



ASSESSMENT OF FACILITY MANAGEMENT PRACTICES IN SELECTED PUBLIC HEALTH CARE FACILITIES IN NIGER STATE

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Abstract

Facility Management (FM) is still in its infancy but growing due to the country's rising profile as one of the fastest growing entities in the emerging market economies. However Public Healthcare Facilities in Nigeria are generally faced with many challenges including poor maintenance culture and therefore there is a need for the professionalization of Facility Management Practices. It is on this basis that the present study assesses the facility management practices in selected Public health care facilities in Niger State. The study was basically on soft facility management which consist of cleaning, recycling, security, pest control, handyman services, grounds maintenance, waste disposal and internal plants. A mixed research survey design was adopted with the administration of questionnaires and interview to the health workers, works and maintenance officers (service providers) as well as end-users and visitors in 9 Local Government Area of Zone 'B', geographical zone of Niger State. A total of four hundred and fifty (450) questionnaires were administered (50 questionnaires to each Local Government under Zone B Niger, State, Nigeria) and interview were conducted with (9) incharge medical officers and (9) maintenance officers across the zone. Out of which three hundred and fifty – two (352) questionnaire are retrieved and found valid and fit for analysis as well as resourceful to achieved the objectives of the study. The research data were analyse manually in tabular form using descriptive statistical procedures, particularly frequency distributions and simple cross-tabulations. The outcome of the findings revealed that Outsourcing Facility Management and In-House (FM) are the two

major types of FM adopted in the public healthcare facilities. Also improved funding, manpower in the works unit, waste management, contract and contractor management, space management Training/re-training of staff and changing of old facilities are the indicators for effective FM practices. The findings also revealed that the level of implementation is adequate in both outsourcing and in-house (FM) practices in public healthcare facilities. The challenges facing the FM practices are unveiled to be corruption, insufficient funding, poor maintenance culture, problem of policy implementation, inadequate FM personnel skill level, low technical knowhow, age of the buildings, inadequate facilities usage information and overcrowding in the building. Finally measure recommended for improved FM practices are the adoption for effective are fitness for purpose/ functionality, aesthetics and psychological appeal, modernity, ease of usage, structural stability, accessibility to the facility. The researcher thereby recommended that strategic facility plan, benchmarking, building simulation/building forecasting, risk management in building facilities and building maintenance should be put in place by the government to encourage the uptake and adoption of FM practices in the healthcare facilities. Furthermore, there should be rigorous enlighten program on FM practice by government to improve healthcare standard and save lives. The management of public healthcare centre; should attached importance to the FM practice and encourage, sanctions any staff found violating maintenance and management protocol in the healthcare facilities. The government should prioritize the provision of financial incentive and modern infrastructure to encourage FM practice with adequate planning and budgetary provision.

Keyword: Assessment, Facilities Management Practices, Public Healthcare, Building.

Introduction

Public healthcare facilities in Nigeria are generally old and in a poor state. Healthcare facilities in Nigeria are faced with many challenges including poor maintenance culture and there is a need for the professionalisation of Facility Management. It is therefore essential for every healthcare district to have an effective FM practice. The lack of proper performance FM system in public

healthcare facilities resulted in problems of various nature (Orubuloye 2008). FM is viewed as a secondary function in public hospitals, with professional FM expertise barely exists amongst most of them. Thus few hospitals determine the maintenance needs for their facilities (Ilozor, 2013).

Facilities management (FM), as known today, is an important aspect in the built environment, dating back to the 1980s when railway companies in USA conceived the idea of providing facilities-related services as opposed to providing buildings (Ikediashi *et al.*, 2013). Since then, the concept and definitions have been evolving and many organizations have different views.

The practice of Facilities Management (FM) is concerned with the process by which organisations ensure that their buildings, systems and services support core operations while contributing to the achievement of their strategic objective under stable business conditions (Bagshaw *et al.*, 2015). Specifically, it deals with space design, construction, allocation, strategy, property asset management, maintenance and post occupancy evaluation of premises, inventory management, value management and life cycle costing, computerization and office automation, management of support services, and so on (Achoru, 2015). The provision of healthcare facilities is needed to sustain life on earth. Unfortunately, in Nigeria today, the provision of health care facilities seems to be low as many Nigerians are vulnerably exposed to the danger of death (Abel, 2014).

Within the context of hospital dispensary, clinics management, facility management has continued to live by its definition of creating the right enabling environment that supports the core mandate of rendering clinical and medical diagnostic services; which is why Shohet *et al.* (2013) considered healthcare facility management as one of the key elements for the successful delivery of healthcare services. Essentially, one can contend that facility management adds value to hospital dispensary, clinics through achievement of zero defects in the healthcare service centres, especially in very delicate areas where very minute problems can have huge and devastating consequences and could be a matter of life and death. Other areas in which facility management adds value to healthcare delivery in hospitals include management of infrastructural facilities such as estate and property, indoor air, structure and fabric, water supply, electricity and telecommunication management referred to as hard facility

management; and catering, cleaning, waste management, security and laundry services described as soft facility management (Liyana and Egbu, 2008).

Previous studies have shown underfunding, lack of understanding of the requirement of FM, inadequate budgetary releases, lack of qualified manpower, and incomplete infrastructure are some few major problems of facility management practices in our public health care facilities. The need of the study is borne out of the fact that most of the facility management practices are not consistent and effectively practice enough in our health care facilities which have led to depreciation and they have lost their value.

Purpose of the Study

The aim of this research is to develop a framework for effective implementation of QM practice in Nigerian construction projects.

Specific objectives of the study are to:

- i. Identify the types of facility management practices in the selected Public healthcare facilities.
- ii. Identify indicators of effective implementation of facilities management practice for the health facilities in the study area.
- iii. Determine the level of effectiveness of the identify practices in the selected Public healthcare facilities.
- iv. Determine the challenges of facilities management practices in Public health care facilities in the study area.
- v. Proffer strategies to improved facilities management practice in the study area.

Literature Review

An Overview of Facility Management Practice

According to Mustapa *et al.* (2008), FM in Asian countries such as Hong Kong, Malaysia and Singapore is basically oriented towards research, practice and education. The practice of FM in Malaysia at present is undertaken by real estate companies due to the fact that buildings such as high rise office towers are managed by property consultants, who basically provide property and building management services as well as simple operations and maintenance. In addition, most companies manage a limited range and number of properties and therefore provide services related to their core employer's area of expertise. There are no

designated facilities management firms. Computerised systems are used to provide integrated functions to allow management to control aspects involving property management, building operation and services management, space management, data monitoring, security, maintenance tracking, as well as monitoring energy consumption by occupants (Mustapa *et al.*, 2008).

A qualitative study which employed site observations and interviews of facility and maintenance managers compared FM implementation at the development stage of construction of high-rise buildings in Sri Lanka and revealed that in the United Kingdom (UK), the government policies integrate strong ties between construction and FM, for instance, Private Finance Initiative (PFI) contracts, where design, construction, finance and operation of projects are consolidated, have demonstrated the strong links between construction and operation (de Silva, 2011). However, this integration of FM in the development phase is unpopular in Sri Lanka due to a lack of awareness of this profession in the local industry as it is still in its adolescent stage and the absence of designated facilities manager in most government buildings and FM functions are usually outsourced in many private organizations.

Kumar *et al.* (2013) reported that in Sweden, facilities managers are not different from traditional building support service providers such as property managers, asset and maintenance managers and that the use of the title of facilities manager is more of a marketing strategy. According to the authors, in some parts of Asia and Europe, FM is yet to integrate the strategic FM, and in the UK, FM is mostly cost-focused and operational. Kumar *et al.* (2013) employed quantitative methods to compare FM practices in Nigeria and other regions where FM evolved, with emphasis on building support services.

Similar studies conducted in Nigeria revealed that the practice of FM is still in its infancy but growing due to the country's rising profile as one of the fastest growing entities in the emerging market economies (Ikediashi *et al.*, 2013). A recent study which dwelt on properties, albeit commercial revealed that facilities provided in the studied high-rise buildings were in poor condition due to the "below-average" level of FM practice (Aliyu *et al.*, 2015). Aliyu *et al.*'s study, which employed quantitative research methods to investigate the application of FM practices in high-rise commercial properties in Jos, Nigeria, revealed various tools including outsourcing, in-house sourcing and co-sourcing, used in practice. Effective FM could entail assigning some activities

or functions, usually non-core activities, to external service providers in order to focus on core functions in an enterprise, termed outsourcing (Kurdi *et al.*, 2011).

Facility Management Practice in Public Health Care Facilities

The demand for healthcare services and facilities are ever increasing in the 21st century due to population growth, increased life expectancies, and elevated standards of life (Hosking and Jarvis, 2003). The growing urbanization has also created the need for more complex hospital buildings. Nowadays, the urban hospitals need to provide a diverse set of health care services to a vast number of patients and visitors in a more condensed, congested and concentrated space. This has emphasized the importance of facility management (FM) in the healthcare sector (CHFM, 2016). In this regard, facility management practice is one of the most challenging and costly elements in hospitals (Chotipanich, 2004; Shohet and Lavy, 2006). It supports functioning and continuity of care facilities and services of hospitals as critical as emergency and lifesaving care facilities (Shohet *et al.*, 2013). Maintenance might also affect many non-core activities of hospitals such as food storage and supply, cleaning, and security of buildings (CHFM, 2016).

National Health Service (NHS) in the UK has advocated the integration of noncore healthcare services under the responsibilities of FM (CHFM, 2016). They have identified several issues necessary to address to implement an integrated FM in NHS that includes maintenance strategic planning, maintenance benchmarking, customer care, market testing, environment and staff management (Jawdeh, 2013).

A number of studies have been reported in the literature (with mentioning of hospitals and healthcare facilities) on maintenance management issues (Garg and Deshmukh, 2006), facility management implications (Ventovuori *et al.*, 2007), KPIs for facility performance measurement (Ware *et al.* 2017), and maintenance performance metrics (Kumar *et al.*, 2013).

Types of Facilities Management Practice

Outsourcing Facility Management

Ware *et al.* (2017) defined outsourcing is a common practice among both private and public organizations and is a major element in business strategy.

Perhaps most organizations now outsource some of the functions they used to perform themselves. Due to widespread outsourcing practices, it has become a frequent topic in the literature. Numerous reasons why outsourcing is initiated have been identified by researchers. Organizations may expect to achieve many different benefits through successful outsourcing, although there are significant risks that may be realized if outsourcing is not successful. Most buildings nowadays are still practicing conventional management which includes a small organization or team in one department.

In-House Facility Management

Here the organization has its own dedicated management team and in-house employees to deliver all FM services. Some specialist services, where there is no expertise in the company, will be outsourced to simple service contracts. These might include as like lift and escalator maintenance. This arrangement is often found in public sector and educational organisations. According to IFMA (2009), traditionally FM has been provided in-house by an FM, Property or Corporate Services department and, depending on the size of the building and the scope of services, the in-house department could range from a few janitorial employees to a multi-disciplined team managing technical, security and cleaning staff.

Outsourced Managing Agent FM Contract

In this scenario the organization will outsource most or all services on contracts and will appoint a FM company as managing agent to manage these contracts on their behalf. Here the service contracts are between the client organisation and the service providers. The client organization is responsible for procurement and the FM managing agent will manage performance. Although the FM services are outsourced the client organization must maintain in-house the knowledge and skill to procure and understand the delivery of FM services. This is sometimes referred to as an 'intelligent client' function. To co-ordinate services requests and collate data to manage performance it is usual to provide a centralized call centre which will operate on some form of service management software. The call centre can be provided by the FM company, a third party or the client organization.

Outsourced Managing Contractor FM Contract

Structurally this is similar to outsourcing on a managing agent contract but a step further where by the FM supplier will deliver services to the client organization through a mixture of their own resources and a series of sub-contracts. The client organisation only has a single contract with the FM supplier. The FM supplier develops their own supply chain and manages the risk of service delivery across all services. The diagram below can depict either the managing agent or managing contract or options. The dotted lines would represent the contract relationships between the client organization and the various service providers in the managing agent option.

Total Facility Management (TFM) Contract

This is a development on the managing contract or option where by the FM supplier will, through strategic partnerships, joint ventures, subsidiary companies or in-house resources, deliver all or at least most FM services to the client organisation. Thus they will provide a total FM solution or ‘one stop shop’. Many best practice FM companies aspire to deliver a TFM solution to clients where possible.

Strategies for effectively improving Facility Management Practices in Public Health Care Facilities

Strategic Facility Plan

IFMA (2009) defined the strategic facility plan: “A two-to-five year facility plan encompassing an entire portfolio of owned and/or leased space that sets strategic facility goals based on the organisation’s strategic (business) objectives”. Therefore, strategic facility planning is the process by which a facility management organization envisions the future of a building by linking its purpose to the strategy of the overall organization and then developing goals, objectives and action plans to achieve that future expectation of the building (IFMA, 2009). The result of the strategic facility planning process is the strategic facility plan. Strategic facility planning (SFP), as opined by Shoheit and Lavy (2006), is a process that can lead to better, more proactive delivery of services from an FM organisation to its stakeholders. IFMA (2009) stated that the time taken to carry out SFP is well spent, in that it helps to avoid mistakes,

delays, disappointments and customer dissatisfaction. It can actually allow facility plan implementations to run more quickly and smoothly.

Benchmarking

Benchmarking is a very useful tool for comparing and measuring one building against others, anywhere in the world, to gain information on tips, practices and measures that will help the building's performance to be improved. According to Ventovuori (2007), benchmarking is a continuous analysis of strategies, functions, processes, products or services, performances, etc. compare within or between best-in-class organisations by obtaining information through appropriate data collection method, with the intention of assessing an organisation's current standards and thereby carrying out self-improvement by implementing changes to scale or exceed those standards. Networking with peer organisations, competitors and, especially for facility organisations, visiting award-winning service organizations provide insight to bring back and adapt to your operations (IFMA, 2009).

Building simulation/building forecasting

Building simulation is a prominent tool in building studies and strategic management planning. IFMA (2009) has it that this tool aims to understand how buildings operate. The building simulation, as analysed in Ware *et al.* (2008), can describe the coordination of facility operations based on understanding and analysing the impact of interrelated facility alternatives and activities. This method can measure building performance and support strategic planning.

Risk management in building facilities

Pitt and Hink (2011) defined the term "risk management" as: A process where an organisation adopts a proactive approach to the management of future uncertainty, allowing for identification of methods for handling risks which may endanger people, property, financial resources or credibility. Therefore, as opined by Shohet and Lavy (2006), risk management should be a high priority for any facility, and it is achieved through a risk management program, in which risks are identified, analysed, classified and controlled. Mustapa *et al.* (2008), in a study of FM in hospitals, found that one of the facility manager's principal duties in FM is to identify, analyse and economically control "those business

risks and uncertainty that threaten building assets or cause loss of earning capacity in buildings.”.

Research Methodology

Research Design

A quantitative and qualitative research methodology was found appropriate and adopted for this study. The study was utilise questionnaires, structured interviews, past research works, internet search engines and journals as the type data collecting instruments. It has been observed that one of the basic considerations that will inform the choice of a particular design one should use is the purpose of the study. Ranjit (2005) similarly observed that the cross-sectional study design (survey design) is commonly used in sciences and it is best suited for studies aimed at finding out prevalence of a phenomenon, situation, problem or issue by taking cross-section of a population. He further posited that the survey design is comparatively cheap to undertake and the data generated easy to analyse. It is against this background that the researcher intends to use a mixed research survey design in carrying out this study.

Research Population

The population of the study consist of health workers, maintenance officers (service providers) end-users, visitors and personnel of the selected public healthcare facilities in Chanchaga, Suleja, Tafa, Gurara, Bosso, Paiko, Rafi, Wushishi, Munya and Shiroro LGA within Niger State.

In Niger State, there are three zones namely Zone ‘A’, ‘B’ and ‘C’. But these research will only make use of zone ‘B’ to get the required data, because it is the largest zone that has the required and relevant public health care facilities for this study which covers 9 Local Government Area Councils Chanchaga, Suleja, Tafa, Gurara, Bosso, Paiko, Rafi, Wushishi, Munya and Shiroro LGA within Niger State.

Sample and Sampling Procedure

Since the target population is very large, the entire population cannot be studied due to resource constraint and time limitation. Hence, only 450 respondents was engaged for the study in the study area by targeting 50 respondents from each Local Government Area. Ranjit (2005) posited that for a sampling design to be

called random sample, it is imperative that each element in the population has an equal and independent chance of selection in the sample. In view of this, a random sampling technique was adopted for the study. Also interviews were carried out to 1 each of the head of the health workers (incharge) and 1 head each of the maintenance unit.

Administration of Data Collection Instrument

The questionnaire for the study was administered by the researcher himself. The questionnaires were well structured to address information about the individual respondent, background information about the particular healthcare facilities, the types, challenges, level of effectiveness and strategies Facility Management practices, level of availability of Facility Management practices in the building and extent of usage of Facility management in healthcare facilities will be sought to address the facility management practices in the particular healthcare facilities. After the questionnaires are administered to respective respondents. The researcher also conduct structured interviews with a sample of the interview guide to each 1 head of the health workers and 1 each of the maintenance unit head (18) from each Local Government Area in the study area) in order to seek additional insights and clarifications.

Methods of Data Analysis

All data collected with respect to this research will be analyse manually in tabular form using descriptive statistical procedures, particularly frequency distributions and simple cross-tabulations.

Descriptive statistics such as tables, charts, percentages, means item score, relative important index; were used to present, analyse and rank the variables. Percentage was used to analyse the respondents' general information. Tables and/or charts were used to present the result of the analysis. Mean item score and percentages with correlation were used to analyse and rank variables in objectives 1, 2 and 3 to check the types of facility management practices in the selected Public healthcare facilities, identify indicators of effective implementation of facilities management practice for the health facilities in the study area and determine the level of effectiveness of the identify practices in the selected Public healthcare facilities.

Results and Discussion

Identifying the types of facility management practices in the selected Public healthcare facilities

Findings on types of facility management practices in the selected Public healthcare facilities were analysed as shown in Table 4.1. The result showed that outsourcing facility is has Mean Item Score (MIS=3.88), indicating adequate availability of outsourcing facility management which is ranked 1st, in-house facility takes the 2nd ranking with MIS = 3.70, which is also adequately practices. The Outsourced Managing Agent FM Contract, Outsourced Managing Contractor FM Contract and Total Facility Management (TFM) Contract has MIS score of 2.88 (3rd rank), 2.73 (4th rank) and 2.64 (rank 4th) respectively indicating that they are not adequately practices in the Public Healthcare Facilities management in Zone B, Niger State.

Responses from the interview conducted also disclosed that Outsourcing facility management and In-house facility management is widely practice among public health facilities in the study area. As disclosed by one of the interviewees that: “the available facilities management practice that I know we acknowledge in our healthcare center here is the in-house facility management”, it was also added by another respondent that: “the easy and mainly feasible healthcare facility management is the in-housing and basic outsourcing as we are still behind in infrastructural standard for other levels of facility management”. This assertion of the present study is in line with other study Adewunmi *et al.* (2013) unveiled that Nigeria need to adopted best practice in facilities management, as it is only managing most of the facilities on in-house measure. Pitt and Hinks, (2011) contend that in-house FM is often seen as the management of cost-efficiency rather than as a method of achieving the multi-dimensional enhancement of business competitiveness.

Table 4.1 Types of Facility Management Practices in the Selected Public Healthcare Facilities

S/N		N*	MIS*	RANK
1	Outsourcing facility management	269	3.88	1 st
2	In-house facility management	269	3.70	2 nd
3	Outsourced Managing Agent FM Contract	269	2.88	3 rd

4	Outsourced Managing Contractor FM Contract	269	2.73	4 th
5	Total Facility Management (TFM) Contract	269	2.64	5 th

Source: Authors' Field Survey (2020)

Identifying indicators of effective implementation of facilities management practice for the health facilities in the study area.

The outcomes of the analysis indicators of effective implementation of facilities management practice for the health facilities in the study area was displayed in table 4.2 The respondents were of the view improved funding has MIS=3.61, manpower in the Works unit has MIS=3.32, Equipping the store in the FM unit of spare parts 3.32, Training/re-training of staff MIS=3.19, Changing old facilities to modern ones MIS=3.22, Waste management MIS=3.08, Space management (i.e. effective utilisation of space) MIS=3.28, Enhancing comfort and amenity for facility users MIS=3.00, Contract and contractor management MIS=2.94 and Building repairs and maintenance MIS=3.15. The result showed that there is very good implementation of indicators facilities management. From the interviewees also had to this fact, has stated by a management officer that: “there is turnover of attention to facility management with increase in manpower, increase in equipment as well as funding”. Waste management is also an important indicator as stated by the interviewees, one of them says’ “proper has been given to the adequate waste management in order to control the spread of disease such as malaria”. Also building repairs and maintenance are also taking lead in the effective implementation of Facility Management Practice.

Table 4.2 Facility Management Practice Indicators

S/N		N*	MIS*	RANK
1	Improved funding	269	3.61	1 st
2	Manpower in the Works unit	269	3.32	2 nd
3	Equipping the store in the FM unit of spare parts	269	3.32	2 nd
4	Training/re-training of staff	269	3.19	5 th

5	Changing old facilities to modern ones	269	3.22	4 th
6	Waste management	269	3.08	8 th
7	Space management (i.e. effective utilisation of space)	269	3.28	3 rd
8	Enhancing comfort and amenity for facility users	269	3.00	7 th
9	Contract and contractor management	269	2.94	9 th
10	Building repairs and maintenance	269	3.15	6 th

Source: Authors' Field Survey (2020)

Finding of Adewunmi *et al.* (2013) supported these findings that the application of FM through indicators are essential to gain wide acceptance in Nigeria, which are assessment manpower in the Works unit, equipping the store in the FM unit of spare parts, Training/re-training of staff, changing old facilities to modern ones, waste management Space management (i.e. effective utilisation of space), enhancing comfort and amenity for facility users, Contract and contractor management among others.

Determine the level of effectiveness of the identify practices in the selected Public healthcare facilities

In regards to the outcome on the findings the types of management practices in the selected Public healthcare facilities, this section here by unveiled the level of effectiveness of the practices in Public healthcare facilities (Outsourcing facility management and In-house facility management). Figure 4.1 revealed that there is fair effective implementation of both outsourcing facility and in-house facility, management practices public healthcare facilities with MIS score of 3.82 and 4.05 respectively.

The interview response also backed this fact as one of the respondent says' that: "the Outsourcing facility management and In-house facility management practices are the available facilities management practice in our health sector yet it is not fully implement". Another interviewee also lamented that: "the management practices are still fairly implemented though to lack of technical knowhow". In view of the responses there are still more needed to be done in the facilities management practice in the public healthcare facilities.

Source: Authors' Field Survey (2020)

Level of effectiveness of the facilities management practices

Correlation analysis was carried out to ascertain if there is a significant relationship between Facility Management Practice Indicators and level of effectiveness of the identify facilities management practices in Table 4.3. This analysis was achieved using Pearson’s (r) correlation; the r-value indicates the strength of the relationship. Overall, the results showed a significant relationship among the variables tested, and in all Pvalue < 0.05.

Table 4.3: Simple Linear Relationship between facility management practice indicators and level of effectiveness of the identify facilities management practices

	Indicators	Adoption	P
Effectiveness of the identify facilities management practices	1	.596**	0.0
	.596**	1	0

(Source: Researchers' Analysis, 2019)

Correlation is significant at the 0.01 level (2-tailed).

The outcome of the study is in line with that of Mustapa *et al.* (2008), who asserted that practice of FM in Malaysia at present is undertaken by real estate companies due to the fact that buildings such as high rise office towers are managed by property consultants, who basically provide property and building management services as well as simple operations and maintenance. Similarly a recent study which dwelt on properties, albeit commercial revealed that facilities provided in the studied high-rise buildings were in poor condition due to the “below-average” level of FM practice (Aliyu *et al.*, 2015).

To determine the challenges of facilities management practices in Public health care facilities in the study area

The result of the analysis on challenges of facilities management practices in Public health care facilities in the study area was displayed in Table 4.4, the unveiled that corruption take the highest ranking with relative importance index (RII=0.98), poor maintenance culture follows with RII=0.94, the 3rd ranking take the insufficient funding with RII =0.90, problem of policy implementation take the RII=0.88, inadequate facilities usage information takes 5th with RII=0.85, Insufficient FM personnel with RII=0.83 ranked 6th, Overcrowding in the building RII=0.79 with 7th, Age of the building 0.76 with 8th, Inadequate

FM personnel skill level with RII=0.70 9th, Low technical know-how RII=0.58 ranked 10th.

The outcome of the interview conducted also describe corruption, insufficient fund, poor maintenance culture, Problem of policy implementation and Inadequate facilities usage information among others. The 1st clear state the adverse effect of corruption to the adequate implementation of Facilities Management Practices in Public health care facilities in the study Area. He says’ “The classical challenge mainly faced by the maintenance unit is corruption which need urgent attention other challenges such as insufficient fund, poor maintenance culture and problem of policy implementation”. Another interviewee says’ “Maintenance and management culture is the greatest challenge we are facing, as well as insufficient fund and low technical knowhow in the health facilities”. The outcome of the findings has proved the list of factors on table 4.5 to be urgent issue needed to be address to ensure adequate implementation Facilities Management Practices in Public health care.

Table 4.4: Challenges of Facilities Management Practices in Public health care facilities in the study Area

S/N	Factors Affecting Facility Management Practice	N*	RII*	RANK
1	Corruption	352	0.98	1 st
2	Insufficient funding	352	0.90	3 rd
3	Poor maintenance culture	352	0.94	2 nd
4	Problem of policy implementation	352	0.88	4 th
5	Inadequate FM personnel skill level	352	0.70	9 th
6	Low technical knowhow	352	0.58	10 th
7	Insufficient FM personnel	352	0.83	6 th
8	Age of the building	352	0.76	8 th
9	Inadequate facilities usage information	352	0.85	5 th
10	Overcrowding in the building	352	0.79	7 th

Source: Authors’ Field Survey (2020)

The findings also supported the findings of some researchers According to (de Silva, 2011) the lack of attention for future maintenance requirements was the most critical factor that gave rise to the problems, for instance, future needs with regard to frequency, method and access systems of cleaning and maintenance, budget, *etcetera*, should be considered at the pre-construction stage.

Also the findings of Mustapa *et al.* (2008) that FM services are being undertaken by operatives who are traditionally blue-collar employees with limited training. This view was supported in a similar study in which the essence of competent facility managers was stressed. Interestingly, Ikediashi *et al.* (2013) explained that the sustainability of the FM services rendered was negatively affected by the dearth of trained FM professionals to handle intelligent and green buildings.

Proffer measures for improved facilities management practice in the study area.

As revealed from the outcome of the analysis on measures needed for improved facilities management practice in public health care facilities in the study area. The result on table 4.5. show that fitness for purpose/ functionality has RII=0.98, followed by ease of usage with RII=0.97, aesthetics and psychological appeal has RII=0.95, structural stability has RII=0.94, accessibility/ access to the facility has RII=0.93, while modernity, Staff training and re-training, Number in use, Routine check on facilities and risk management has RII of 0.92, 0.90, 0.89, 0.85 and 0.83respectively. The result show that all measure a believe to be vital for improved facilities management practice in the public healthcare facilities.

Responses of the interviewee those differ from the opinion above has one the respondent says’ “functionality is the key to proper management practices as it center round any other necessities for the system”, another interviewee says’,” Ease of usage, structural stability and accessibility/ access to the facility and number in use should be taken into consideration as measure to adequate facilities management practice in the public healthcare facilities”

Table 4.5 Measures for improved facilities management practice in the study area.

S/N	STATE OF FACILITIES	N*	RII*	RANK
1	Fitness for purpose/ functionality	352	0.98	1 st
2	Aesthetics and psychological appeal	352	0.95	3 rd
3	Modernity	352	0.89	8 th
4	Ease of usage	352	0.97	2 nd
5	Structural stability	352	0.94	4 th

6	Accessibility/ access to the facility	352	0.93	5 th
7	Number in use	352	0.90	7 th
8	Staff training and re-training	352	0.92	6 th
9	Routine check on facilities	352	0.85	9 th
10	Risk management	352	0.83	10 th

Source: Authors' Field Survey (2020)

These findings backed the findings of Lavy (2010) and it stressed that, the role facility managers fulfil is an exercise that is considered needed for success in health services. The following measures are important Aesthetics and psychological appeal, modernity, ease of usage, structural stability, accessibility/ access to the facility among others. And also Adewunmi *et al.* (2013) argued that the application of FM and benchmarking in FM in particular are practices that are yet to gain wide acceptance in Nigeria, and IFMA (2009) highlighted. Lavy (2010), again stated that risk management should be a high priority for any facility, and it is achieved through a risk management program, in which risks are identified, analysed, classified and controlled.

Conclusion and Recommendations

Based on the findings of the study, it could be concluded that outsourcing facility management and In-house facility management are the two major types of FM adopted in the public healthcare facilities. Also that improved funding, manpower in the works unit, equipping the store in the FM unit of spare parts, Training/re-training of staff etc. are the indicators for effective FM practices. The challenges facing the FM practices are corruption, insufficient funding, poor maintenance culture, problem of policy implementation, inadequate FM personnel skill level, low technical knowhow among others. Finally measure cited for improved FM practices are fitness for purpose/ functionality, aesthetics and psychological appeal, modernity, ease of usage, structural stability, accessibility/ access to the facility and so on. The researcher thereby recommended that strategic facility plan, benchmarking, building simulation/building forecasting, risk management in building facilities and building maintenance should be put in place by the government to encourage the uptake and adoption of FM practices in the healthcare facilities. The management of public healthcare centre; should attached importance to the FM

practice and encourage, sanctions any staff found violating maintenance and management protocol in the healthcare facilities. The government should prioritize the provision of financial incentive and modern infrastructure to encourage FM practice with adequate planning and budgetary provision.

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