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Client's Perception of Quality of Health Care Under the National Health Insurance in a District Hospital in Ghana - A Cross-Sectional Study

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ABSTRACT: *Background:* Ghana's pursuance of extensive reforms of her health care system to improve access, increase efficiency and ensure quality dates back to the colonial era. The recent attempt made to achieve this is the introduction of National Health Insurance Scheme (NHIS) which has resulted in the increase of health care utilization. The aim of this study is to find out how this increase has affected client's perception of quality of health care delivery in Ghana under the NHIS.
Method: A cross-sectional survey was used to assess client perception of quality under the NHIS. In a bid to gather information on fresh client experience at the hospital, exit interview was conducted using structured questionnaire. Moreover, at the point of service delivery, observation was utilized to collect data on customer and service provider interaction.
Results: Albeit the service delivery fall short of the Ministry of Health (MoH) quality standards, most of the patients were satisfied. Regarding health facilities, clients need to be educated on their entitlement especially by health insurance schemes, on what they are entitled to whenever they visit health facilities.
Conclusion: Generally, the introduction of the NHIS has resulted in increased level of utilization of health services utilization, however this has not been reflected in the quality of service delivery. Since the patients are not aware of their entitlements, they are unable to harvest the maximal benefits of the services.

KEYWORDS: Patient, Perception, Quality, Health Insurance, Healthcare.

1 BACKGROUND

An important health outcome correlation is income, both at the disaggregated and at the aggregate levels. The link from health to income can also be important, as evidenced by the economic impact of AIDS in Africa [1]. Meanwhile health service of inferior quality does not promote equity or maximize health gain. According to Crosby et al, quality is doing things right the first time [2]. Zeimenthal et al suggest that service quality is the extent to which the users' perception of the service exceeds their expectations [3]. The World Health Organization (WHO) has identified six dimensions of health care quality as; effective, efficient, accessible, acceptable/patient-centered, equitable and safe [4].The history of quality assurance in Ghana could be traced back to Regional Directors of Health conference held in 1989 on ways of improving quality of health care delivery in the country. In Ghana the Ministry of Health (MoH) quality standards looks, among other things, at availability of required number of skilled personnel, equipment, quality assurance team, activities undertaking to ensure quality such as patients satisfaction survey, client complaint management-designated place, client feedback such as suggestion box, fencing of the facility, security post, open space for packing, waiting time, place of convenient and availability of drugs [5].

Several approaches to finance health care have been experimented and adopted in different countries in diverse ways. One of such approaches is social health insurance which is always introduced against a background of existing attitude and traditions in the provision of health services. For instance in a place where health services have been provided free at the point of use, there may be resistance when changing to a system where payment is more visible. On the other hand where

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people have been paying for a service at the point of use, changing to the former is likely to be embraced. The method of financing health care therefore determines its accessibility, affordability and utilization [6].

Financing health care in Ghana has gone through some stages. The first national government revamped the health sector by enlarging and modernizing facilities [7]. As a result Ghanaians could seek medical care in any government hospital as well as health centres and pharmacy stores free of charge [8] .It has been suggested that between 1957 and 1963 the number of health centres increased from 1.0 to 41 and of the £144 million that government budgeted, between 1963 and 1964, for projects, as part of public expenditure, about 31 % went towards the social services with much attention given to the health sector [9]. Also government's health expenditure increased from 6.4% in 1965 to 8.2% in 1969 [10].

The quality of health care began to decline in the late 1960s, because subsequent governments failed to invest in the health care system [11]. Upon adoption of the International Monetary Fund's (IMF) and World Bank's Structural Adjustment Program (SAP), the government was charged to reduce expenditure drastically on social services including health and as a result, the full burden of paying for health care was borne by patients. Government expenditure on health was therefore reduced from 10% of the national budget in 1982 to 1.3% in 1997. Many people could not afford to pay the requisite fees at point of delivery to seek medical attention, they then avoided going to hospitals and health centers instead, they engaged in self-medication or other cost-saving behaviors or practices [12]. It has been established in literature that utilization of health services in Ghana was reduced during this period [13] [14] [15, 16].

In order to remove the financial barriers for Ghanaians to access healthcare services and to ensure equitable access to quality services especially by the poor and vulnerable in society, the government of Ghana initiated and passed the National Health Insurance Scheme (NHIS) Law, 2003 (Act 650) and the National Health Insurance Regulations, 2004 (L.I. 1809) aimed at abolishing the 'Cash and Carry' system and limiting out-of-pocket payments at the point of service delivery [6, 17, 18]. The NHIS is financed from four main sources:1 a value-added tax on goods and services, 2 a reserved portion of social security taxes from formal sector workers, 3 individual premiums, and 4 miscellaneous from investment returns, Parliament and donors. The 2.5% tax on selected goods and services, called the National Health Insurance Levy (NHIL), is by far the largest source, comprising about 70% of revenues. Social security taxes account for an additional 23%, premiums for about 5%, and other funds for the remaining 2% [19].

Just as it has been reported by other studies about the effects of Mutual Health Organizations (MHO) on the health service use, outpatient utilization of healthcare services increased over forty-fold from 0.6 million in 2005 to 25.5 million in 2011as the result of the introduction of the NHIS [20-24]. During the same time, inpatient utilization also increased over fifty-fold from 28,906 to 1,451,596 in 2011 [19]. Although Gumbre in 2001 found that MHO members were less likely than the non-members to seek care when ill [25].

This study is therefore designed to assess the client's perception of quality of health care delivery under the NHIS at the Atwima Mponua District Hospital in Ashanti Region of Ghana.

2 MATERIALS AND METHODS

2.1 PROFILE OF THE STUDY AREA

The study was conducted in the Atwima Mponua District which is located in the south-western part of the Ashanti Region covering an area of approximately 894.15 square kilometers with Nyinahin as its capital town. Health delivery in the district is through eight government and six non-government facilities; one Hospital, five Health Centers, two Clinics and five Maternity/Child Health. In addition, outreach clinical activities are organized in some communities by the District Health Directorate from the district hospital at Nyinahin. The district has one Medical Officer, two Medical Assistants, five Mid-wives, twenty Enrolled and Community Health Nurses and 110 Traditional Birth Attendants providing health services in the public health facilities. Their efforts are complimented by one Medical Assistant, five Mid-wives, one Laboratory Technician and two Nurses in private health facilities.

2.2 STUDY DESIGN AND SAMPLING

A cross-sectional survey was used to establish the relationship between increase in the utilization of health service and clients perception of quality of health care delivery under the NHIS. A sample size was calculated based on the district population as well as using the percentage of the number of people who had registered with the scheme at the national level which was 52% as the proportion. As a result, 384 respondents were to be interviewed based on 95% confidence level using exit interview questionnaire. This number was rounded to 400. Purposive sampling technique was used to select key

informants for interview and simple random sampling technique was also used to select people who were leaving the Hospital after consultation for exit interview.

2.3 DATA COLLECTION

Exit interview was used to gather information on the fresh customer experience at the hospital.

Observational checklist was also used to collect data on customer- service provider interaction at the point of service delivery. It was again used to assess the ministry of health quality standards at the hospital. Following training of field workers, the questionnaire was pre-tested at the Nkawie Government Hospital in the Atwima Nwabiagya District which shares boundary with the study district.

This was done to ensure validity, reliability and to check ambiguities. The choice of the Atwima Nwabiagya District was informed by the fact that it had similar characteristics as that of the study district. The pretest revealed some weaknesses in the questionnaire which were subsequently addressed before its application on the field. Filled questionnaires were numbered and checked for completeness, clarity and consistency at the end of interview. Data was cleaned up and irrelevant materials sorted out.

2.4 DATA ANALYSIS

The data was analyzed using Microsoft Excel 2007 edition. Descriptive and inferential statistics were used to describe and make inferences from the data where applicable. The findings were presented in tables, graphs and charts.

2.5 ETHICAL CONSIDERATION

The study was approved by the Committee for Human Research and Publication, School of Medical Sciences, Kwame Nkrumah University of Science and Technology.

A verbal consent was used to seek the consent of respondents before they were interviewed. This was informed by the fact that the research did not present risk of harm to respondents and involved no procedures for which written consent is normally required outside of the research context. They were however assured of the confidentiality of their response and the null association of it to them now or in the future. In addition, they were assured that their participation would not affect their relations with the hospital now or in the future and that refusal to participate would not attract any penalty.

2.6 LIMITATION

The instrument may be limited in determining the anthropological details in relation to the use of health services considering the limited use of qualitative tools. However; this was minimized through extensive interview. Further, the use of local language (Twi), may have led to misunderstanding or misinterpretation of the import of the set questions and therefore lead to inaccurate results. These limitations were however mitigated through training of field workers for standardization of the interpretation of the questions and through close monitoring by researcher of the data collection process.

3 RESULTS AND DISCUSSION

3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 1. Background characteristics of respondents

	N=400 Frequency	(%)
Sex		
Male	184	(46)
Female	216	(54)
Educational level		
Never	116	(29)
Basic	180	(45)
Secondary	84	(21)
Tertiary	20	(5)
NHIS Status		
Registered	282	(70.5)
Not registered	36	(29.5)
Payment mode before NHIS		
Out of pocket	340	(85)
Family	60	(15)
Others	-	(-)
level of health care usage		
before	64	(16)
after	336	(84)

Source: Field survey, 2008.

3.1.1 SEX DISTRIBUTION

Majority of the respondents 54% (216) were females and 46% (184) were males. Most of the respondents 45% (180) completed basic school (Junior High School), 29% (116) have never been to school, 21% (84) and 10% (20) completed secondary school and tertiary respectively..

3.1.2 NATIONAL HEALTH INSURANCE STATUS

Again 70.5% (282) which represents the majority of the respondents have registered with the NHIS and the remaining 29.5% (36) have not registered with the NHIS

3.1.3 HOW PEOPLE PAID FOR HEALTH SERVICES BEFORE NHIS

It was discovered that 85% (340) paid for their hospital bills out of their pocket prior to the advent of the NHIS whiles 15% (60) had their family members paying their hospital bills for them.

3.1.4 LEVEL OF UTILIZATION OF HEALTH SERVICES BEFORE AND AFTER NHIS

The level of utilization was higher among 84% (336) after the introduction of the NHIS and 16% (64) used to visit hospital more regularly before its introduction.

Table 2 : Clients Satisfaction

	Frequency (%)	
Waiting time		
Satisfied	288	(72)
not satisfied	112	(28)
Availability of drugs		
Available	336	(84)
not available	54	(16)
Understanding of drug regimen		
Understood	312	(78)
Not understood	88	(22)
Service satisfaction		
Satisfied	353	(88.25)
not satisfied	47	(11.75)
Client assessment of staff		
Very good	276	(69)
Good	111	(27.75)
Poor	13	(3.25)

Source: field survey, 2008

3.1.5 AVAILABILITY OF DRUGS AND UNDERSTANDING OF DRUG REGIMEN

Most respondents 84% (336) had all their prescribed drugs from the hospital however 16% (64) did not get all their prescribed drugs from the hospital. The number of respondents understood the drug regimen were the majority 78% (312) and 22% (88) did not understand it as shown in the table 2 above.

3.1.6 SERVICE SATISFACTION

The number of respondents who were satisfied with the services rendered to them was 88.5% (353) but 11.75 (47) were not satisfied. Concerning the workers attitude, 69% (276) of respondents graded it as very good, 27.75% (111) good and 3.75% (13) graded it as poor.

3.2 QUALITY STANDARDS

Using the checklist it was found that the hospital has vacant security post. Also there was vacant client complaint desk, inadequate directional signs, long waiting time in a narrow and dark space. Again there was an untrained quality assurance team.

4 DISCUSSION

The sex distribution in the district was 54% (216) for females and 46% (184) for male 184. This is in line with Turkson [26], who reported that majority 70% of respondents were females. Again the figures were not so much different from the national one. The national figures as against district are male 49 at national and 46 at the district and 51 at national and 54 at the district level for the females. This will make it easy for national health policies to be easily replicated in the district.

The level of utilization of health services went up after the introduction of the NHIS compared to before as 336 representing 84% of the respondents indicated that they visit the hospital more frequently after the introduction of the NHIS as against 64 respondents representing 16% who used to visit hospital more regularly before the advent of NHIS. Studies have revealed that, uninsured individuals are more likely to forgo preventive care and treatment. Also being a member of MHO is associated with higher utilization of modern health care in the form of out-patient visit or hospitalization [20, 21] Agrey and Appia also reported that majority of subscribers accessed healthcare with their NHI cards [27] .Although Gumbre in 2001 found that MHO members were less likely than the non-members to seek care when ill [25].

Concerning the workers attitude majority, 68.5% of respondents graded it as very good, 27.75% good and 3.75% graded it as poor. This supports Agrey and Appiah findings that most clients rated the general attitudes of staff as good [27] however Turkson reported that participants perceived poor attitude of health workers during a focus group discussion [26].

The hospital had only one medical doctor who was seeing an average of 120 patients per day instead of 40. As a result, patients who were supposed to wait for 20 minutes before seeing a doctor took over 60 minutes [28]. Again Turkson also reported among other things that long waiting times and inadequate staff are detrimental to effective delivery of quality healthcare. Ro Strasser find that all countries face the challenge of shortages of doctors and other health professionals in rural and remote areas [29].There was an untrained quality assurance team. Also there were directional signs but inadequate, vacant security post, incomplete fence, vacant client complaint desk which means patients will find it difficult and possibly frustrating to lodge complaints, long waiting time in a narrow and dark space, lack of (x-ray) imaging facilities and insufficient toilet facilities. Most respondents 84% (336) had all their prescription drugs from the hospital respondents representing 16% (64) did not get all their prescription drugs from the hospital. This is a pitfall to client satisfaction as explained by the Treasury Board of Canada Secretariat in 1991 that not meeting publicized standards will result surely in client dissatisfaction [30].

In assessing client's understanding of drug regimen, they were asked to repeat the instruction of the dispensary officers on how they should take their drugs. The number of respondents who showed that they understood the drug regimen was out of 400 representing 78% (312). This number could be attributed to the high literacy rate in the district. But 22% (88) did not understand it, although in percentages those who did not understand the prescription look small yet in terms of real numbers 88 is significant.

As reported in other studies [26, 27] majority of the respondents 88.25% (353) , were atisfied with the service received while11.75% (47) were not satisfied. This means that most of the clients were satisfied with the services rendered to them at the hospital. Among the reasons could be that they really had better service from the hospital. Another could also be that they are not well informed as to what they are entitled to and therefore have no choice than to appreciate whatever service at their disposal. This worth being studied further as it stands.

5 CONCLUSIONS

In this study, it has been shown that the introduction of the NHIS has resulted in increased in the utilization of health services. Although the service delivery falls short of the MoH Quality Standards, most of the clients were satisfied with the services rendered to them at the hospital.

This mean that the way clients perceive health care quality is different from the technical quality standards spelt out by the health ministry. Patients' assessment of quality depends mostly on the altitudes of workers and availability of drugs. This could be attributed to the fact that patients may have less or no information about what they are entitled to when they visit hospital. It is therefore recommended that patience should be educated, especially by the national insurance scheme, on what they are entitled to whenever they visit any health facility.

COMPETING INTERESTS

The authors' declare no competing interests.

AUTHORS' CONTRIBUTIONS

The concept, data analysis and drafting of the manuscript were done by Peter Twum. All authors contributed to reading and correcting the manuscript prior to submission.

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