondents were subscribed as members of NHIF.

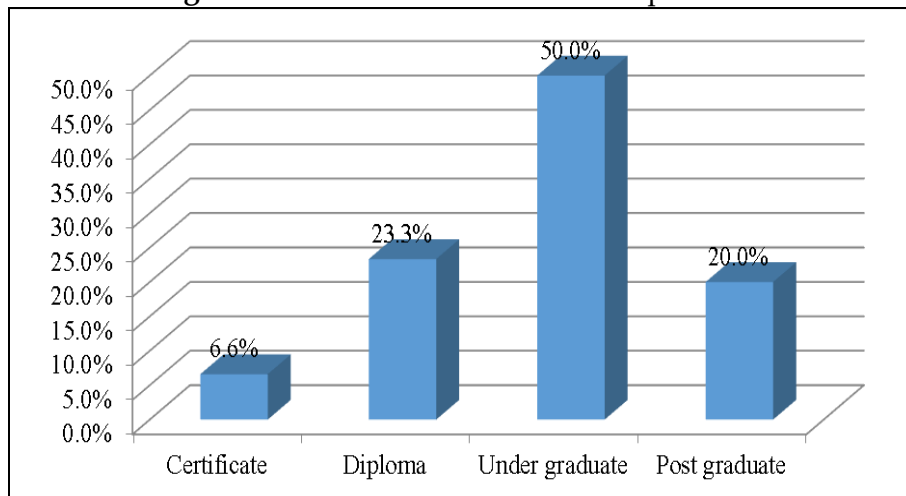
Figure 3: Respondents' years of NHIF membership



The table above shows that, most members have been members for the period below 5 years in the insurance company. This means that, the membership subscription exercise is very active and that the NHIF is interested in new and energetic members. There is however a considerable number of 10 (33.33%) who have been members for 6-10 years, 3 (10%) who have been members for 11 - 15 years and 1 (3.33%) who have been members for above 16 years. This one respondent was a more experienced member hence may give support and guidance through the skills he had achieved as per his experiences.

4.4 Level of Education

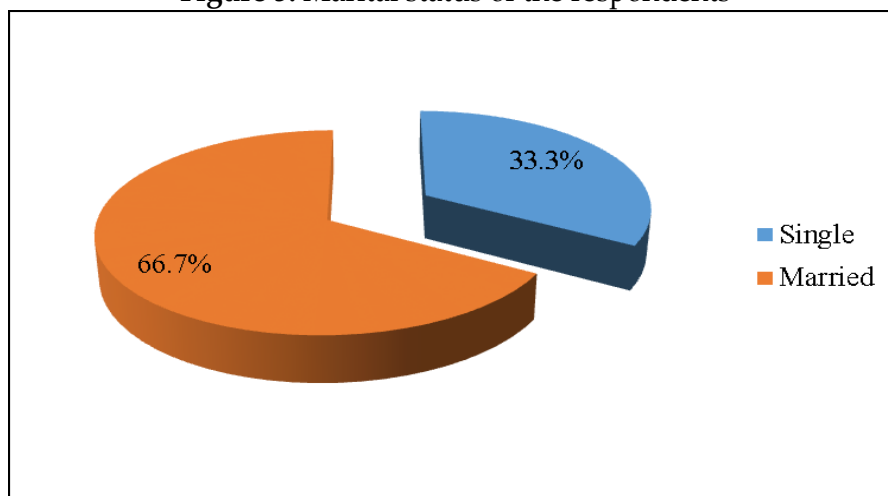
Education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgement. Different levels of education determine how different member have different knowledge and awareness about the process of using M-Pesa to make NHIF contribution payments. Therefore, the researcher wanted to find out the different levels of education of the respondents as shown in table 4.4 below.

Figure 4: Level of education of the respondents

The table above shows that most of the members at NHIF are under-graduates. This makes up a 50% of the total number. A minimal number have attained certificates and diplomas with percentages of 6.6% and 23.33% respectively. And 20 % of the total members are post graduates. This is to say, most of the members of NHIF are well educated and therefore they can be engaged in decision making especially during the Annual General Meeting which will assist the management in their day-to-day operations.

4.5 Marital Status

The marital status of an individual play an important role on how the individual performance. Members with satisfied marital status normally perform effectively unlike those with unsatisfied marital status. Thus, this factor could help in identifying the issues on effective performance. The table below shows the marital status of the respondents.

Figure 5: Marital status of the respondents

From table above shows it is clear that the distribution of respondents by their marital status was found that most of the respondents 20 were married with an average of 66.66%, 33.33% of the respondents, 10 in number, indicated that they were single. This showed clearly that the distribution of marital status was well done from the respondents with majority of the respondents bearing a married status. It can be seen that the NHIF Meru branch has married members' more than unmarried. The 29.41% of the single members could be attributed to the fresh blood subscribed in the insurance cover.

5. Level of Premium and Collection Mechanisms

The study found out that most of the respondents (50%) feel that the level of NHIF premium rates are affordable and cheap, 29.41% felt that the rates were expensive since they contribute ksh500 compared to when they used to pay ksh160.

Table 1: Level of premium

	Freq.	Percent	Cum.
Very cheap	5	14.71	14.71
Cheap	17	50	64.71
Expensive	10	29.41	94.12
Very Expensive	2	5.88	100.00
Total	34	100.00	

5.1 Transaction Cost

The study noted that cost was not a major concern for the NHIF members surveyed. 20.588% perceived the service as very cheap and did not mind the cost involved in using it, 61.765% perceived the service as cheap and a significant percentage were of the opinion that the transactional cost was reasonable but 5.882% perceived the service as very expensive to them and they prefer depositing through the bank which does not charge anything. Figure 5 below shows the perception of the respondents concerning the cost of mobile banking.

Table 2: Transaction Cost

	Freq.	Percent	Cum.
Very cheap	7	20.588	20.59
Cheap	21	61.765	82.353
Expensive	4	11.765	94.118
Very Expensive	2	5.882	100.00
Total	34	100.00	

5.2 Simplicity of Transaction Procedure

The study noted that the transaction procedure was well understood by many of the NHIF members who wished to make their monthly contribution payment through mobile money. 82.35% that is 28 respondents agreed that the mobile money transaction

procedure was simple and easy to follow, while 17.65% that is 6 respondents felt that the transaction procedure is a bit confusing and therefore not easy to follow.

5.3 Convenience of Mobile Money

The research sought to find out the perception of the respondents on the convenience of mobile money use. There are no forms to fill when making the mobile money transfer and the NHIF contributor does not have to travel to the NHIF offices or queue in the bank but can make the transaction from wherever he or she maybe. Most of the respondents (61.76%) indicated that they strongly agreed that mobile money is convenient for making NHIF contribution payments as shown in the table below.

Table 3: Mobile Money Conveniences

	Freq.	Percent	Cum.
Strongly Agree	21	61.76	61.76
Agree	12	35.29	97.06
Neither Agree nor Disagree	1	2.94	100
Disagree	0	0	100.00
Total	34	100.00	

5.4 Accessibility of mobile money services

The study findings on the accessibility of mobile money services indicated that majority of the respondents (70.59%) did use mobile money services to access financial services to make payments of the NHIF monthly contribution.

Table 4: Accessibility of mobile money services

	Freq.	Percent	Cum.
Strongly Agree	24	70.59	70.59
Agree	9	26.47	97.06
Neither Agree nor Disagree	1	2.94	100
Disagree	0	0	100.00
Total	34	100.00	

6. Summary of Findings

The use of the highly successful and innovative M-Pesa money transfer platform has enabled NHIF to extend health services to informal sector workers who are not captured in formal payroll systems and whose incomes are often less regular or predictable. The option to make monthly insurance contributions using M-Pesa has helped to minimize travel to NHIF offices and time spent in long lines away from productive livelihood activities. M-Pesa is a particularly useful payment method for NHIF beneficiaries living in rural areas with limited access to NHIF offices. Additionally, by allowing workers to make incremental contributions to their monthly premium, the M-Pesa platform has helped to reduce the frequency of NHIF's penalty charge – 5 times the monthly contribution amount for those who default in remitting

contributions. The steep penalty fee has been a major deterrent to re-enrollment for defaulted members as well as attraction of new members

A. How does the Level of premium rates and collection mechanisms affect the rate of NHIF premium remittance?

Under this objective, the researcher sought to find out how premium rate of the NHIF affect the rate at which the NHIF members make prompt monthly contribution payments. This study found out that many of the self-employed members of NHIF find the premium rates to be affordable and they are able to make their monthly payments before deadline date. The unemployed NHIF members feel that the rates are high and that they are not able to make the payments before deadline date therefore incurring more expenses since they have to pay a penalty of 50% for every late payment.

B. How does the M-Pesa transaction cost influence the collection of contribution payments?

Under the objective of transaction cost the researcher found out that most of the respondents who are NHIF member and who make their monthly payment through M-Pesa feel that the M-Pesa transaction charges are affordable and cheap, but there are those that felt that the charges were high and that they better visit the NHIF accounts office or the bank when they want to make their monthly contributions.

C. How does accessibility of M-Pesa services influence the collection of contribution payments from the NHIF contributors?

Under this objective, the researcher sought to find out how the accessible the M-Pesa services are to the NHIF members who make their contributions through the mobile money transfer. This study found out that most respondents own phone and have access to the mobile money services, but those does not own or have access to a phone are not able to access to mobile money services.

D. How convenient is the use of M-Pesa to make NHIF premium payments?

Under this objective, the researcher sought to find out how convenient M-Pesa services are when the NHIF contributors want to make their monthly contributions through their phones. This study found out that most people prefer using their phones to make their contributions since they do not have to queue in the banks and in the NHIF Accounts office whenever they want to make their monthly payments. They are able to proceed with their daily businesses as usual.

7. Conclusions

The study found high knowledge of currently available mobile money services surveyed. Additionally, this study demonstrated increasing use of mobile money services to make the NHIF contribution monthly payments in Meru town. Majority of

study respondents agreed that mobile money has had a positive impact on their premium remittance even though fewer respondents are not using the service to make their contribution payments because of the extra cost incurred such as the transaction cost. This study concludes that use of mobile money transfer has a positive impact on the way the NHIF members make their monthly contributions easily and with convenience.

7.1 Recommendations

The following recommendations were made, based on the findings of this study: The National Hospital Insurance Fund (NHIF) which has been identified as the institution to be used to implement universal health coverage in Kenya's needs to improve in the following areas: First, there is need to increase the awareness of health insurance level among the rural populations. Secondly the network of offices especially in the rural areas should be increased to enable residents' access vital information, registration and premium payments. It is also important to explore the viability of simple online platforms to enable persons residing in areas far from NHIF offices register and pay premiums without having to visit NHIF offices. Finally, given that affordability of the premiums has been cited as a major challenge, the institution should consider allowing informal sector workers pay their premiums in small installments rather than insisting monthly, quarterly, semi-annual and annual payments

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