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Evaluation of the Management Practices in the Healthcare Delivery System of Ghana: A Case Study of KNUST Hospital, Kumasi

Isaac Yevu[1], Edward Brenya[1], Samuel Adu-Gyamfi[1], Benjamin Darkwa Dompreh[1], Lucky Tomdi[1]

[1]Department of History and Political Studies,
Kwame Nkrumah University of Science and Technology,
Kumasi, Ghana

Abstract

Healthcare delivery issues are managerial though they are sometimes tied to national policies. There is therefore the call for effective management practices in healthcare facilities. However, there is no specific management training system for doctors and other staff who become chief executive officers of these facilities. This paper evaluates the management practices of healthcare delivery of the KNUST Hospital and the implication of these practices on quality healthcare delivery. Using a population of 265 health staff and 125 patients who have spent a minimum of 24 hrs in the hospital, the authors used a purposive and simple random sampling to ascertain the significant relationship between healthcare management practices and healthcare delivery systems. The outcome of the study was determined by evaluating responses from our structured questionnaire on the management practices of healthcare delivery in KNUST Hospital. There was a strong association between maternity and child health, and drugs and vaccines. Similarly, we found the association between environmental health and counselling services to be strong. Healthcare management practices and healthcare delivery were positively and significantly related. Shortage of health care professionals, service quality and length of time before seeing the doctor were challenges to efficient management practices. The study recommends that there should be proper training schemes for management. In addition, management of the hospital should undertake outreach programmes in the communities to sensitize the people on the negative effects of self-medication and superstition in the management of health care delivery in the hospital.

Key words: Healthcare, Hospital Management, Managers, KNUST Hospital, Ghana

Corresponding author: Samuel Adu-Gyamfi E-mail: mcgyamfi@yahoo.com

Introduction

Health is one of the most critical aspects of Ghana's societal framework. Essentially, many countries including Ghana cannot prosper without good health. As a result, individuals are driven to offer the needed support to a sick relative or friend by ensuring they have access to the right healthcare delivery (Afulani et al., 2018). This unique relevance of health in our lives makes careers in the health sector so vital and, often times, attractive (Sperber, 2016). Health, in particular, stands as a pivotal human right key around which other human rights and activities revolve (Gostin et al., 2019). Every human being is, therefore, entitled to the enjoyment of the highest attainable standard of health, leading to living a quality life (WHO, 2017). Consequently, the right to good health care is not only vital, but also a major duty of the government (Boamah, 2018). This continually presents the health service industry as the most energetic enterprise across the length and breadth of the globe (Itkin et al., 2018). The recent growth of the healthcare management field (Doyle, 2019) has equally sparkled interest for potential and talented supervisors and healthcare experts (Blum and Tremarco, 2019). Essentially, the interest and requirement for managers, and healthcare managers in particular, are based on the earnest requirement for accessing the challenges of this potential market (WHO, 2008). This is due to the fact that healthcare is undergoing a constant revolution which requires managers of this institution to adapt to new abilities and skills in their administrative functions (WHO, 2008).

Subsequently, the literature on healthcare management have established that, with the globalisation of the healthcare service industry, medical service managers and experts are required to possess practice-situated, universal and scholarly abilities in this field (Blum and Tremarco, 2019). In respect to the above, healthcare supervisors have developed the possibilities that are needed for future worldwide medical services (Elekwachi, 2019). The present debate in the literature puts forth that these (healthcare) managers are saturated within the health industry with the broad administrative abilities of improving the quality of health while diminishing the expense at an equivalent time (Smith, 2019). Correspondingly, the effectiveness of a hospital or other health care centres depends on the type of health care management and the manager it subscribes to (Seth et al, 2019). As classical professional administrators, healthcare managers are regarded as unique among professional organisations that are vital in the healthcare industry (Hughes, 2017; Cronin et al., 2018; Doyle, 2019). Their main roles include; managing community healthcare centre staff; tracking, screening, requesting supplies, and drugs and further observing patients all through the cycle of consideration (Cronin et al., 2018). They also create spending plans and oversee contacts with partners in communities (Wallick and Stager, 2002).

Significantly, the African health sector has been frustrated with hindered inefficiencies, comprehensive variation in the quality of patient care and the absence of well-defined characterised and appropriately adjusted leadership frameworks (Elekwachi, 2019). One of such areas where the healthcare systems are battling with is healthcare management. As everyone utilises health care or has individuals from their families or companions who are healthcare users, there has been a growing interest in the subject of healthcare management in recent times (Alldred, 2018). The work of Kazdin has revealed that management of individuals, procedures, and resources is a significant part of health care delivery system (Kazdin, 2019). Nevertheless, many studies have revealed that there is no explicit management training framework for doctors and other healthcare professionals amid their study in the universities and other institutions (The Health Foundation, 2012; Wilkie, 2012; Cronin et al., 2018). Essentially, in the choice or arrangement of administrators to oversee

healthcare in institutions where professional administrators are absent, the literature argues that the senior medical experts who have worked in a specific healthcare organisation for a significant number of years is made either the Chief Executive Officer (CEO) or the administrator of a unit of that healthcare organisation (Loh, 2012; Rotar et al., 2016; Deane et al., 2006). This makes the administration of the hospital challenging as medical doctors who are not fine-tuned with managerial issues are made administrators (Loh, 2012; Elekwachi, 2019). The customary organisation of appointing these doctors to lead health care organisations is not helping the adaptation to the elements of the changing health system (Rotar et al., 2016). Enhanced management have been reported in this manner to streamlining medical services delivery (Loh, 2012; Rotar et al., 2016). Subsequently, a considerable measure of these healthcare managers cause issues rather than resolving them. Hence, a lot of healthcare related problems in Africa today has tended to be managerial rather than policy problems (Loh, 2012; Elekwachi, 2019).

The University Health Services (KNUST Hospital) started as a dressing station in 1952 (Frimpong, 2007; Bansah, 2017). By 2007, it had grown by additions and modifications into a full-fledged 125-bed capacity hospital (Frimpong, 2007). The hospital currently serves an estimated population of 200,000 with over 42,000 students, 30,000 staff and dependents and about 150,000 people from over 30 surrounding communities including Ayigya, Bomso, Ayeduase, Kotei and Boadi (Bansah, 2017; Adobah, 2011). Located in the northwestern part of Kumasi, on the Kumasi-Accra highway, the Kwame Nkrumah University of Science and Technology Hospital stands as the medical arm of the University (KNUST) providing the needed healthcare services to the University Community and the people living in proximity since its inception (Bansah, 2017; Frimpong, 2007; Adobah, 2011). The hospital is a quasi-government health facility (GAQHI) designated as a District Hospital by the Ministry of Health of Ghana and complements other public and private health institutions in the Kumasi Metropolis of the country (Bansah, 2017).

This notwithstanding, little attention is paid by scholars towards the evaluation of the management practices of healthcare deliverers in the above institution. Significantly, the KNUST hospital has not been a prime focus of the literature on administrative studies as it has received less scholarly attention. It is, therefore, essential to evaluate the management of healthcare delivery at KNUST Hospital in the Asante region of Ghana. This contribution aims to fill the gap in the literature by presenting an invaluable evaluation of the management practices of healthcare delivery in the hospital; identify the management practice of the KNUST hospital; establish a relationship between management practices and the quality of healthcare delivery and explore the challenges of the efficient management practices in KNUST hospital.

Theoretical Assumptions

This study uses three main theories to discuss healthcare management. These theories include attribution, evidence-based management practices and utilisation management theories.

The attribution theory, applied to health care management, is a theory used to assess the successes and failures of a health system or programme (Martinko et al., 2012; Palmieri and Peterson, 2009). Attribution theory is described as a possible theory of medical care management that can be used to create a safer environment for patients (Palmieri and Peterson, 2009). As a causal explanation for individual's behaviour, attribution theory can be used as a conceptual framework to foster a positive and safe work environment for both healthcare professionals and patients (Martinko et al., 2012). This theory assumes that health care management can be improved

by understanding that health care errors are sometimes inseparable from the art (Carayon and Wood, 2010). Healthcare providers understand and use attribution framework to explain their behaviours and that of others by associating causality with events (Palmieri and Peterson). The theory of attribution is an essential tool for predicting individual's behaviour at the work place (Martinko et al., 2012). Subsequently, with the recognition of errors as mere 'human' errors, proponents of the theory assume that healthcare professionals can make relevant inference by focusing on continuing their tasks to provide a positive environment for patient recovery rather than focusing on what they have not done successfully (Reason, 2000; Heider, 1958).

The second theory of health care management deemed fit by the authors in this study is the theory of evidence-based management. According to Guo et al. (2017), healthcare providers have been slow in accepting and applying the same theories that health professionals often have. Generally, they have shied away from an evidence-based approach that requires doctors, nurses and other health care professionals to make decisions based on the best available evidence (Guo et al., 2017). This theory holds that decision making by managers must be rooted in the most reliable evidence (Janati et al., 2018). Ideally, the use of evidence-based as a framework for decision making has the potential of helping management to develop effective measures towards delivering quality care (Janati et al., 2018). In application, Guo and his contemporaries suggest that it is necessary to impose these same standards in the decision-making process of health care administrators to achieve a level of uniformity in the decisions of health care officials (Guo et al., 2017). Practical considerations, such as time constraints and deadlines, often hinder the transition from evidence-based theory to practice (Guo et al., 2017).

Usage or utilisation management is a third theory applicable to health management systems operations. The utility theory continues to be very active in management science and application (Wallenius et al., 2008). Specifically, this theory received a broader application in the healthcare sector than more theoretical attributions and evidence-based theories (Wallenius et al., 2008). This theory is particularly interested in individual's values (Fishburn, 1968). It assumes that preferences and values of an individual enable them to be of important use to his firm (Fishburn, 1968; Wallenius et al., 2008). Generally, utilization management applied to healthcare, is a proactive approach to administering medical care through established guidelines (Muth et al., 2019; Wallenius et al., 2008). Muth and his peers identified several tasks in utilisation management that are essential for the effective administration of a health organisation (Muth et al., 2019). First, it is essential to determine the priorities of the organisation (Muth et al., 2019). This is followed by an investigation and a determination of who will benefit from the important decisions that are made (Muth et al., 2019). We infer from this theoretical construct that; health care managers determine which goals to set and how to conduct further research. Once the data is collected and evaluated, policies, guidelines and procedures can be developed and implemented (Holtrop et al., 2019).

Research Methodology

The descriptive case study was utilised as the research design for the study. The population for the study included the administration, senior and junior staff and patients of the KNUST hospital. The researchers used a purposive sampling method to choose the sample from the populace. We sourced for data from both primary and secondary sources. Questionnaires were administered to source

for information from participants on the management practices of healthcare delivery of the KNUST Hospital. Information collected was analysed with MS-Excel 2010 and presented in tables. In addition, the Pearson's Chi-square was used by the researchers to test the connection between healthcare management practices and efficiency of healthcare delivery.

Research Design

The research design was chosen to enable the researchers attain prevalent overview of the research context and capture information on the knowledge of a variety of stakeholders (Aguinis and Solarino, 2019). The design is deemed appropriate for reading complicated social phenomena (Haproff et al., 2018). This descriptive study was to test the relationships between management and quality healthcare delivery. The study therefore sought to establish the relationship between management practices and the quality of healthcare delivery and, by extension, the satisfaction patients enjoy from such services. Quantitative methods were used to assess the management of healthcare delivery in the KNUST hospital.

Study Population

The study population consists of staff of KNUST Hospital and in-patients who have spent a minimum of 24 hours in the hospital. This selection criterion was informed by the decision that patients and staff who have spent at least 24 hours in the hospital have knowledge about the management practices of the hospital. The researchers used purposive and simple random techniques to select the study population within the specified time. Table 1 presents information on the population of the study.

Table 1 Population for the Study

Category	Number
Senior Members	21
Senior Staff	154
Junior Staff	39
Contract Staff	51
In-Patients	125
Total	715

Source: KNUST Human Resource Division (2019); KNUST Hospital Records (2019)

Sample Size

Using Sloven's formula for determining sample size, $n = \frac{N}{1+Ne^2}$

Where □ = sample size, N = the population size and e = the margin of error

$$n = \frac{715}{1 + 715(0.05)^2} = 256.50 \cong 257$$

A sample size of 257 respondents were selected for the study in table 2..

Table 2 Sample for the Study

Study Category	Number
Senior Members	15
Senior Staffs	107
Junior Staffs	25
Contract Staffs	30
In-Patients	80
Total	257

Sampling Technique

The purposive sampling technique and simple random sample were used for the study. The purposive sampling technique was used to select the senior members and senior staff of the hospital. The researchers used the purposive sampling technique to limit the study to respondents that were relevant to the subject under consideration.

The simple random sampling technique was adopted in this study to enable the selection of junior and contract staff and in-patients who had spent a minimum of 24hrs in the hospital to give each constituent of the study population equal chance of being included in the sample.

Sources of Data

Primary and secondary sources of data were collected for the study. Primarily, data was sourced from information gathered from the questionnaires that were distributed via mobile assisted devices. Information gleaned from the KNUST Hospital Health Directorate's annual reports and annual review reports of the hospital and annual reports from the Ministry of Health (MoH) and Ghana Health Service (GHS) formed a major part of the primary data taken for the study. The secondary data was gleaned from books, theses and journal articles. The secondary records were used to corroborate information from the primary sources in aid of analysis and fact checking with previous studies on the subject matter.

Data Collection Instruments

The instrument used to collect data was a questionnaire. This was an arrangement of questions that are inscribed for participants to answer (Brenya and Warden, 2014).The primary data tool was a set of structured questionnaires. A Likert scale, with anchors ranging from "strongly disagree" to "strongly agree" "never" to "every time" and "sufficient to "not sufficient" was used. The researchers selected the right alternative to the query in accordance with the opinions of the participants. The questionnaire was framed in a clear manner to avoid misinterpretations and allowed the participants to understand and reply to the questions easily. The instrument consisted of two (2) sections; A and B. Section A was once in four parts and centred on the staff of KNUST Hospital. Section B consisted of questions, which focused on the relationship between the management of people, processes, and resources and quality healthcare delivery in the KNUST hospital. Prior to data collection at the hospital, permission was sought from the director to collect data from the workers and in-patients of the hospital for academic purposes. The participants were given the opportunity to respond to questionnaires on mobile-assisted devices. A structured questionnaires linked to a mobile- assisted device was used to collect data on hospital staff and in-patients with unique IDs to anonymise the data source.

In all, two hundred and forty (240) out of the two hundred and fifty-seven (257) staffs and patients participated. This represents about 93.3% of the sample size that were chosen by the researchers. Particularly, 170 of the respondents were healthcare staff and the remaining were in-patients. The healthcare staff were drawn from several departments of the hospital; maternity and child health, chronic illness, environmental health, reproductive health among others. The variety of responses to the questionnaires were viewed as satisfactory and sufficient for statistical analyses.

Data Analysis

The data was analysed and evaluated to decide their usefulness, consistency, credibility, and adequacy. Data collected from the survey was entered into MS-Excel 2010 for analysis, discussion, and presentation. Statistical calculations were presented in frequencies, percentages and tables using MS-Excel 2010 and Stata (version 14.0). The study quantitatively employed Pearson's Chi-square test to determine and establish the relationship between management practices and the delivery of quality healthcare by utilising all categories under each variable. In that regard, the overall management of healthcare practices was paired against the overall delivery of quality healthcare in the hospital.

Results and Discussions

The results and discussion/analyses of the study have been presented in frequencies, tables and percentages and qualitative analysis of same.

Characteristics of Respondents

The characteristics of respondents which formed the basis of the analysis of this study are gender, age, marital status, educational level, number of years worked and job positions of staff and in-patients.

Table 3 Characteristics of KNUST hospital staff

Age Categories	Gender		Total (n=170)
	Male (n=33), n(%)	Female (n=137), n(%)	
20-24	4 (12.9)	27 (87.1)	31
25-29	7 (18.29)	31 (81.58)	38
30-34	6 (26.09)	17 (73.91)	23
35-39	5 (25)	15 (75)	20
40-44	5 (22.73)	15 (77.27)	20
45 and above	6 (16.67)	30 (83.33)	36
Marital Status			
Single	18 (20.93)	68 (79.07)	86
Married	15 (19.48)	62 (80.52)	77
Divorced	0	7 (100)	7
Widow/Widower	0	0	0
Co-habiting	0	0	0
Other	0	0	0

Table 3 Characteristics of KNUST hospital staff (cont.)

Age Categories	Gender		Total (n=170)
	Male (n=33), n(%)	Female (n=137), n(%)	
Highest Academic Qualification			
Primary	1 (100)	0	1
Secondary	3 (11.54)	23 (88.46)	26
Tertiary	29 (20.28)	114 (79.72)	143
Other	0	0	0
Main Occupation			
Medical Officer	11 (64.71)	6 (35.29)	17
Nurse	9 (16.07)	47 (83.93)	56
Pharmacist	2 (40)	3 (60)	5
Laboratory Technician	0	11 (100)	11
Ward Assistant	7 (17.95)	32 (82.05)	39
Accountant	0	12 (100)	12
Midwife	0	5(100)	5
Other	4 (16)	21 (84)	25
Number of Years Worked in the Hospital			
Less than one year	1 (6.67)	14 (93.33)	15
1-5 years	9 (21.43)	33 (78.57)	42
6-10 years	8 (19.51)	33 (78.57)	41
11-15 years	10 (27.03)	27 (72.97)	37
16-20 years	4 (14.29)	24 (85.71)	28
21 years and above	1 (33.33)	6 (66.67)	7

Source: Researchers' Field Study (2019)

From Table 3, out of a total of 170 KNUST hospital personnel, 33 representing 19% were males and 137 representing 81% were females. Specifically, the study revealed that more females were represented than males. Majority (22%) of the respondents were within the age group of 25-29 years, followed closely by those in the age group 45 years and above. This was followed by those in the age group 20-24 years and 30-34years. The respondents in the age groups, 35-39 and 40-44 years were in the minority. Most of the respondents (51%) were single. About 77 (45%) were married whilst the divorced constituted only 4%. Academically, the highest qualification was tertiary education with 143 participants. This shows that most of the participants included in the study were educated. Approximately, 80% were females. Again, out of 56 nurses, majority (47) of them were females, followed by the ward assistant. Significantly, most of the staff had worked from 1-5years and 6-10years.

Healthcare Management Practice

This section of the analysis is to identify the management practice of healthcare at the KNUST hospital.

Table 4 Percentage Distribution of Healthcare Management Practice (HMP) at KNUST Hospital

HMP	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Decision making involves all staff	13.53	28.24	28.24	12.35	17.64
Information is easily disseminated within the hospital	15.88	21.18	20.58	21.18	21.17
Management relates well with staff	10.59	28.24	33.53	17.64	10
Staff are well motivated	16.47	12.35	36.47	22.35	12.36
Management timely resolve disputes fairly	19.41	17.06	27.65	18.82	17.06
Financial resources are efficiently allocated	17.06	19.41	28.24	25.88	9.41
Management encourages development of staff	12.94	7.65	25.88	32.94	20.59
Management encourages staff initiatives	21.76	17.06	20	26.47	14.71
Management ensures culture of maintenance of infrastructural facilities	11.18	11.76	22.35	32.35	22.36

From Table 4, majority (28.24%) of the respondents, disagreed and were neutral that decision making within the hospital involves all staff. This notwithstanding, 21.18% of the respondents agreed and 21.17% strongly agreed that information is easily disseminated within the hospital. In terms of management-staff relationship, the respondents were 33.53% neutral that management relates well with staff. We therefore infer that based on the analysis, the leadership of the hospital under review is approachable and supportive to its workers and patients. The hospital thus, has a strong organisational culture which embraces teamwork towards the delivery of healthcare.

Also, out of the 170 respondents, 36.47% were neutral that staff are well motivated, 27.65% reported that management timely resolves dispute fairly among staff. In addition, 28.24% of the respondents were neutral that financial resources are efficiently allocated within the hospital while 32.94% agreed that management encourage development of staff. Again, 26.47%, 32.35% and 32.35% of the staff agreed that management encourage staff initiative, ensures culture of maintenance of infrastructural facilities and promotes infrastructural development of the hospital respectively.

Table 5 Pearson's Chi-Square test between maternity and child health and drugs and vaccines

Healthcare Delivery		
Management Practices	**Maternity and Child Health**	
Drugs and Vaccines	Sufficient (%)	Not Sufficient (%)
Never	40	60
Almost Never	66.67	33.33
Occasionally/ Sometimes	22.73	77.27
Almost Every time	81.25	18.75
Every time	57.14	42.86

Pearson chi2 (4) = 14.9600 Pr = 0.005; Source: Researcher's Field Study (2019)

Under this section, questions concerning the hospital's capacity and capability to provide health care services on maternity and child health, and drugs and vaccines were posed. The responses from participants allowed for establishing the association between these variables. As shown in table 5 above, the probability value of 0.005 indicates that there is a strong direct relationship between maternity and child health and drugs and vaccines. This further explains that the more the drugs and vaccines are provided, backed by required management practices, the more efficient service delivery is realized on maternal and child health. This is in line with findings in the literature. A recent study by Munoz (2018) has revealed that efficient provision of vaccines has the proclivity of reducing the maternal and child mortality. In South Africa, it has been found that the leadership style affects the functioning of maternal health services (Mathole et al., 2018). The provision of supportive supervision in vaccination programmes, provision of maternal and child health practices training and ward inspections are among the functions played by healthcare managers to improve maternal and child health practices (Mathole et al., 2018).

Table 6 Pearson's Chi-Square test between environmental health and counselling services

Healthcare Delivery		
Management practices	**Environmental health**	
Counselling services	Sufficient (%)	Not Sufficient (%)
Never	54.55	45.45
Almost Never	12.5	87.5
Occasionally/ Sometimes	33.33	66.67
Almost Every time	73.91	26.09
Every time	70	30

Pears on chi2(4) = 13.2665 Pr = 0.010 Source: Field Study (2019)

From Table 6, the probability value of 0.010 shows that there is an association between environmental health and counselling services. That is as management put in more counselling services practices, the more efficient service delivery on environmental health, hence reducing cases on environmental health

Table 7 Distribution of staff availability in the hospital

Staff	Never (%)	Almost Never (%)	Occasionally/ Sometimes (%)	Almost Every Time (%)	Every Time (%)
Doctors	19.41	14.12	17.65	18.82	30
Nurses	9.41	15.29	19.41	27.06	28.82
Pharmacists	8.24	28.82	5.88	17.65	39.41
Midwives	12.94	17.06	26.47	12.35	31.18
Physician Assistants	21.18	18.24	24.12	8.82	27.65
Laboratory Technicians	22.35	11.76	24.71	31.18	10
Radiologic Technologist	12.94	17.06	30.59	31.18	8.24
Physical and occupational Therapists	14.12	9.41	30.59	34.71	11.18
Dieticians	12.94	14.12	35.88	27.65	9.41
Labourers	10.59	11.76	34.71	34.12	8.82
Orderlies	18.24	14.71	25.88	26.47	14.71
Security Personnel	14.12	18.24	35.29	25.29	7.06

Source: Field Study (2019)

From the table 7, 30% of the in-patients hinted that doctors were available every time while 14% indicated that they were almost never available. Again, 28.32% of in-patients were of the view that nurses were available every time while 9.41% hinted that they were never available. On the part of pharmacists, 39.41% of the participants pointed out that, pharmacists were available every time while 5.88% believed that they were occasionally/sometimes available. Also, 31.18% of the respondents opined that midwives were seen to be available every time while 12.35% were of the view that they were not always available every time. On the part of physician assistants, 27.65% of the in-patients were of the view that the former were available every time while 8.82% informants hinted that physician assistants were almost every time available. This suggests that the hospital has doctors, nurses, pharmacists, physician assistants and laboratory technicians among many others. Although the hospital has all these cadres of healthcare workers, most of them were, most of the time not available. This has posed as a challenge to the delivery of quality healthcare services.

Challenges of Efficient Management Practices in the Healthcare Sector

The study also explored the challenges to the efficient management practices in the healthcare sector. The responses on the challenges facing management of healthcare delivery system in the KNUST hospital are summarised in the table 8.

Table 8 The challenges of efficient management practices in the healthcare sector

Aspect	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Self-medication	14.12	9.41	34.12	28.82	13.53
Superstition	10.59	11.76	34.71	31.76	11.18
Confidentiality of patients' records	15.29	14.12	39.41	18.82	12.35
Cost of health care	18.24	14.71	25.88	24.12	17.06
Attitude of medical staff	14.12	18.24	35.29	22.94	9.41
Proximity to the hospital	14.12	9.41	34.12	28.82	13.53
Lack of motivation	10.59	11.76	34.71	31.76	11.18
Inadequate medical facilities	15.29	14.12	39.41	18.82	12.35
Production of incompetent health care professionals	12.94	17.06	30.59	28.82	10.59
Shortage of health care professionals	14.12	9.41	30.59	34.71	11.18
Low participation in health insurance	12.94	14.12	35.88	27.65	9.41
Dissatisfaction from health care professionals	10.59	11.76	34.71	34.12	8.82
Service quality	18.24	14.71	25.88	26.47	14.71

Source: Field Study (2019)

From Table 8, the Likert scaled responses to the prompt, "self-medication is a challenge to the efficient management practices in the healthcare sector," revealed that 14.12% strongly disagreed that self-medication by the people was a challenge and 9.41% disagreed. Comparatively, 34.12% were neutral that self-medication by the people was a challenge and 28.22% agreed and 11.18% strongly agreed that superstition was a challenge to effective healthcare sector. Aggregating the "neutral" results show that self-medication, superstition, confidentiality, cost of health care as well as inadequate medical facilities were challenges. It then tends out to be obvious that self-medication among others was a challenge to the efficient management practices in the healthcare sector in the KNUST hospital. This finding confirms previous surveys conducted on self-medication in Ghana. The study by Donkor et al. (2012) for instance, revealed that self-medication is a challenge to efficient and effective healthcare delivery. The respondents' responses to "lack of motivation (for workers) as a challenge to the efficient management practices in the KNUST hospital" show that 10.59% strongly disagree with this statement and 11.76% disagree. In addition, 34.71% were neutral, 31.76. % agreed and 11.18% strongly agreed with this statement. The results from this data imply that lack of both financial and non-financial morale for the workers in the KNUST hospital serves a demotivating factor to the efficient management practices in the healthcare sector in the hospital. This is consistent with previous findings. In a research correlating morale and motivation with employees' behaviour, Mbindyo and his contemporaries have suggested that supportive leadership have the tendency to establish proper working relationship between leaders and subordinates (Mbindyo et al., 2009). They further argued that improving motivation through the provision

of incentives boosts employees' performance at the work place (Mbindyo et al., 2009). The literature argues that the absence of motivation in low and middle-income countries have over the years contributed to the problem of brain drain on the continent of Africa (Willis-Shattuck et al., 2008). The work of Willis-Shattuck and his peers has put forward the argument that both financial and non-financial incentives motivate most health workers to work in both underserved and relatively developed areas (Willis-Shattuck et al., 2008).

Responses to "inadequate medical facilities as a challenge to the efficient management practices in the healthcare sector" revealed that 15.29% strongly disagreed with this prompt and 14.12% disagreed. Adding to the above, 39.41% were neutral, 18.82% agreed and 12.35% strongly agreed with this statement. This challenge has been in existence since the colonial inception of modern hospitals (Adu-Gyamfi and Adjei, 2017). In support, recent scholarship on healthcare confirms the idea that aside inadequate human resources, many hospitals and health institutions in Africa have inadequate medical facilities making the delivery of healthcare a major menace to the wellbeing of the people (Oleribe et al., 2019). In Nigeria, the inadequacy of medical infrastructure has been challenging the delivery of proper healthcare in the country (Akinwale, 2010). According to the findings of Akinwale (2010), this problem exists particularly due to corruption and negligence on the part of government and other stakeholders. Also, response to "production of incompetent health care professionals as a challenge to the efficient management practices in the healthcare sector" revealed the following: 12.94% strongly disagreed and 17.06% disagreed. 30.59% were neutral, 28.82% agreed and 10.59% strongly agreed with this statement. Research has also revealed that most of the training institutions and schools produce incompetent health care professionals who in tend serve as a challenge to efficient management practices in the healthcare sector in the hospital (Chan et al., 2019). Consequently, when the people, who become management professionals in the hospitals are not trained adequately, they tend to offer substandard services to the people who patronize the hospital (Manthorpe et al., 2019).

Our findings argue that the delivery of quality health service has been a challenge to the management of the health sector and the KNUST hospital in particular. Significantly, when respondents were asked about how the delivery of "service quality is a challenge to efficient management practices in the healthcare sector," the results showed that 18.24% strongly disagreed and 14.71% disagreed. However, 25.88% were neutrals and 26.47% agreed whereas 14.71% strongly agreed. We infer from our responses that the quality of service being rendered to people who visit the hospital can be a challenge to the way and manner they patronise the hospital. To wit, the degree to which health services meet patients' needs and expectations is of concern to both health workers and patients (Fenton et al, 2019).

Conclusion

Healthcare is on a collision course with patient needs and economic reality. Without significant changes, the scale of the problem will only get worse. Lack of motivation, shortage of and dissatisfaction of healthcare givers, inadequate facilities among many others were found out by this study as the major constraints to quality healthcare delivery in the KNUST hospital. Although, the problems in the KNUST hospital are varied, they are surmountable in many ways. The fragmented health care delivery system delivers poor-quality care. The health care professionals who have the ability to help achieve a higher-performing health care system are in limited supply in Ghana and the

KNUST hospital in particular. Our evaluation has revealed that the health care system in KNUST hospital is limited in terms of clinicians and health care facilities. As a matter of fact, quality health care delivery and management practices are important components that professionals and patients crave for as there exist a strong association between the former and the latter (Sweis et al., 2019; Sullivan and Chabot, 2018). It is therefore important that from time to time, health care services are evaluated to find out whether the deficiencies (if any) do exist and the measures that can be taken to rectify them.

Recommendations and Implications to Healthcare Managers.

From our study, it is imperative to make the following recommendations:

1. The management of the hospital should continue to improve healthcare management practice. This is because enhanced management practices significantly improve quality of healthcare delivery.
2. The management of the hospital should improve efficiency of services to reduce the waiting time in accessing health care. Essentially, in the absence of adequate physicians at the hospital, the hospital should assign more health professionals in peak periods or days to enable them to cater for patients.
3. The management of the hospital should adopt strategies such as increasing motivation of workers, flexible scheduling of duties and decentralising decision making by junior staff to help attract new workers and retain old healthcare personnel in the healthcare sector.
4. The management of the hospital should adopt strategic planning techniques in the management of health care delivery in the hospital in general.
5. The management of the hospital should be innovative and come out with programmes and activities that help them to generate internally generated funds to put up facilities to help in smooth delivery of health care services.
6. The management of the hospital should undertake outreach programmes in the surrounding communities to sensitise the people on the negative effects of self-medication and superstition

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