# SERVICE QUALITY AND CUSTOMER SATISFACTION IN HEALTHCARE DELIVERY:

A COMPARATIVE STUDY OF PUBLIC AND PRIVATE HOSPITALS IN GHANA

LYDIA ANDOH-QUAINOO RICHARD ASANTE | JOSHUA OFORI-AMANFO ENERST OFORI-NYARKO AUGUSTINE ANTWI-BOASIAKO

## **Abstract**

The 21st century has witnessed a dramatic growth in the services sector. One service sector that has advanced significantly is the health sector. In Ghana, health care delivery, particularly infrastructural development, has improved significantly over the past 10 to 15 years. However, its reflection in quality health service to the customer and customer satisfaction has not received much attention. This study was carried out to explore how satisfied the health service customer is and the quality of services delivered. It was also to compare public and private hospitals on these variables. A survey instrument on variables of service quality and customer satisfaction was used to collect data from some selected private and public hospitals within the Accra Metropolis.

It was hypothesized that there would be no significant differences between public and private hospitals on service quality and customer satisfaction. The study however, found that there are differences in service quality and customer satisfaction dimensions between public and private hospitals. The findings suggest that in general quality of service delivery and customer satisfaction are relatively better in private hospitals than public hospitals, and that public hospitals need more improvement in service quality and customer satisfaction.

#### Key words:

satisfaction, health care, customer, service quality, public hospital, private hospital

## Background

Health care occupies a very important position in every country because it is linked directly to the economic development of every nation (Andaleeb et al., 2007) because no nation can develop without healthy people (Omachonu & Einsprach, 2010). Quality health care delivery is increasingly becoming an issue of prime importance in every economy.

Health care is the medical management of illness or disease. Government classifications of health care industry, is based on the United Nation's system of classification known as the International Standard Industrial Classification, (2010). According to this system of classification, health care generally consists of hospital activities, medical and dental practice activities, and other human health activities including para-medical services (US Labour Department, 2002).

The health industry in Ghana is dominated by the government who provide 60% of health care needs supported by 40% from the private sector (Frost & Sullivan, 2008). The implementation of the Health Insurance scheme (NHIS) a few years ago in Ghana has further made health care delivery more affordable and accessible to Ghanaians. The government of Ghana has invested in the revitalization of all public hospitals as part of the millennium development goals (Frost &Sullivan, 2008). Despite the above, the question remains whether the drive towards improved healthcare is being reflected in the quality of services delivered.

This study is based on perceived service model quality that is the SERVQUAL model (Parasuraman et al., (1985); Choi et al. (2005) & Andaleep (2007).

## 1

## Service Quality and Customer Satisfaction

Service quality has several definitions by different authors but the most commonly used and accepted one by many researchers is that. "Service quality is perceived by the customer as the degree and direction of discrepancy between customer service perception and expectations" (Parasuraman et al., 1985). Asubonteng et al (1996) also describe service quality as "the difference between customers' expectations for service performance prior to the service encounter and their perceptions of the service received". A more recent definition by Gefan (2002) describes service quality as the subjective comparison that customers make between the quality of the service that they want to receive and what they actually receive at the service delivery point. Hence, it could be concluded that service quality is embedded in what the customer expects before service consumption and what is actually consumed and the evaluation of expectation and delivery thereafter. For this research however, and from various

definitions, Service quality was determined by the differences between customer's expectations of health services provider's performance in hospitals and their evaluation of the healthcare they received from these hospitals after usage of the service and facilities.

Customer satisfaction on the other hand is the outcome of service evaluation based on expectation by the customer. According to Oliver (1997) customer satisfaction is a general psychological state which is about the expectation and experience from shopping behaviour. It is also defined as a phenomer on of post-purchase reflection on how much the customer likes or dislikes the service after experiencing it (Woodside et al., 1989). Lo (2002) assert that customer satisfaction has various levels including satisfaction with sales personnel, consumption experience or products experience. Based on these definitions customer satisfaction has been

seen as transaction specific and also cumulative over a period (Wang and Hing-Po Lo, 2002).

In conceptualizing the basic service quality model, the SERVQUAL model by Parasuraman et al (1985) identified ten key determinants of service quality as perceived by the company or Institution: the consumer reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibility. Earlier studies suggest that service quality can be adequately measured using the SERVQUAL framework from different service industries (Parasuraman et al. 1991) and reduced currently to five dimensions including; tangibles, reliability, responsiveness, assurance, and empathy.

# Service quality and customer satisfaction in health care

Health care service is considered to be an extraordinarily human centric service industry (Peltier & Dahl, 2009). In the field of medical service, Kim et al. (2008b) adopted the concept of customer satisfaction and noted that patient satisfaction is the judgment of perceived value and sustained response toward service related stimulus before, during or after the consumption of medical services by a patient. Patient satisfaction is concerned with the degree to which the expectations of a patient are fulfilled by the medical services. It appears that service quality is more global while satisfaction is transaction.

Findings from Eiriz and Figueiredo's (2005), reveal that health care services quality should not be evaluated exclusively by customers given the complexity, ambiguity and heterogeneity of health care services. This has been supported by Naidu (2009) that patient satisfaction is a multi-dimensional healthcare construct affected by many variables. A research conducted by Mosad Zineldin (2006) on the quality of health care and its

relationship to patient satisfaction shows that, very satisfied patients recommend the hospital to others. Dissatisfied patients are discouraged from recommending the service to others. Where patients are willing to recommend the hospitals to others then they are very satisfied with the service. This has implications for competition, business growth and sustainability in hospital management.

One factor contributing to customer satisfaction is time spent in the processes and procedures. Choi K. et al (2005) found out that, time spent in a hospital for processes and procedures affect customer satisfaction to a very large extent. Although customers spend less than ten minutes with the physician, they end up spending more time with receptionists, nurses, pharmacists etc. Delays perceived by the customer to be petty and unreasonable could escalate into anger and dissatisfaction. A study by Bielen and Demoulin (2007) added that customer perception of waiting time influence their satisfaction with the service that they receive.

In a qualitative study of satisfaction with medical services conducted in 1997 and 2003 in Ghana, it was found that satisfaction had increased from 57% in 1997 to 78.6% in 2003, indicating a 21 percentage point increase. However, the level of satisfaction was not scaled but simply defined for persons who consulted health practitioners and cited no problem with the health system (Ghana Statistical Service, 1997 and 2003).

Using the SERVQUAL framework (Parasuraman et al. 1991, 1993) and its refined version in the context of Ghana, Andaleeb (2000a, 2001) attempted to explain factors that influence patient satisfaction with healthcare delivery. Through focus group discussions the following variables in health care service quality and satisfaction were found: Reliability, Responsiveness, Assurance, Tangibles, Communication, Empathy. Atinga et al. (2011) also observed that the introduction of the National Health Insurance

Scheme has intensified delays in administrative procedures. Patients routinely complain of spending considerable time before accessing their folders to start medical procedures. This is an emerging issue affecting service quality and customer satisfaction in Ghana.

## Service Quality and Customer Satisfaction in Private and Public Healthcare

Another issue of importance is the difference in the levels of satisfaction between private and public healthcare institutions. Arasli et al (2006) identified six service quality factors as perceived in both Northern Cyprus public and private hospitals: empathy, giving priority to the inpatients' needs, relationships between staff and patients, professionalism, food and the physical environment. The results showed

that patient expectations in both hospital types were not met. An examination of SERVQUAL variables in both public and private hospitals, suggests that health care is a complex area that is unique in all its characteristics and it has too many dimensions to be fitted into a simple singular unit. Therefore, it may be difficult for inpatients to accurately evaluate quality.

According to Andaleeb et al., (2007), staff, facilities and processes are crucial factors for service quality and satisfaction in all hospitals. In their study comparing three hospitals; Private, Public and Foreign hospitals, it was found that foreign hospitals were perceived to be the best among the three in terms of service quality and satisfaction variables while private hospital were better than public hospitals. It could be concluded that service quality and customer satisfaction maybe generally better in Private hospitals than Public hospitals

## 2 Research Plan

The study was quantitative and the survey strategy was adopted as the most appropriate method and the questionnaire was based on the SERVQUAL model dimensions including responsiveness and delivery, professional-ism and quality of staff, communication, facilities, processes and procedures. Responses to items on the questionnaire were rated using a five-point Likert scale ranging from five (5) strongly agree to (1) strongly disagree. Scores on the variables were summed up for further analysis

Some public and private hospitals were purposely selected for patients who have used their services. The public health institutions were: Korle-bu Teaching Hospital, Mamprobi Poly Clinic, Kaneshie Poly Clinic and Ga South Poly Clinic while the private hospitals were Faith Mission Hospital, Bob Freeman Hospital and Finney Hospital. The simple random sampling technique was used to select out-

patient clients who have current experience of the services of the hospital.

(Owusu-Frimpong, 2010).

The data collection process comprised two stages; pretesting and the actual survey. The pre-test survey instrument was reviewed for changes in the content of the questionnaire. Research assistants were trained to assist in the data collection for respondents who could read and write answered questionnaire on their own under the supervision of researchers. In all 125 respondents were interviewed from the public hospitals and 35 were interviewed from private hospitals. An overall response rate of 100% was obtained as all 160 questionnaires administered were retrieved, thereby eliminating non-response bias as an inhibiting factor in the analysis and interpretation of the data (Armstrong and Overton, 1977). Data collected was analysed using Statistical Package for Social Sciences (SPSS) and Pearson Chi-Square was used to analyse the hypothesis.

## **Data Analysis and Discussion**

This section presents the analysis and discussion on the data collected for this research. It constitutes tables, charts and other statistical tools. A sample of 160 patients from some major hospitals was used for the project on customer satisfaction to help assess the level of customer care in these hospitals. The responses were analyzed using Statistical software Package for Social Sciences (SPSS) version 16 and Microsoft Excel 2010

Demographic Information of Respondents

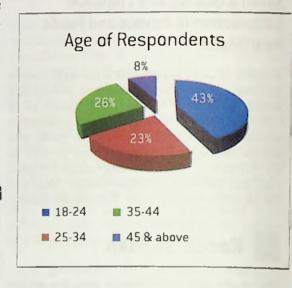
Table 1: Type of hospitals visited by respondents

Type of Hospital	Frequency of patients	Percentage
Public	125	78.1
Private	35	21.9
Total	160	100.0

Source: Field Data, 2012

Table 1 above indicates that out of the 160 patients sampled from out-patient departments from the hospitals used for this research, majority of them (78.1%) were from public hospitals whereas the remaining 21.9% were from private hospitals. The assumption is that the government hospitals chosen are

larger and are more likely to be visited by more people, hence the larger sample. In contrast to private hospitals it is assumed that people who can afford private healthcare are likely to be fewer considering the cost implications.



In figure 1 above, the distribution of age of respondents, reveals that majority of the respondents interviewed (about 43%) were within the ages of (18-24 years) with ages (25-34) years recording 23%, and 35-44 also following with 26% of respondents. These ages fall within the active working group. The older group which is 45-60 and above were 8%, although in terms of health this age category should have been more since they are likely to have more health issues.

# Comparative Analysis of Service Quality Variables in Public and Private Hospitals

Service quality as assessed from consumer/client perception after use of health services was assessed from various dimensions such as; responsiveness and delivery, quality of interactions, quality of facilities and level of professionalism.

Table 2 (A, B &C): Cross Tabulation of Type of Hospital and Level of Responsiveness and Delivery

Percentage

[5.6%]

[31.2%]

[35.2%]

[28.0%]

(100.0%)

### A: Public Hospitals

Excellent

Very Good

Good

Poor Total

Level of Responsiveness and Delivery

39

44

35

125

Frequency

## **B: Private Hospital**

Level of Responsiveness and Delivery					
Frequency Percentag					
Excellent	3	(8.6%)			
Very Good	18	(51.3%)			
Good	10	(28.6%)			
Poor	4	[11.5%]			
Total	35	[100.0%]			

## C: Average scores for Private and Public Hospitals on Responsiveness and Delivery

Average Responsiveness and Delivery							
Type of Hospital	Excellent	Very Good	Good	Poor	Total		
Public	6%	21%	12%	0%	38%		
Private	9%	34%	10%	0%	52%		
Total	14%	55%	21%	0%			

The distribution of the type of hospital by their responsiveness and delivery such as hospital services received, speed of delivery and information as shown on table 2 above indicates that, more than half of the customers from the private hospitals, 52%, rated the level of responsiveness and delivery which are important variables of service quality as ranging from excellent to good.

The level of responsiveness in the public hospitals however, recorded 5.6% excellent and 31.2% very good and 12% as good. This implies that the customers from the private hospitals feel the staff who work in these hospitals they visited tend to be more responsive and caring than those from the public hospitals.

This may also be due to the high cost of health care delivery at the private hospitals and the business and marketing approach adopted in private businesses. For public hospitals this

could be due to a number of factors such as the number of patients per day, lack of logistics, lack of motivation and commitment etc on part of public hospital staff. It also appears that when service delivery is not excellent or very good, then customers expectations are not met. Earlier findings by Arasli et al (2006) from Cyprus reported that patient's expectation from staff interactions is an important variable of service quality delivery in both private and public hospitals. Closer interactions with clients at both hospitals have exposed the moment of truth about responsiveness and delivery such customers are able to assess their satisfaction based on their expectation. This study seems to support such findings that even though to a large extent some expectations have been met especially in private hospitals not all customers are satisfied and that staff patient interaction can affect satisfaction with service delivery and staff responsiveness towards clients.

Table 3: Chi-Square Tests for Association between Type of Hospital and Level of Professionalism and Quality of Staff

Type of Test	Value	Degrees of freedom	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.049a	3	.384
No. of Valid Cases	160		

Source: Field Data, 2012

a. 1 cell(s) (16.7%) have expected count less than 5. The minimum expected count is 1.97.

From table 3 above, the level of professionalism and quality of staff showed an insignificant association or independency on the type of hospital as illustrated by the Chi-Square Test for association between the type of hospital and the level of professionalism and quality of service. This is because the p-value for the Pearson chi-square was 0.384 which is greater than the 0.05 level of significance. Thus the level of professionalism and quality of staff had no positive effect on the type of hospital. It revealed that both variables were independent of each other. Thus both types of hospitals do not show better professionalism and quality staff than the other. It is possible that both hospitals employ qualified and well trained staff with good qualifications, skills and attributes.

Table 4 (A, B, &C): Cross Tabulation of Type of Hospital and Quality of Facilities

### A: Private Hospital

B: Public Hospital

QUALITY OF F	ACILITIES		QUALITY OF F	ACILITIES	
	Frequency	Percentage		Frequency	Percentage
Excellent	2	(5.7%)	Excellent	7	(5.6%)
Very Good	19	[54.3%]	Very Good	40	[32.0%]
Good	11	(31.4%)	Good	54	(43.2%)
Poor	3	[8.6%]	Poor	24	[19.2%]
Total	35	[100.0%]	Total	125	[100.0%]

Source: Field Data, 2012

Source: Field Data, 2012

## C: Average Score on quality of facilities in Private and Public Hospitals

Quality of facilities					10.7
Type of hospital	Excellent	Very Good	Good	Poor	Total
Public	6%	21%	14%	0%	41%
Private	6%	36%	10%	0%	52%
Total	11%	58%	25%	0%	

Source: Field Data, 2012

From the tables 4 (A & B) above, it was observed that 41% of the customers from public hospitals agree that the quality of facilities are excellent, 32% of them admit that the facilities are very good, 43.2% are of the view that the facilities are good, 19.2% saw it as poor. It was also observed that 5.7% of the customers from the private hospital perceived the quality of facilities are excellent, 8.6% also accept that the facilities as poor, 54.3% of them however agreed that the facilities are very good and the remaining 31.4% of them perceived the facilities as good.

From Table 4C the average responses shows that there are some differences in the perception of quality of facilities as more people (52%) perceive private facilities as better than that of public facilities (41%).

Table 5(A, B & C): Cross Tabulation of Type of Hospital and Level of Communication

## A: Public Hospital

#### Level of Communication [staff-patient interactions] Frequency Percentage Excellent 5 [4.0%] Veru Good 46 [36.8%] Good 42 [33.6%] Poor 32 [25.6%] 125 (100.0%)

## **B: Private Hospitals**

Level of Com (staff-patier	71	
	Frequency	Percentage
Excellent	5	(4.0%)
Very Good	46	(36.8%)
Good	42	(33.6%)
Poor	32	(25.6%)
	125	[100.0%]

Source: Field Data, 2012

Source: Field Dato, 2012

## C: Averages Scores on Quality of Communication in Private and Public Hospitals

Type of hospital	Excellent	Very Good	Good	Poor	Total
Public	4%	25%	11%	0%	40%
Private	9%	25%	12%	0%	46%
Total	13%	49%	24%	0%	

Source: field Data, 2013

The distribution on the type of hospital and the quality of communication (interaction) shows that equal percentage of the customers from the private hospitals (37.1% each) perceived the quality of communication to be good and very good while in public hospital (36.8) admitted the communication to be very good (33.6). It is also observed that comparing the quality of communication between the public and private hospitals, there is a slightly higher percentage of the customers who perceive communication and customer interaction better in private hospitals (46%) than public hospitals (40%). This may be due to the fact that the private hospitals may deal with customers from a business or marketing perspective hence may provide in-service training or orientation to new staff on customer relations and effective service. It may also be due

to the fact that with private hospitals supervision may be better and conditions of service in terms of salaries and others may be better. It is also arguable that because there simply isn't pressure on the private medical facility, the staff has a lot more time to devote to patient care while the public hospital might experience a lot of pressure and job stress due the possibly larger number of patients who visit these hospitals.

Table 6 (A, B & C): Cross Tabulation of Satisfaction with Processes and Procedures in Public Hospital

## A: Public Hospital

B: Private Hospital

Level of Satis	sfaction of Proc	esses & Procedures	Level of Satis	faction of Proces	sses & Procedures
	Frequency	Percentage		Frequency	Percentage
Very Good	2	[1.6%]	Very Good	0	
Good	42	[33.6%]	Good	15	[42.9%]
Poor	81	(64.8%)	Poor	20	(57.1%)
Total	125	[100.0%]	Total	35	(100.0%)

Source: Field Data, 2012

Source: Field Data, 2012

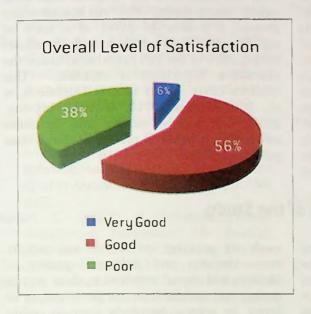
### C: Average Score on quality of facilities in Private and Public Hospitals

	Processes a	nd procedures			Total
Type of hospital	Excellent	Very Good	Good	Poor	
Public	2%	22%	22%	0%	46%
Private	0%	29%	19%	0%	48%
Total	2%	51%	41%	0%	

Source: Field Data, 2012

It was observed from tables 6 A & B that although more respondents accept the processes to be good (Private 42.9%; Public 33.6%) more than half of the customers (private 57.1%; public 64.8%) had a poor view of the level of satisfaction with the processes and procedures. This shows that a significant number of hospital customers perceive processes and procedures at the hospital to be poor. This means that both the private and public hospitals have poor processes and procedures when it comes to health care delivery. According to Hill (2003), satisfaction is both a process that the customer goes through as well an outcome evaluated after the service process. The process is one of the major mixes for services marketing and it is a sequence of actions in the service performance. The care process in a hospital begins as soon as a patient enters the hospital from reception, records, recording of vital health statistics such as temperature, blood pressure etc. Dagger et al (2007) suggest that the healthcare process should be managed administratively and not technically. Atinga et al. (2011) observed that the inception of the National Health Insurance Scheme has intensified delays in administrative procedures.

## Overall Service Quality and level of Customer Satisfaction of Health Services Delivery



The figure above shows the distribution of the overall level of satisfaction of customers in healthcare services delivery as perceived by both customers from both private and public hospitals. It was also observed that even though majority of the customers about 62% were satisfied with the overall quality of services at the various hospitals the percentage of customers with a poor satisfaction still exist and it is quite high. The study recorded that about 38% of the customers were dissatisfied with the overall quality of services at their various hospitals which means that much needs to be done by hospitals on quality of service to improve upon the overall level of customer satisfaction.

## 4

# Hypothesis Testing Showing the Effect of Hospital Type on Overall Level of Satisfaction

To test the strength of relationship between hospital type and customer satisfaction, the following Hypotheses were stated and tested as follows:

HO: Hospital type does not affect or influence overall customer satisfaction.

H1: Hospital type affects or influences overall customer satisfaction.

However, the results of the chi-square tests below depict an association between the overall level of customer satisfaction and the type of hospital. This result would assist in determining whether or not to reject the null hypothesis as a p-value less than the level of significance (0.05), would cause the rejection of the null hypothesis otherwise.

Table 7: Chi-Square Tests for Association between Type of Hospital and Overall Level of Satisfaction

	Value	Degrees of freedom	P-value
Pearson Chi-Square	6.387a	2	.041
N of Valid Cases	160		

Source: Field Data, 2012 a. 1 cell(s) (16.7%) have expected count less than 5. The minimum expected count is 1.97.

The table above shows the testing of the hypothesis using the chi-square tests for association. The analysis showed that between the type of hospital and overall level of satisfaction, there is a significant difference in their overall level of satisfaction. This therefore leads to the acceptance of the alternative hypothesis that, hospital type affects or influences overall customer satisfaction and confirms the earlier result from the cross tabulation that customers from private hospitals are more likely to be satisfied

with the services at the hospital than their public counterparts. The chi-square table showed a p-value of 0.041 at a level of significance of 0.05 which statistically allows the rejection of the null hypothesis; hence the alternative hypothesis is retained. confirms other studies such as (Andeleeb. et al., 2007; Havva, 2010; Owusu-Frimpong, 2010) that service quality and customer satisfaction is better in private hospitals than public hospitals.

## Conclusions & Implications of the Study

The major objective of this research was to explore the quality of service and customer satisfaction in the healthcare industry and to ascertain whether differences exist between customers of public and private healthcare institutions. The study was carried out in some selected private and public hospitals in the Accra metropolis. The study found that service quality and satisfaction in both private and public hospital is high among almost all variables. To some extent, customer expectations have been met. However, most customers are dissatisfied with the processes and procedures in both hospitals.

In general there were some differences in service quality and customer satisfaction as far as public and private hospitals are concerned. Significant differences were found in variables

such as quality of communi-cation. responsiveness and delivery, quality of facilities and overall satisfaction, thus service quality and satisfaction are perceived to be better in private hospitals than in public hospitals.

The implications are that public hospitals need to further improve on their levels of customer satisfaction and service quality to reflect the changes taking place in the sector. Also, the quality of processes and procedures must be improved significantly in all hospitals to ensure maximum satisfaction. This will mean public hospitals becoming more customer oriented than they are currently and adopting an innovative and business approach in dealing with their customers.

## References

Andaleeb, S.S, Siddiqui, N. & Khandakar, S. (2007). Patients Satisfaction with Health services in Bangladesh. Health Policy and Planning. Vol 22, pp263-273.

Anderson, A. (1995). Measuring service quality at a university health clinic', International Journal of Health Care Quality Assurance, Vol. 8 No. 2, pp. 32-37. Arasli, H., Ekiz, E. H. & Katircioglu, S. T.

(2008). Gearing service quality into

public and private hospitals in small islands: Empirical evidence from Cyprus', International Journal of Health Care Quality Assurance Vol. 21 No. 1, (2008) pp. 8-23.

Arrow, K. (1963). Uncertainty and the welfare economics of medical care. American

Economic Review, 53:941-73.

Atinga R. A. et al., (2011). Managing healthcare quality in Ghana: a necessity of patient Satisfaction" International Journal of Health Care Quality Assurance Vol. 24 No. 7, (2011) pp. 548-563.

Choi K. et al., (2005). The service quality dimensions and patient satisfaction relationships in South Korea: Comparisons across gender, age and types of service Volume 19 · No. 3 (2005), pp 140–149.

Eiriz & Figueiredo (2005). Quality evaluation in health care services based on customer-provider relationships. International Journal of Health Care Quality Assurance, Vol. 18 No. 6, pp. 404-412.

Fornell, C, (1992). A National Customer Satisfaction Barometer: The Swedish Experience. Journal of Marketing, January (1992), Volume 56, No 1, pp. 6-20.

Gill, L. & White. L. (2009). A critical review of patient satisfaction. *Leadership in Health Services*, Vol. 22, No. 1, pp. 8-19.

Havva, C. (2010). Quality of Hospital and Customer Satisfaction. *Journal of Economic and Social Research*, Vol 9, No 1, pp 55-69.

- Laohasirichaikul, B. et al., (2010). Effective customer relationship management of health care: A study of hospitals in Thailand. Journal of Management and Marketing Research. Available www.emerald.Insight.com (Accessed on 16/11/2011)
- Lloyd, P. 2002. Working partnerships: engaging communities and consumers. In: Harris MG, ed. Managing health services concepts and practice. Sydney: Maclennan and Petty, (2002): 75-97.

Modernghana (2009). An overview of the Healthcare Industry in Ghana' [online] Available at www.modernghana.com (Accessed October 12, 2011)

Mosad Z. (2006). The quality of health care and patient satisfaction, An exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics. International Journal of Health Care Quality Assurance Vol. 19 No. 1, pp. 60-92

Mulley, A. G. (1995). Industrial quality management science and outcomes research. In: Blumenthal D, Scheck AC, eds. improving clinical practice: total quality management and the physician. San Francisco: Jossey-Bass, (1995): 73-107 (s).

Naidu, A. (2009). Factors affecting patient satisfaction and healthcare quality" *International Journal of Health Care Quality Assurance* Vol. 22, No. 4, (2009) pp. 366-381.

Neuman W. L. (2006). Social Research Methods: Qualitative and Quantitative approaches, 6<sup>th</sup> edition, Pearson International, Boston.

Owusu-Frimpong, N, Nwanko, S. & Dason, B. (2010). Measuring Service Quality and Patients Satisfaction with access to Public and Private Healthcare Delivery. International Journal of Public Sector Management, Vol 23, Iss. 3, pp203-220.

Peltier, J & Dahl, A. (2009). The relationship between employee satisfaction and Hospital Patients Experiences. Available at Northwestern University website (Accessed, December, 3<sup>rd</sup> 2011).

Phelps, C. E. (2002). Health Economics 3rd Ed. Addison Wesley. Boston, MA

Rashid, .W and Jusoff, S. (2009). Service quality in health care setting. *International Journal of Health Care Quality Assurance* Vol. 22 No. 5, pp. 471-482

Saunders, M., Lewis, P., Thornhill, A. (2007). Research methods for Business Students. 4<sup>th</sup> edition, Pearson education, UK.

Tam, L. M. (2007). Linking quality improvement with patient satisfaction: a study of a health service centre' *Marketing Intelligence & Planning* Vol. 25 No. 7,(2007) pp. 732-745.

Torres. E. J and Guo K. L (2004), "Quality improvement techniques to improve patient satisfaction" *International Journal of Health Care Quality Assurance* Volume 17 · No 6 · pp. 334-338

#### **ABOUT THE AUTHORS**

## Lydia Andoh-Quainoo

She is a Lecturer at the Department of Marketing and Services, Marketing Unit, Pentecost University College (PUC). She is currently Long Essay Coordinator and also an Adjunct Lecturer at the PUC Graduate School.

#### Richard Asante

He is a Lecturer at the Department of Marketing and Services, Marketing Unit, Pentecost University College. He is currently the Deputy Coordinator for the Association of Business Executives (ABE), UK professional programme. He is also an Adjunct Lecturer at the PUC Graduate School.

## Augustine Antwi- Boasiako

He is a Lecturer at the Department of Marketing and Services, Marketing Unit, Pentecost University College. He is currently the Coordinator for the Association of Business Executives (ABE), UK professional programme. He is also an Adjunct Lecturer at the PUC Graduate School.

## **Enerst Ofori-Nyarko**

He is a Lecturer at the Department of Marketing and Services, Logistics and Supply Chain Unit, Pentecost University College.

## Joshua Ofori -Amanfo

He is a Lecturer at the Department of Marketing and Services, Logistics and Supply Chain Unit, Pentecost University College. He is also an Adjunct Lecturer at the PUC Graduate School.