Towards Understanding Hospital Perspectives on Vitality of Financing Health in Kenya: A Case of National Hospital Insurance Fund

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Abstract: This paper is an attempt to assess the perceived benefits of an insurance fund to members from. Taking a sample from health workers of a level four hospital in Kisii county data was analyzed using Frequencies, Percentages, means and Standard deviation. Inferential statistics like Chi-squire and ANOVA was also used to test the hypotheses in this study through the use of SPSS. The findings indicated that from the perspectives of health staff, medical insurance cover is beneficial to patients despite the challenges that are encountered by both health staff and members. Also, it revealed that that f-value is less than table value at 5 percent level of significance ((P>0.05), therefore the null hypothesis is accepted. The study concluded that there is a need to provide principal members with more information on the new and introduced coverage.

Keywords: health staff, medical insurance cover, patients.

1. INTRODUCTION

The Kenyan government has made a commitment to achieve Universal Health Coverage (UHC) by 2030. A key part of its UHC strategy is to expand coverage of the National Hospital Insurance Fund (NHIF), which currently covers approximately 15% of the population. In 2015, the NHIF introduced significant reforms aimed at enrolling more people and expanding the range of services that enrolled members have access to (Kemri Wellcome trust 2018) Globally there is growing international consensus on the importance of extending social protection in health to the whole population (Carrin and Preker, 2004; WHA, 2005) in order to reduce financial barriers to health care services for the needy and to avoid catastrophic health expenditures (Kawabata et al., 2002). The option of social health insurance as a financing mechanism generating additional resources in typically chronically underfinanced health systems is receiving increasing attention (Carrin and James, 2004), for the informal sector too (WHO, 2006). However, one of the major challenges to social health insurance in developing countries is integration of the expanding informal sector and inclusion of the poor. Various low-income countries (Ghana, Kenya, Kyrgyz Republic, the Philippines, Tanzania and Viet Nam) and mid-income countries (South Korea, Mexico), which have introduced or are in the process of expanding social health insurance, are being faced with this, (Carrin and James, 2004).

1.1 National Hospital Insurance Fund (NHIF)

The NHIF is a public corporation managed under the provisions of the NHIF Act of 1998 (Republic of Kenya, 2012). The fund is steered by a board which reports to the minister of health (Republic of Kenya, 2012). Routine management of NHIF is done by a team headed by a chief executive officer (CEO) (Republic of Kenya, 2014b). The NHIF insures 15% of Kenya's total population which is about 88.4% of all persons with health insurance in Kenya (Ministry of Health, 2014). Membership of the NHIF is compulsory for all formal sector workers, and voluntary for the informal sector. The Principal membership has grown over the recent years as indicated on Table 1

Table 1: Principal Members Growth Pattern

YEAR	PERIOD	PRINCIPAL MEMBERS
1	2013/2014	4,713,662
2	2014/2015	5,475,180
3	2015/2016	6,136,256
4	2016/2017	6,817,888
5	2017/2018	7,657,463

Source: NHIF Report (2018)

Between 1998 and April 1 st 2015, mandatory contribution to the NHIF was restricted to persons earning a minimum 10 monthly salary of KES 1,000 (USD 11)1 with premiums rising with increasing gross income up to a cap set for those earning KES 15,000 (USD 167) and above (National Hospital Insurance Fund, 2015). Most formal sector workers contributed the maximum premium of KES 320 (USD 3.50) per month. On April 1st 2015, the minimum salary from which contributions will be required was raised to KES 5,999 (USD 67) (contributing KES 150 (USD 1.6) each month), while the top contribution of KES 1,700 (USD 19) will be required from those earning more than or equal to KES 100,000 (USD 1,111) (Republic of Kenya, 2015), increasing premium contributions fivefold. Contributions from the informal sector were increased from KES 160 (USD 1.8) to KES 500 (USD 5.5) per household (National Hospital Insurance Fund, 2015). Accompanying this change in contributions is an enhanced benefit package which includes outpatient care and other services such as health promotion and disease screening (National Hospital Insurance Fund, 2015). The NHIF also earns revenue from several investments including real estate, parking fees and interest from loans offered to their staff at subsidized rates (Deloitte Consulting Limited, 2011). NHIF covers outpatient benefits based on a positive list of services. Payments are made on a capitation basis based on the number of persons registered at a particular facility. The capitation is reported to be between KES 1000 and KES 1400 per beneficiary (Isaac Ongiri, 2015).

Inpatient service benefits are pegged according to the hospital category/contact: **Contract A**: Public health facilities only. Comprehensive cover for all services offered• including surgery, **Contract B**: Faith-based organizations and low cost private facilities. Comprehensive• services, although facilities may charge a maximum KES 15,000 (USD 167) **Contract C**: Private facilities- Daily bed rate only of KES 400-1800 (USD 4.4-20), based• on number of hospital beds and other facilities following an assessment by the NHIF.

Table 2: Utilization of the NHIF benefits packages in Kenya

S/No	Period	2017/2018	2016/2017	Growth
	Healthcare Benefit Package	(Kes) Amount	(Kes) Amount	%
1	Inpatient Services	14,695,395,233	12,048,865,574	22%
2	Outpatient Services	7,512,551,228	5,075,532,866	48%
3	Surgeries (Major and Minor)	3,622,114,046	2,091,611,416	73%
4	Renal Dialysis	1,763,415,726	1,247,216,500	41%
5	Maternity Services	1,533,079,255	1,628,589,332	-6%
6	Free Maternity (Linda mama)	1,488,460,969	28,172,808 –	
7	Cancer treatment	1,367,193,712	1,232,149,150	11%
8	Optical (Managed Schemes)	738,440,079	158,747,955	365%
9	Dental (Managed Schemes)	559,545,537	373,651,683	50%
10	Specialized Surgeries	548,059,958	274,110,673	100%
11	MRI	434,031,838	651,582,821	-33%
12	CT-Scan	285,069,617	311,512,561	-8%
13	Kidney Transplant	64,796,889	21,709,305	198%
14	Rehabilitation for Drugs & Substance Abuse	54,386,371	32,472,977	67%

Source: NHIF Report (2018)

The NHIF also manages the Civil Servants and Disciplined Forces Medical Benefits Scheme, which provides comprehensive cover for outpatient and inpatient services, group life cover and funeral expenses (National Hospital Insurance Fund, 2015). Members of this scheme can access services at accredited public and private facilities, depending on their preferences. Facilities are paid on a capitation basis and fee-for-service basis for outpatient and inpatient services respectively. Members can change their choice of health provider every six months. The expanded benefits package currently offered has increased health care access for NHIF members and at the same time boosted the health care providers' ability to provide more effective care to both NHIF members and the Kenyan citizen. Table 2 illustrates the utilization of the NHIF benefits packages;-

2. THEORETICAL FRAMEWORKS

There are several theories that explain why people opt to take any insurance cover. A few are explained below.

2.1 Consumer theory

This theory assumes that consumers who are perfectly informed maximize their utility as a function of consuming various goods, given relative prices, their income and preferences. According to Begg et al. (2000), „changes in prices and income influence how much of different goods rational consumers will buy". They argue that „health insurance is expected to be a normal good with a positive income elasticity of demand, implying that the people are less likely to insure, given a lower price". They further maintain that „a price increase of a substitute for insurance such as user fees is expected to raise the insurance demand, as is a decrease in insurance premium. In the researchers view, consumers reaction to the price changes depends upon their socioeconomic status since the rich, in particular, are likely to be insensitive to price changes, provided they are still getting quality of health care they expect at that exorbitant price. Cameron et al. (1988) also criticized the theory by arguing that „since there are uncertainties about health insurance, choice is not made based on utility alone but on consumers' expectation about factors such as their health status. Thus, theories on decision making under uncertainty better describe insurance registration.

2.2 Expected Utility (EU)

Theory Manning and Marquis (1996) stated that, „under expected utility theory, insurance demand is a choice between an uncertain loss that occurs with a probability when uninsured and a certain loss like paying a premium". The theory assumes that people are risk averse and make choices between taking a risk that has different implications on wealth. At the time of insurance choice, households are uncertain whether they will be ill or not, and of the related financial consequences. Insurance reduces this uncertainty. Explaining this further, Hsiao et al. (2006) argue that „the choice of rural residents to join or not join a CBHI is a discrete decision process consistent with qualitative choice model" and that the farmers' choice of joining a community-based health insurance scheme in rural China was grounded in the comparison of the expected utility of having health insurance versus having none." Despite these criticisms, expected utility is most commonly used in models of decision making under risk, (Marquis and Holmer, 1996).

3. RESEARCH DESIGN AND METHODOLOGY

The study adopted a case study design that comprised of one of the level four hospitals in Kisii County and the target population was all health staff in the hospital. The reason was to find out the views from all staff members especially those who deal with patients to know if according to their experience they prefer health insurance schemes especially NHIF. A sample of 94 respondents was used in this study. The study adopted stratified sampling technique since there was a number of stratas as mentioned above.. The researcher utilized Descriptive statistics and ANOVA when analyzing the data.

4. FINDINGS AND DISCUSSION

4.1 Perceived Benefits on NHIF to Patients

According to Bauhinia Foundation Research centre Health Care Study, (2007) the heath care system in Hong Kong was facing the same problem like other health care are facing in the world. The same problem applied to Kenyan hospitals regarding how health workers responded on the statements that the service to patients have to be improved due to lack of

basic needs to patients (drugs and medical supplies and equipments) and this caused by insufficient of funds, hence the facilities are unable to meet their requirements. The perceived benefit on NHIF to patients has seven statements of questionnaires it has also positive and negative statements. The following are the results of table 3. X7 is the first score of 373, indicates that the majority agreed that the services to patients have to be improved. Out of 94 respondents 41 (43.6%) were agree and 31 (33%) were strongly agree. This is due to insufficient of drugs, medical supplies and medical equipments in the facilities. Without those items services ca be dropped for that case each facility must make sure that they are available in NHIF department all the time. X3 is the second score of 332, majority agreed that Staff who attending NHIF members are skilled and experienced due to the fact that most of patients are good observers so that they can evaluate services delivered through suggestions box or through medias. Out of 94 respondents 43 (45.7%) were agree and 17 (18.1%) were strongly disagree. Staffs are making sure that patients (NHIF members) are satisfying with their services. X6 is the third score of 325, where by out of 94 respondents 41 (43.6%) were agree and 18 (19.1%) were strongly agree that some of patients are discouraged with services delivered. The reason is the same as X7 without those items patients will be discouraged and they can shift to other health facility which may cost them due transport facilities because they must get treatments from the facility which is near to them. X1 is the last score of 277, out of 94 respondents 40 (42.5%) were disagree with the statement that the facility have enough drug and other medical supplies for NHIF members and X5 is the last but one score of 320, where by majority agreed that patients are not satisfied with service delivered. The basic reason of X1 and X5 is the same as X7, having well; skilled and knowledgeable staff only without enough drugs and supplies is like to have drivers without motor vehicle while you need to travel.

Table 3: Benefits of NHIF to patients

SNO	STATEMENT	SA	A	N	D	SD	TOTAL SCORES
X1	The facility have enough drug and other medical supplies for NHIF members	9 (9.6)	32 (34.0)	13 (13.8)	19 (20.2)	21 (22.3)	271
X2	Number of patients who attending for daily treatment are very sufficient	13 (13.8)	34 (36.2)	21 (22.3)	19 (20.2)	7 (7.4)	329
X3	Staff who attended NHIF courses are skilled and experienced	17 (18.1)	43 (45.7)	13 (13.8)	15 (16.0)	6 (6.4)	332
X4	The health facility have a tendency to detect non members during treatment	12 (12.8)	41 (43.6)	24 (25.5)	11 (11.7)	6 (6.4)	324
X5	Patients are not satisfied with services delivered	14 (14.9)	36 (38.3)	11 (11.7)	20 (21.3)	13 (13.8)	320
X6	Some of patients are discouraged with services delivered	18 (19.1)	41 (43.6)	13 (13.8)	10 (10.6)	12 (12.8)	325
X7	Services have to be improved	31 (33.0)	41 (43.6)	14 (14.9)	4 (4.3)	4 (4.3)	373

SA= Strong agree, A= Agree, N= Neutral, D= Disagree and SD= Strong disagree,

4.2 Descriptive statistics Analysis of Benefits of National Hospital Insurance Fund to Patients'

From table 4, it clearly indicated that, Services have to be improved; this statement is agreed by respondents with the highest mean of 3.9681 which supported by the score of 373 in X7 and it is ranked number 1 and the second rank of 3.5319 which supported by score of 332 in X3 as well as the third rank of 3.4574 which supported by score of 325 in X6. These concepts are true due to the fact that the facilities do not have enough drugs and other medical supplies for NHIF members as it supported by mean of 2.8830 and score of 271 in X1and it is ranked number 7 and the sixth rank of 3.1915 which supported by score of 320 in X5 . In any health facility the priorities after personnel are drugs, medical supplies and medical equipments, if these lacking there is no need of providing services because it not able even to tackle the emergencies.

Table 4: Perceived benefits of NHIF to patients

SNO	STATEMENT	MEAN	SD	RANK
X1	The facility have enough drug and other medical supplies for NHIF members	2.8830	1.35088	7
X2	Number of patients who attending for daily treatment are very sufficient	3.2872	1.16048	5
X3	Staff who attended NHIF courses are skilled and experienced	3.5319	1.15192	2
X4	The health facility have a tendency to detect non members during treatment	3.4468	1.06374	4
X5	Patients are not satisfied with services delivered	3.1915	1.31392	6
X6	Some of patients are discouraged with services delivered	3.4574	1.27562	3
X7	Services have to be improved	3.9681	1.02077	1

(Sources: Field data)

Min=minimum, Max=maximum, SD=standard deviation.

4.3 Hypothesis Testing

The researcher found that the perceived benefits on NHIF to patients do not significantly differ between gender groups of health workers. One way Fisher's ANOVA was used to test this hypothesis and results are indicated in table 5.

Table 5: Difference in Perceived benefits of NHIF to patients between male and female Health Workers

SNO	VARIABLES	F.VALUE	SIG	INTERPRETATION	DECISION ON Ho
X1	The facility have enough drugs and supplies	6.899*	0.010	Significant	Reject
X2	Number of patients	1.255	0.265	Insignificant	Accept
X3	Staff who attended NHIF course	3.211	0.076	Insignificant	Accept
X4	Health facility detect non members	1.609	0.208	Insignificant	Accept
X5	Patients are not satisfied with services	0.059	0.809	Insignificant	Accept
X6	Patients are discouraged with services	0.019	0.891	Insignificant	Accept
X7	Services to be improved	0.024	0.878	Insignificant	Accept

(Sources: Field data)

df = 1,92; P = 3.84

The results in table 5 indicated that the gender groups in the variable of facility have enough drugs and supplies differ significantly according to the perceived benefits of NHIF to patients, being the f-value is greater than table value at 5 percent level of significance (P=0.05) lead to the rejection of null hypothesis. But the rest of the aspects, it is indicated that the gender groups do not differ significantly. The results indicated that f-value is less than table value at 5 percent level of significance ((P>0.05), therefore the null hypothesis is accepted. This shows that apart from statement X1, the sample was drawn from the same mean.

5. LIMITATION AND RECOMMENDATION FOR FURTHER RESEARCH

The current study was based on a case study of one level four hospital in Kisii County. The study assumed that the other level four facilities may provide same information since workers move from one hospital to another in form of transfers. However, these findings were not generalized to the whole country because NHIF registration is all over the country. This study recommends that a further study should be done on the perceived benefits of NHIF and Challenges facing NHIF implementation in other counties and even in level five and six hospitals. Also, there is a need to carry research on Client or members' perspectives of NHIF cover in Kenya

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