The Impact of National Health Insurance Scheme on the Health Status of Staff: A Case Study of the College of Technology Education, Kumasi of the University of Education, Winneba

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Abstract

The study focused on the impact of the National Health Insurance Scheme (NHIS) on health status of staff of the College of Technology Education, Kumasi (COLTEK) of the University of Education, Winneba (UEW). It explored the extent to which the NHIS has improved the health status of staff. Both stratified random and purposive sampling were adopted to select 42 members of staff for the study. Questionnaire was used to obtain data from the respondents. Simple descriptive statistics were used in the analysis of the data. The major findings were that the adoption of NHIS at COLTEK has increased access to medical care by staff, and has solved the problems associated with the obnoxious 'cash and carry' system and as such has remarkably reduced the financial burden on members of staff. Also, members of staff are able to work efficiently and effectively for the progress of the University since they have access to affordable and, to a large extent, quality healthcare. It is recommended that even though the Department of Human Resource, COLTEK is doing a good job in ensuring that staff register or renew their NHIS cards, it is recommended that staff should be reminded on regular basis to renew their expired NHIS cards on time or register with the NHIS immediately they are appointed. It is also recommended that NHIS issues should be included in the orientation programme for new appointees at the College.

Keywords: health insurance, COLTEK, quality health care

1.0 Introduction

Provision and access to health care within the health industry in Ghana has presented a great deal of challenges to present and past governments, policy makers, managers and consumers. This has occasioned a number of policies aimed at making health care accessible and affordable to all. To effectively address the problem of financial barriers to quality health care, the government of Ghana in 2001 initiated a National Health Insurance Scheme (NHIS) as a humane alternative to financing health care services in the country. This initiative on health insurance culminated in the promulgation of the National Health Insurance Law 2003 (Act 650) that ushered in the operation of the National Health Insurance Scheme (NHIS). This law makes it compulsory for every Ghanaian to belong to the scheme. This was in line with building a healthy and prosperous nation.

The National Health Insurance Act (NHIA) was passed in 2003, and implemented in March 2004, and it was expected to address the myriad of challenges associated with the "cash and carry" system which required patients to pay a stipulated amount of money before receiving the needed treatment at the various healthcare centres in the country. The amount of money paid was meant to cover the cost of drugs and treatment. This system, according to Ossei (2008), to a large extent, deprived many people of quality healthcare because they could not afford. The introduction of the NHIS therefore made it possible for different sectors of the Ghanaian population, including those in higher education institutions like the College of Technology Education, Kumasi (COLTEK) to benefit from the scheme.

The upgrading of the former Faculty of Applied Arts and Technology Education (FAATE) to College of Technology Education, Kumasi (COLTEK) led to an increase in both student enrolment and recruitment of staff (both teaching and non-teaching). The staff obviously plays a crucial role in the management and functioning of the College, in particular, and the University of Education, Winneba in general. It is therefore contended that if efficiency and effectiveness are of paramount consideration in the administration of the University, the health condition of staff must be taken into greater consideration. To this end, the University of Education, Winneba in 2008 adopted the National Health Insurance Scheme as a means to better the health needs of its staff (Akrono, 2006). This bold step was followed by COLTEK in 2015 (Vice-Chancellor Annual Report, 2015)

1.1 Statement of the Problem

One of the factors that contribute to the achievement of organizational goals is healthy workforce. Prior to the introduction of NHIS, the COLTEK was paying bills for its staff. The hospital bills had to be pre-financed by staff before they were reimbursed by the University. Most of the staff were therefore not assessing better healthcare, because they could not pre-finance the cost of treatment at the various hospitals and healthcare

centres. After operating the NHIS for some time at COLTEK, it is considered vitally important to undertake a study to assess the impact of the Scheme on the provision of quality health care service for staff and students at the College. This is aimed at finding answers to critical questions such as whether the NHIS has improved the general health status of staff at the College and what challenges have bedevilled the Scheme after its implementation at COLTEK.

1.2 Purpose of the study

The purpose of this study is to examine the impact of National Health Insurance Scheme on the health status of staff, at the College of Technology Education, Kumasi of the University of Education, Winneba.

1.3 Objectives of the Study

The study sought to:

- examine whether the introduction of the NHIS at COLTEK has improved the general health status of staff.
- determine the extent to which staff of COLTEK have easy access to quality healthcare through the NHIS.
- identify the benefits that the introduction of the NHIS has brought to staff and the College.
- identify the problems confronting the implementation of the scheme at COLTEK.

1.4 Research Questions

In line with the objectives of the study, the following questions guided the study:

- Has the health status of staff improved with the introduction of NHIS at COLTEK?
- How does the NHIS promote easy access to quality healthcare?
- What are the benefits of the NHIS at COLTEK?
- What are the challenges of the implementation of the scheme?

1.5 Significance of the Study

It is hoped that the research findings will provide Management of COLTEK the necessary information on the strengths and weaknesses of the NHIS and the modalities to put in place to ensure that staff derive maximum benefits from its implementation. The Ghana government through the Ministry of Health (MOH) could also utilize the findings by examining the strength and weaknesses inherent in the implementation of the NHIS policy in educational institutions to launch out flexible and pragmatic health policies for such institutions. It is also anticipated that similar institutions in the country could be encouraged through the findings of this study to examine their health care policies with the objective of strengthening their systems as well.

2.0 Literature Review

2.1 Historical Evolution of Health Insurance

President Bismarck of Germany is reported to have adopted social health insurance in the 18th Century to save his government from collapse. To achieve this, a law was passed on existing mutual health organisations backed by governmental support (Campanje, Hendrinks, Veraghtert & Widdershoven, 2010). Similarly, in the United Kingdom (UK) the Beveridge Scheme was adopted in 1944. This Scheme sought to meet the health needs of specific persons in society. In the same vein, South Africa, in the 1980s, promoted the formation of mutual and social health insurance schemes aimed at providing good quality healthcare to the citizenry (Spicker, 2009).

The concept of health insurance was proposed in 1694 by Hugh from the Peter Chamberlin family. In the late 19th Century, early health insurance was actually disability insurance, in the sense that it covered only the cost of emergency care for injuries that could lead to a disability. As the Industrial Revolution matured during the middle to late 20th Century, traditional disability insurance evolved into modern health insurance programmes.

Another form of health insurance was also observed in the pre-industrial era in Europe, with the formation of Mutual Aid Societies and the Guilds. The Guilds were made up of independent workers of same profession, grouped together for economic interests. They decided to give assistance to members in need (form of mutual aid) in the form of systematic coverage of social risk like funeral expenses, child birth and sickness, among other needs (Kropotkin, 2010).

This payment model continued until the start of the 21st Century in some jurisdictions like California. Patients were expected to pay all other health care costs themselves, under what was known as the fee-for-service business model just like the 'cash and carry' system. Today, most comprehensive private health insurance programmes cover the cost of routine, preventive and emergency healthcare procedures, and also most prescription of drugs (Wikipedia, 2011).

2.2 The Concept of Health Insurance

Health insurance may be referred to as a contractual relationship whereby an insurance company (insurer) agrees to reimburse the insured for healthcare costs in exchange for a premium. The contract (policy) generally stipulates the type of healthcare benefits covered as well as costs to be reimbursed (Murray, 2007).

The Ministry of Health (MOH, 2003) in Ghana, referred to Health Insurance as an alternative healthcare financing system which involves resource pooling and risk sharing among members. It provides security against loss by illness or injury. Health Insurance provides financial protection against health related expenses. It provides coverage for Out-Patient Department (OPD), in-patient care and other specialised types of care (MOH, 2003).

The National Health Insurance is intended to solve problems associated with the 'cash and carry' system which made it compulsory for everybody to pay money before or after treatment in the hospitals and clinics. It is believed that pre-financing for healthcare by an individual provides more security in terms of access and quality at the time of need (Arhin, 1994; MOH, 2003).

In general, health insurance schemes provide certain advantages like: access to quality healthcare, cross subsidization, solidarity among members, stabilisation of income of the poor contributors, ensuring good governance of the health sector as contributors have more negotiating power through insurance organisations whiles making the health providers responsive to client's needs (Atim, 1998).

The main principles governing health insurance schemes include solidarity among members, contributions (premium) by members based on the law of large numbers (the larger the number the lower the risk that is spread over members), ability to pay, ensures equity, promoting equalization, providing subscriber ownership and partnership among others (Hacker, 2002).

2.3 Types of Health Insurance

Globally, there are three types of health insurance, namely: Mutual or Community Based Health Insurance, Classical Social Health Insurance and Commercial Health Insurance. The Mutual or Community Based Health Insurance is commonly found in the Philippines, Senegal, Tanzania, Thailand and now Ghana. The second type is the Classical Social Health Insurance as pertains in Belgium, France, Germany, and the United Kingdom. The third type is the Private Commercial Health Insurance such as Mutual Health Organisations in the United States of America (Hacker, 2002).

Under the Ghana Law, Act 650 of 2003, three main types of Health Insurance Schemes were prescribed as follows: District Mutual Health Insurance Schemes, Private Commercial Health Insurance and Private Mutual Health Insurance Schemes. The Law stipulates that any person resident in Ghana has the right to join any one of the three types of schemes (NHIA, 2003).

2.4 Funding under the National Health Insurance Scheme

Funding under the National Health Insurance Scheme is basically through individual contributions by members. Members are categorised into two groups namely, those from the formal sector and the informal sector. Funding of the National Health Insurance is as follows:

- 2.5% contribution of workers
- 2.5% VAT levy of selected goods and services,
- Minimum premium of GH¢25.00 per annum from informal workers,
- Parliamentary approval of a specified amount from the consolidated fund,
- Donations, grants, gift and other voluntary contributions,
- Money that may accrue from the investment of the national health insurance contributions (National Health Insurance Council, 2005).

2.5 Health Care facilities considered under the National Health Insurance Scheme

Service providers that are accredited under the National Health Insurance Scheme are as follows: teaching hospitals, regional hospitals, district hospitals, health centres, maternity homes, private hospitals, quasi-government hospitals/clinics, mission hospitals, pharmacy shops and chemical sellers.

In accessing the service, LI 1809 schedule I, Part I of the National Health Insurance Law states that:

- i. the first point of attendance, except in cases of emergency, shall be a primary healthcare facility, which includes Community-based Health Planning Services (CHIPS), health centres, district hospitals, polyclinics or sub-metro hospitals, quasi public hospitals, private hospitals, clinics and maternity homes.
- ii. in localities where the only health facility is a regional hospital, the general patient department shall be considered a primary healthcare facility.
- iii. all healthcare services provided in these facilities shall be paid for by the respective health insurance scheme that the patient has registered with.
- iv. in cases where the services are not available, all referred cases in connection with illnesses covered by

the health insurance policy shall be reimbursed by the health insurance scheme.

v. emergencies shall be attended to at any health facility

2.6 Minimum Healthcare Benefits

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Healthcare benefits to be paid for by the scheme under the National Health Insurance Law are:

- Out-Patient Services such as:
- a) Consultations and reviews. These include both general and specialist consultations.
- b) Requested Investigations including laboratory investigations, X-rays and ultrasound scanning for general and specialist out-patient services.
- c) Medication, namely, prescription drugs on National Health Insurance Scheme Drug List, traditional medicines approved by the Food and Drugs Authority and prescribed by accredited medical and traditional medicine practitioners.
- d) HIV/AIDS symptomatic treatment for opportunistic infections.
- e) Out-patient/day surgical operations including hernia repairs, incision and drainage, haemorrhoidectomy.
- f) Out-Patient physiotherapy.
- 2. In-Patient Services
 - a) General and specialist in-patient care,
 - b) Requested investigations including laboratory investigations, x-rays and ultrasound scanning for inpatient care,
 - c) Medication, namely, prescription drugs on National Health Insurance Scheme Drug List, traditional medicines approved by the Food and Drugs Authority and prescribed by accredited medical and traditional medicine practitioners, blood and blood products,
 - d) Cervical and breast cancer treatment,
 - e) Surgical operations,
 - f) In-patient physiotherapy,
 - g) Accommodation in general ward and
 - h) Feeding (where available).
 - Oral Health Services including:
 - (a) Pain relief which includes incision and drainage, tooth extraction and temporary relief;
 - (b) Dental restoration which includes simple amalgam fillings and temporary dressing.
- 4. Eye Care Services including:
- Refraction, visual fields, A Scan, keratometry, cataract removal and eye lid surgery.
- 5. Maternity Care including:
- Antenatal care, and normal deliveries, Caesarean section; postnatal care.

6. Emergencies

All emergencies shall be covered. These refer to crisis health situation that demand urgent intervention and include:

- (a) Medical emergencies;
- (b) Surgical emergencies including brain surgery due to accidents;
- (c) Paediatric emergencies;
- (d) Obstetric and gynaecological emergencies including Caesarean section;
- (e) Road traffic accidents;
- (f) Industrial and workplace accidents;
- (g) Dialysis for acute renal failure (National Health Insurance Council, 2005).

3.0 Methodology

3.1 Research Design

The study design adopted was descriptive and analytical sample survey. This design was chosen because according to Creswell (1994), the information obtained from the sample can be generalised to an entire population. The target population consisted of 420 staff members (Academic and Administrative) of COLTEK as at July, 2016 (Records at Department of Human resource, COLTEK.

3.2 Sampling Procedure

Stratified random sampling was adopted for the study. The population was four hundred and twenty (420) members of staff of COLTEK as at July, 2016, (Records at Department of Human Resource, COLTEK). The breakdown is as indicated in Table1.

Table 1: Number of Staff at COLTEK

Category of	Senior Members	Senior Members (Non-	Senior	Junior	TOTAL
staff	(Teaching)	Teaching)	Staff	Staff	
Population	100	31	120	169	420
Sample (10%)	10	3	12	17	42

Source: Department of Human Resource, COLTEK, (2016)

Table 1 indicates that Junior staff were the most represented (n = 17) while Senior members (non-teaching) were the least represented (n = 3).

The stratified random sampling helped to increase representation of staff from different categories. As Nwana (1981) indicates, a large sample size does not guarantee a higher degree of precision and validity, but the quality of the data depends on several factors, and sample size is one of them. Nwana (1981) is of the view that, due to financial constraints, if the population is a few hundreds, a 10% sample size will do in a cross sectional survey. Thus, faced with such constraints, 10% of the population was used as the sample for the study.

3.3 Data Collection Technique and Data Analysis

A questionnaire was used for the study. The researchers personally distributed the questionnaires to respondents. The completion period was within two weeks. The data gathered were coded and entered into the computer. The SPSS software was used for the data analysis. Descriptive statistics involving frequencies and percentages were used to analyse the data. Outcomes of the study are as indicated in the subsequent tables.

4.0 Presentation of Results

Table 2 presents the demographic information about the respondents

Variable	Frequency (N)	Percentage (%)	
Gender			
Male	21	51.2	
Female	19	46.3	
How long have you served in the U	niversity		
1 - 5 years	7	17.1	
6 - 10 years	11	26.8	
11 - 15 years	14	34.1	
16 - 20 years	6	14.6	
21 years and above	3	7.3	
Category of staff			
Senior Member	13	31.7	
Senior Staff	14	34.1	
Junior Staff	14	34.1	

Source: Field work, 2016

From Table 2indicates that more than half (51.2%) of the respondents were males while 46.3% were females. Majority (78.1%) of the respondents had worked in the University for15 years or less while only nine, (21.9%) have worked for 16 years or more. Concerning the categories of staff in the University; the results show that the University is dominated with senior and junior staff with (n=14, 34.1%) for both categories.

4.1 Research Question one: Has the health status of staff improved with awareness of the existence of NHIS at COLTEK?

Table 3 indicates the number of staff who were aware of the existence of NHIS at COLTEK Clinic as well as the number of staff who had registered.

Table 3: Awareness of NHIS at COLTEK

Variable	Frequency (N)	Percentage (%)	
Are you aware that COLTEK Clinic is accredited with NHIS			
Yes	39	97.5	
No	1	2.5	
Have you registered with the NHIS			
Yes	42	100	
No	-	-	

Source: Field work, 2016

In Table 3, the respondents were asked whether they were aware of the fact that the University Clinic has been given the accreditation to offer free health services to NHIS card holders. The responses show that overwhelming majority (97%) of the University staff are aware that the College Clinic has been given accreditation to offer free health services to patients with NHIS. However, only 3% stated otherwise.

4.1.1 The Health Status of the Staff before the Introduction of the NHIS at COLTEK
Table 4 Health status of staff before the introduction of NHIS at COLTEK

Table 4. Health status of stati before the introduction of NHTS at COLTER							
Category of staff (%)							
	Senior Member	Senior	Junior Staff	Total	χ2 (p-value)		
Characteristics		Staff	Junior Starr	Average			
I opted for self-medication	n before NHIS at C	OLTEK					
Strongly Disagree	61.5%	14.3%	28.6%	34.1%			
Disagree	30.8%	21.4%	21.4%	24.4%	17.711(0.023)		
Neutral	.0%	28.6%	.0%	9.8%			
Agree	7.7%	35.7%	42.9%	29.3%			
Strongly Agree	.0%	.0%	7.1%	2.4%			
I could not afford health treatment before NHIS at COLTEK							
Strongly Disagree	16.7%	21.4%	14.3%	17.5%			
Disagree	75.0%	28.6%	21.4%	40.0%	20.015(0.003)		
Neutral	.0%	28.6%	.0%	10.0%			
Agree	8.3%	21.4%	64.3%	32.5%			

Source: Fieldwork, 2016

Regarding staff's opting for self-medication before the introduction of the NHIS, the outcome depicts that approximately one-third (34%) of the respondents strongly disagreed with the notion that they opted for self-medication anytime they fell ill. Additionally, almost a quarter (24.4%) of the respondents also disagreed that they opted for self-medication. However, nearly one-third (29.3%) of the respondents agreed that they opted for self-medication before the introduction of NHIS at COLTEK. The results presented about the health status of the respondents at the College before the introduction of NHIS and chi-square analysis of the results show that there was a statistically significant association between the option for self-medication based on the category of the respondents (Pearson's chi-square=17.11, p<.05).

Furthermore, in Table 2, the respondents were asked to indicate whether they could afford health treatment before NHIS at COLTEK. The results suggested that more than half (57.5%) of the respondents disagreed with the fact that they could not afford healthcare before the introduction of NHIS at the College. However, only one-third (32.5%) of the respondents agreed that they could not afford healthcare before the introduction of the NHIS at COLTEK. Generally, the trend of responses was tilted towards the disagreement end of the scale suggesting that majority of the respondents could afford the cost of healthcare even before NHIS services were introduced. Chi-square analysis of the results ($\chi 2=20.02$, p<.05) showed that there was a significant association between the category of the respondents and their inability to afford healthcare treatment before the introduction of NHIS on campus.

4.2 Research Question two: How does the NHIS promote easy access to quality healthcare? Table 5 shows how NHIS promotes easy access to quality healthcare.

Category of staff (%)								
	Senior Member	Senior	_	Average	χ2 (p-value)			
Characteristics		Staff	Junior Staff	Total				
With the introduction of N	With the introduction of NHIS do you frequently seek medical attention?							
Yes	30.8%	64.3%	50.0%	48.8%				
No	69.2%	35.7%	50.0%	51.2%	3.043(0.218)			
Has your health status improved with the introduction of NHIS at COLTEK?								
Yes	58.3%	35.7%	85.7%	60.0%	17.711(0.023)			
No	41.7%	64.3%	14.3%	40.0%				

Source: Fieldwork, 2016

From Table 5, it could be observed that about half (51%) of the respondents denied that statement that with the introduction of NHIS at COLTEK they frequently seek medical attention. However, approximately (49%) of the respondents stated they do now seek regular medical care with the introduction of NHIS at the College Clinic. The results have been presented according to the categories of the staff in the sample. Chi-square analysis of the results (χ 2=3.043, p=.218) shows that there was no statistically significant association between the category of the staff and the seeking frequent medical attention with the introduction of NHIS.

4.2.1 How the Introduction of the NHIS has improved the Health Status of Staff

The respondents were asked whether the introduction of NHIS at COLTEK has improved their health status. The result shows that more than half (60%) of the respondents indicated 'Yes' to the question: Has your their health status improved with the introduction of the NHIS at COLTEK?. However, 40% of the respondents thought otherwise indicating that their health status has not improved with the introduction of NHIS at COLTEK. Chi-square analysis of the results indicates that there was a statistically significant association between the position of the respondents and improvement in their health status (Pearson's chi-square=17.11, p<.05).

4.3 Research Question three: What are the benefits of the NHIS at COLTEK?

Table 6 shows the benefits of the introduction of NHIS at COLTEK.

	Category o	of staff (%)	_				
	Senior Member	Senior		Average			
Characteristics		Staff	Junior Staff	Total	χ2 (p-value)		
Has punctuality at work improved?							
Yes	75.0%	64.3%	100.0%	80.0%			
No	25.0%	35.7%	.0%	20.0%	5.848(0.054)		
Have your financial status improved?							
Yes	58.3%	38.5%	92.9%	64.1%	17.711(0.023)		
No	41.7%	61.5%	7.1%	35.9%			

Source: Fieldwork, 2016

The result shows that more than three-quarters (80%) of the respondents responded 'Yes' to being punctual at work with the introduction of NHIS at COLTEK. However, one-fifth (20%) of the respondents responded 'No' to that introduction of NHIS has made them punctual at work. Chi-square analysis of the responses shows that there was no statistically significant association between the position of the respondents and their punctuality at work with the introduction of NHIS at COLTEK (Pearson's chi-square=5.848, p>0.05).

The responses further show that the majority (64.1%) of the respondents indicated that their financial status has improved with the introduction NHIS at COLTEK. However, approximately 36% of the respondents reported that their financial condition has not improved with the introduction of NHIS at COLTEK. Chi-square analysis of the results ($\chi 2=17.711$, p<.05) shows that there was a statistically significant association between the position of the respondents and the improvement in their finances with the introduction of NHIS.

4.4 Research four: What are the challenges of the implementation of the scheme?

In Table 7, the respondents were asked to indicate whether they were impressed with the services offered at the COLTEK Clinic.

Category of staff (%)							
	Senior Member	Senior		Average			
Characteristics		Staff	Junior Staff	Total	χ2 (p-value)		
Are you impressed with th	Are you impressed with the services of the Clinic						
Yes	66.7%	69.2%	92.9%	76.9%			
No	33.3%	30.8%	7.1%	23.1%	3.147(.207)		
Do you encounter difficulty when registering or renewing your NHIS							
Yes	23.1%	28.6%	41.7%	30.8%	1.062 (.588)		
No	76.9%	71.4%	58.3%	69.2%			

Source: Fieldwork, 2016

The responses show that more than three-quarters (77%) of the surveyed staff responded 'Yes' to being impressed with the health services offered at the Clinic. On the other hand,23% of the respondents, mentioned they were not impressed with the services provided at the Clinic. Chi-square analysis of the responses shows that there was no statistically significant association between the position of the respondents and how impressed they are with the services offered patients at the clinic (Pearson's chi-square=3.147, p>0.05).

4.4.1 Difficulty to renew cards or register for NHIS

Also, respondents were asked whether they encounter any difficulty when registering or renewing their NHIS subscriptions. The responses show that the majority (69.2%) of the respondents responded 'No' suggesting they do not encounter any difficulty registering or renewing their NHIS subscriptions. However, about 31% of the respondents indicated they have difficulties registering or renewing. The results showed that there was statistically significant association between the position of the staff at the College and the difficulties they have in registering or renewing with the NHIS authorities (Pearson's chi-square=1.062, p>0.05).

5.0 Discussion of Results

The study revealed the following:

5.1 Research Question 1: Has the health status of staff improved with the awareness of National Health Insurance Scheme at COLTEK?

The study found that the NHIS policy has succeeded in improving the health status of most of the staff at COLTEK with (80%) stating that their health status have improved. It has also improved the financial position of COLTEK staff. This confirms the claim by Arhin(1994) that pre-financing for healthcare by an individual provides more security in terms of access and quality at the time of need. Majority of staff indicated that they were satisfied with the services rendered at the Clinic and this confirms Atim's (1998) findings that health insurance ensures good governance of the health sector as contributors have more negotiating power through insurance organisations whiles making the health providers responsive to client's needs.

5.2 Research Question 2: How does the NHIS promote easy access to quality healthcare?

The study revealed that the adoption of the NHIS at COLTEK has increased access to medical care by staff, and had protected staff from burdensome out-of-pocket expenditures. These results indicate that health insurance can broadly increase healthcare utilization and financial protection at COLTEK as indicated in Akrono (2011). The findings also affirm the Ministry of Health's Report (2003) that health insurance provides protection against health related expenses and also provide evidence of the fulfilment of the objective for the introduction of the NHIS to solve the problems associated with the 'cash and carry' system. However, some questions have been raised about the non-coverage of certain essential drugs by the NHIS and the long-term sustainability of the scheme, particularly in light of recent changes which exempt pregnant women and all children under the age of 18 from paying premiums.

5.3 Research Question 3: What are the benefits of the NHIS at COLTEK?

The study showed that there are a number of benefits associated with the introduction of NHIS at COLTEK. These include improving the health of staff (60%), improving financial position of staff (64%) and improved punctuality at work (80%) all supporting the objectives for the introduction of the NHIS in Ghana. This support the claim by Atim (1998)that health insurance schemes provide certain advantages like access to quality healthcare and stabilisation of income of the poor contributors.

5.4 Research Question 4: What are the challenges of the implementation of the scheme?

The study noted that about 31% of the respondents face difficulty in registering or renewing their NHIS status. In addition, over 23% of the respondents also indicated that they were not impressed with the services provided at the clinic. It could be said that even though these challenges are largely not comparable to the enormous benefits derived from NHIS at COLTEK, they need to be tackled to ensure that almost every staff member at COLTEK has an unimpeded access to the benefits of NHIS in terms of registration and renewal of membership of the scheme.

6.0 Recommendations

Based on the findings, the following are recommended:

- The study noted that 69.2% of respondents did not have difficulty in registering or renewing their NHIS card while about 31% said they have difficulty and therefore reluctant to register or renew their NHIS card. The 31% who have difficulty in registering or renewing their NHIS status is too high since productivity involves the performance of every staff. The Department of Human Resource at COLTEK should regularly educate staff on NHIS matters to enable all staff attach the needed importance to NHIS issues to ensure that every staff is registered. Notice should be made available to staff members every quarter of the year, on the various NHIS expiry dates to sensitise staff. This will serve as a reminder and also address the delays in the renewal of NHIS membership by staff. Issues of NHIS should be part of orientation of new employees. The College should get involved in the procedures for the registration and renewal of NHIS cards for every staff member to obtain it on time. Management should invite the National Health Insurance Authority to the campus on regular basis to register or renew NHIS membership of staff.
- Majority (77%) of respondents said they were satisfied with the services rendered at the College Clinic while23% said they were not satisfied. Management should therefore monitor the activities at the Clinic with the provision of the needed logistics and manpower to make it attractive to all staff of COLTEK.
- The study revealed that 60% of staff were of the view that their health status had improved with the introduction of NHIS at COLTEK while 40% said their health status had not improved. It is therefore recommended that Management should make it policy to ensure that staff undergo medical examination periodically to unravel any hidden diseases for treatment.

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