Awareness and utilisation of national health insurance scheme by healthcare workers in southwest Nigeria

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ABSTRACT
Objectives: To assess the awareness, utilization and perception of healthcare workers towards National Health Insurance Scheme in a tertiary hospital.
Methods: A cross-sectional descriptive study among healthcare workers in a tertiary health institution in Ile-Ife Nigeria. The study population included all the staff in the hospital excluding the doctors and the convenience sampling technique was employed in the selection of study participants. A well-structured self-administered questionnaire was used to obtain data from consenting participants at their duty posts and analysed using SPSS v20.0.
Results: Study recorded 87.9% (246/280) response rate and over 60% (160) was within 19–38years and mean age was 35 years. More females (54.9% and 85.9%) than males (45.1% and 76.6%) participated in the study and registered with the Scheme respectively.
Conclusion: Awareness of the workers was found to be fair, the perception was good and utilization not very encouraging. The study concluded that gender, marital status, having children and educational level were not significantly associated with awareness, perception and utilization of NHIS by healthcare workers.
Keywords: health insurance, healthcare workers, awareness, perception, utilisation

INTRODUCTION

The quality of healthcare service is equally as important as the knowledge of the healthcare services offered by providers, the accessibility to services and education on the best utilization of self- or practitioner-provided services.[1] Health education which the process of informing, motivating individuals can improve their ability to promote their health, increase desired or actual use of health services and provide consumers with the basis for evaluating whether they require treatment.[1,2] It enables healthcare consumers to actively seek the best-known provider and facility for their particular illness.[3] Knowledge is the key determinant to the adoption of new health techniques or events in any population especially in places where health awareness is very poor. There is need to provide basic information concerning healthcare issues to equip the populace so that voluntary actions can be adopted for ultimate health promotion of the population. With the dwindling health financial resources and consequent rising health costs, health promotion through health education is arguably the best way to alleviate the problems of inequitable distribution of healthcare resources and inaccessibility to care especially in the developing climes.

In the developing nations where income is meagre for most workers, social health insurance may be the only way to obtain care that would otherwise have been unaffordable.[9] Social health insurance is the pooling of funds to ameliorate the risks of illnesses among the registered participants and their dependants. Insurance coverage is reported to exert a significant positive effect on the use of health services and identified as the most important fringe benefit offered by employers.[10,11] The payments for health insurance are deducted from gross revenues in calculating the employers' taxable income thus ensuring that these workers' incomes are not drastically reduced. It also enhances workers' effort and productivity because of the psychosocial aspects of having a good job thus increasing satisfaction with a job.[12] Jobs with a form of health insurance coverage have been shown to have personnel with higher productivity and lower job

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turnover than jobs without health insurance coverage.[56,12,14] Researchers now calculate the cost of unhealthy employees to employers by relating poor health to absenteeism, lower productivity due mainly to absences, increased turnover, early retirement and premature death.[4,5] Ill-health among workers can lead to absenteeism, decreased workforce availability with a consequent decline in productivity.[6-8]

The utilization of health services by the population is a function of their predisposition to the use of those services, the enabling and inhibiting factors of use, their need for healthcare and satisfaction with services.[15] Other factors influencing the use of social health insurance include distance, accessibility, users' perception, self-rated health status, the level of education, gender, socioeconomic and cultural factors.[16,17] The utilization of healthcare services is also known to increase with social health insurance as found in other climes. Though researchers have done some studies on National Health Insurance Scheme (NHIS) among workers in Nigeria but there is a paucity of evidence among healthcare workers especially those employed in the tertiary health institutions.

Knowledge about an issue will motivate its utilization and the users are most likely to have positive attitude and good perception towards it. The perception of users of social health insurance is expected to be better than those not utilizing it though they may be registered. The attitude and perception towards the social health insurance are related to utilization and satisfaction. If the healthcare service coverage is very limited as it is with the dental services in the Nigerian social health insurance, enrollees tend to be subtly indifferent or obviously have negative attitude to the healthcare insurance issues. Healthcare workers in the developing country are considered knowledgeable and very prime in all health-related issues especially in their immediate environment and among family members. They can either motivate others to enrol or dissuade them from joining the Scheme. The inadequate knowledge of a social health insurance, creates a situation of displeasure or dissatisfaction as enrollee can misinterpret the coverage and benefits they stand to enjoy prior to enrolment. This may be in contrast to their earlier belief that the social health insurance will cater for all their healthcare needs.

The aim of this study, therefore, was to assess the awareness of the healthcare workers employed in a tertiary health institution concerning the NHIS. The attitude of these workers, as well as their perception about the Scheme, was also assessed. The level of their utilization of the Scheme was determined to ascertain their predisposition to the Scheme whether they can act as motivators and agents of change to the actualization of the proposed universal coverage of the entire populace by the Scheme.

METHODS

This was a descriptive cross-sectional study conducted among healthcare workers in Obafemi Awolowo University Teaching Hospital Ile-Ife. The study population included all the staff employed in the hospital excluding the doctors. The study employed a well-structured self-administered questionnaire. The questionnaire comprised socio-demographic, knowledge, utilization and attitude-perception variables. The convenience sampling technique was adopted but deliberate care was taken by the investigators to include staff from all the departments and units of the hospital. Study participants were approached in their duty posts and the consenting staff were administered the questionnaire. Some responded immediately and returned the completed questionnaire whereas others returned their completed questionnaire at a later date. A total of 280 questionnaires were administered and 246 of the returned were found usable. The data were collated, processed and entered into the Statistical Package for Social Sciences version 20.0 (SPSS, IBM Inc New York). The quantitative data were analysed and expressed using simple counts, mean, proportions and standard deviation while Pearson correlation and Chi-square test were employed to highlight the associations between the variables at $P<0.05$ and confidence interval of 95%.

Clinical staff: for the purpose of this study represent the Doctors, Nurses, Pharmacists, Optometrists, Dental Therapists, Physiotherapists, Medical Laboratory Scientists, Dental Surgery Assistants.

Non-clinical staff; represent the Medical Laboratory Technicians, Administrative staff, Secretaries, Typists, Cooks/Caterers, Security personnel, Dieteticians, Technicians, Records staff and Works and maintenance personnel.

RESULTS

The study recorded 87.9% response rate as 246 out of the 280 questionnaires administered were returned, properly completed and found usable. The socio-demographic characteristics of the study participants showed that majority 160 (65.0%) of the healthcare workers under study were within the 19–38-year-old group. The mean age of the study subjects was 35 years old (SD = 9.114) and age range was between 19–56 years. More females 135 (54.9%) participated in the study than males 111 (45.1%) which was not significant (P=0.143) and the majority 161 (65.4%) of the study participants were married and only eight participants were either co-habiting, separated or divorced. The greatest proportion (83.7%) of the participants had tertiary education. The study indicated that 63% of participants had less than three children; 78 of the married participants had no child. [Table 1]

Table 2 shows the knowledge parameters of participants concerning the NHIS in relation to the gender. The study found significant differences between the responses of the female and male participants concerning the year the enabling law of NHIS was established, the year NHIS started operations and the categories of people that can register with the Scheme (P scores of .023, .004 and .017 respectively) [Table 2]. It was also found that there were no differences in the responses between the female and male participants concerning what NHIS is, the contributors to the Scheme, beneficiaries of the Scheme and when to access care using the Scheme following registration; at P > 0.05 for the variables respectively [Table 2].

The utilization of the Scheme and its impact on the health of the users were highlighted in Table 3 and this revealed that there were no significant differences between the responses of the female and male participants to the queries made to ascertain the utilization of NHIS and its impact. The only significant difference was found in their responses to the use of NHIS to pay for surgeries and NHIS reducing burden of medical bills at P = .029 and .020 respectively. Nonetheless, there were no differences in their responses concerning provision of drugs, admission bills, non-affordability of medical bills, delay in accessing care and accessing care more often than before with NHIS [Table 3]. The study also found that the difference between the 85.9% female and 76.6% male participants registered with NHIS was not significant at P=0.059 [Table 3].

The results of the perception and attitude of healthcare workers towards NHIS were depicted in Table 4; it showed that perception and attitude of the male participants did not differ significantly from the female participants at P > 0.05 [Table 4]. The only exception was on the responses to the query if NHIS should be for everybody, was significant at P = .000 [Table 4]

DISCUSSION

The social health insurance system of financing health became imperative owing to the rising cost of healthcare, economic recession, dwindling resources and consequent population growth experienced in many climes. Budgetary provision for health services in Nigeria has witnessed drastic and embarrassing drop since the 1980s. It has dropped to as low as 1.9% of the total federal government expenditure and never exceeded 3% until the year 2000;[20,21] total health expenditure hovering around 3.7% in 2014 and 4.3% in 2016.[22,23] With the expunging of the free healthcare services in the country and the attendant introduction of user fees for virtually every aspect of healthcare services in the public sector; there was a proliferation of private practices. Ichoku reported over 75% of private health facilities of the total facilities in a study in one of the states of the federation.[24] The private health providers found both in the rural and urban areas rendering curative medical care range from drug vendors (chemists), pharmacy shops, traditional medicine sellers and traditional birth attendants and health centres.[24,26]] The social health insurance, otherwise known as national health insurance; a system which was introduced into Nigerian health system as the National Health Insurance Scheme. The need for the establishment of the National Health Insurance Scheme was unequivocal, but the population who are the consumers should be aware of its existence, guidelines and principles so that all future conflicts will be minimised.

The study established that the majority of the participants are in their active service years and as such, they are to benefit maximally from the Scheme. It goes to show that the workers are implicated in the failure of the nation to attain yet the proposed 10% coverage of the population beginning with the employees in the formal sector. It is expected that the coverage should have been 100% as the subjects are employed in a health institution that is also a federal government establishment. The proportion of study

participants registered with the Scheme is not as encouraging as one would expect in a federal tertiary health institution. These healthcare workers are expected to be positive agents of change that will help to create awareness about the Scheme among the population but their knowledge about the Scheme's operations and guidelines was found to be inadequate. There is still need to educate them concerning the various aspects of the Scheme.

The utilization of the Scheme by the workers was not too promising and this may be due to poor perception about the Scheme not living up to their expectations of catering for all their healthcare needs. The users of the Scheme had issue with the non-availability of drugs especially expensive drugs which are always out-of-stock and this may also precipitate their dissatisfaction with the utilization of the Scheme. An awareness campaign will be beneficial in this regard as the workers will understand fully what their benefits and responsibilities are. The more promising the utilization of care using NHIS, the better will the attitude to it be.

The healthcare workers will require the authorities in charge to invest time and resources to create awareness and the enabling environment to inform, re-educate and reinforce the baseline knowledge that they have. If the authorities are keen on achieving the universal coverage at a future date; there is need to embark on the massive awareness and enlightenment campaign. Since the study showed that the knowledge, utilization and perception and attitude toward NHIS were not related to gender, marital status or having children so it will be expected that any intervention targeting the entire staff will be most effective in achieving the desired result. There will not be a need to design group-specific public health or enlightenment programme. Good perception about the Scheme will promote higher patronage and usage and also discourage malpractices and abuse occasioned by indifferent attitude towards the NHIS by the employees in the formal sector.

The changes suggested by respondents that should be introduced into the Scheme showed that these healthcare workers actually would want the Scheme to continue and operate better for the good of the population. The fact that they would want the Scheme to ensure that drugs are provided without discrimination in terms of cost might be a pointer that the Scheme is already acceptable to them and only slight modifications are required. They also want to see the attainment of the universal coverage of the entire population by the Scheme and for the regulatory authorities to monitor the Scheme to forestall abuse of the Scheme which may hamper benefits and sustenance of the Scheme.

CONCLUSION

The attainment of the universal health insurance coverage in Nigeria may not likely be in the nearest future. The knowledge of healthcare workers concerning NHIS was not adequate though their perception and attitude were found to be positive and encouraging. There is still much to be done by the regulatory authorities to ensure that all the employees in the formal sector are adequately informed so that they are motivated to enrol and utilize the Scheme for all healthcare needs. These group of workers can act effectively as ideal agents of change in the propagation of awareness campaign for the NHIS and are motivated with its continued operations.

LIMITATION

The study should have considered in details the sources of dissatisfaction with the utilization of the Scheme. A further larger study overcoming this limitation is suggested to be conducted.

Table 1: Demographic Characteristics

Age in years		
19 – 28	61	24.8
29 – 38	99	40.2
39 – 48	52	21.1
49 – 58	34	13.8
Gender		
Female	135	54.9
Male	111	45.1
Marital status		
Single	77	31.3
Married	161	65.4
Others	8	3.3
Educational level		
Primary	5	2.0
Secondary	35	14.2
Tertiary	206	83.7
Number of children		
0 – 2	155	63.0
3 – 5	83	33.7
>5	8	3.3
Job Description		
Clinical HCW	113	45.9
Non – clinical HCW	133	54.1

*HCW-Healthcare Workers

Table 2: knowledge of respondents concerning NHIS

Variable	Clinical		Non – clinical		P
	No	Yes			
	N (%)	N(%)	N(%)	N(%)	
NHIS is a social health insurance programme	18 (7.3)	95 (38.6)	32 (13.0)	101 (41.1)	.114
NHIS (enabling law) was established in 1999	47 (19.1)	66 (26.8)	69 (28.1)	64 (26.0)	.107
NHIS started operations in 2005	49 (19.9)	64 (26.0)	66 (26.8)	67 (27.2)	327
Only government workers can register with NHIS	63 (25.6)	50 (20.3)	51 (20.7)	82 (33.3)	006*
Government, employers and workers fund NHIS	26 (10.5)	87 (35.4)	69 (28.1)	64 (26.0)	000*
NHIS covers four biologic children below 18 years	11 (4.5)	102 (41.5)	34 (13.8)	99 (40.2)	001*
Enrollee can use NHIS on the same day of registration	45 (18.3)	68 (27.6)	60 (24.4)	73 (29.7)	403

*-significant at P<0.05.

Table 3: Impact of NHIS utilization on health

Variable	Clinical		Non – clinical		P
	No N (%)	Yes N (%)	No N (%)	Yes N (%)	
I used NHIS to buy all my prescribed drugs	80 (32.5)	33 (13.4)	83 (33.7)	50 (20.3)	.165
NHIS paid my admissions bills	63 (25.6)	50 (20.3)	71 (28.9)	62 (25.2)	.710
NHIS paid my dependants' healthcare bills	69 (28.1)	44 (17.9)	72 (29.3)	61 (24.7)	.274
NHIS paid for my surgery	84 (34.1)	29 (11.8)	87 (35.4)	46 (18.7)	.130
Had need but no money to seek medical care	104 (42.3)	9 (3.7)	89 (36.2)	44 (17.8)	.000*
Delayedseeking medical care because I could not afford the hospital bill	91 (36.9)	22 (8.9)	85 (34.5)	48 (19.5)	.004*
With NHIS I access medical care more than before	48 (19.5)	65 (26.4)	49 (20.0)	84 (34.1)	.367
NHIS has reduced my spending on healthcare	29 (11.8)	84 (34.1)	31 (12.6)	102 (41.5)	.668

Variable	Clinical		Non – clinical		P
	No	Yes	No	Yes	
NHIS has significant impact on health of users	17	96	23	110	.634
NHIS reduces the burden of medical bills	15	98	17	116	.909
NHIS will promote improved health Facilities	32	81	44	89	.965
NHIS will enhance efficiency in healthcare delivery	32	81	44	89	.420

*P significant at P<0.05

Table 4: Perception and attitude characteristics

NHIS will promote equity among the different income groups	39	74	54	79	.326
NHIS should not be for everybody	93	20	91	42	.012
NHIS will succeed in Nigeria	38	75	41	92	.639
There are adverse consequences associated with NHIS	69	44	88	45	.406
NHIS should be discontinued	102	11	103	30	.007
The performance of NHIS is good and satisfactory	52	61	66	67	.573

Figure 1: The suggested changes by respondents

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