
FLEXITIME AND SERVICE QUALITY OF MEDICAL EMPLOYEES IN TEACHING HOSPITALS IN NIGERIA: A STUDY OF TEACHING HOSPITALS IN NORTH CENTRAL NIGERIA

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ABSTRACT

This paper studied the relationship between flexitime and service quality of medical employees of teaching hospitals in Nigeria concentrating on those in North Central Nigeria. It discussed the need to ensure and aid medical employees in discharging quality healthcare services that meet the patients' perception by way of having control over their job. The study employed a survey design, using a sample of 373 medical employees and patients of six teaching hospitals in North Central Nigeria. A 5-point Likert scale questionnaire was used for data collection, and data analysis was conducted using Pearson's Product moment correlation and Regression with the aid of SPSS version 23. The study found that flexitime had a significant positive relationship with four dimensions of service quality namely; reliability, responsiveness, empathy and assurance. Flexitime however showed significant negative relationship with tangibility, another dimension of service quality. Overall, the study demonstrated that flexitime significantly impact service quality of medical employees. The paper provides practical implications for society, all medical outfits, government, policy makers and managers of public hospitals by way of supporting medical employees through giving them control over their job to enable them balance work and personal life which in turn improves the quality of health care service delivery and by extension improvement in the quality of life of the society. The study validates and strengthens view that health systems studies are emerging as factual interdisciplinary fields of investigation where ideas from several different viewpoints are combined into conceptual frameworks to address health problems and contributes to expanding knowledge on the consequence of employee support through the use of flexible practices such as flexitime in the work place to boost the performance of medical employees in terms of service quality. The study further reinforces and validates the Psychological work control theory and its significance to flexibility studies and made recommendations to help manage employees in the healthcare outfits for optimal service delivery therefore aiding to close the research gap with similar researches on service quality improvement among employees in healthcare organisations.

KEYWORDS: Flexitime, service quality, teaching hospitals, medical employees.

INTRODUCTION

Workplace flexibility functions as an essential and active resource for employees, which permit them

to control the scheduling, duration, and location of carrying out their tasks (Lewis, 2003, Goguen, 2017). Organisations often offer such arrangements with the objective of attracting and retaining talented employees through increasing employees' commitment, work-life balance, and satisfaction (Allen, Golden, & Shockley, 2015).

There has been a rise in the study and prevalence of flexible work practices recently which is occasioned by work and the very nature of work environment, economic reasons and personal life. More importantly, the healthcare setting is a demanding and complicated workplace requiring a round-the-clock and ongoing patient care which suggests the need for flexible working arrangements to help reduce stress and aid retention (Osisioma, Nzewi & Ifechi, 2015). Although workplace flexibility has been linked to a multitude of significant employee and organizational outcomes such as enhanced employee performance and improved job attitudes (Civian et al., 2008; Galinsky et al., 2011, Allen, Golden & Shockley, 2015), little is known about the links between flexible work arrangements and service quality of medical employees which is the crux of this research.

In this recent time of stiff competition, both private and public organisations have witnessed new challenges concerning sustainable quality service delivery and building committed workforce (Wainaina, 2015) as it is difficult for any organisation to attain optimal performance level unless its employees remain committed to the attainment of its goals and objectives (Varsha & Bhati, 2012). Achieving work-life balance and having control over work remains the target of every employee especially among medical employees. Organisations have equally realized the role of employees as the vital resource to enhance quality service delivery and build efficiency (Lissy & Ventakash, 2014).

Research suggests that organisations across the globe have begun to implement work-life balance initiatives such as flexible work arrangements to abate the undesirable effects of work-life disparity and hence take advantage of the attendant benefits which comprise but not narrowed to, reduced absenteeism, increased employee commitment, increased employee morale, increased service quality and increased productivity (Todd, 2004; Hughes & Bozionelos, 2007). The concept of flexible working arrangement has received considerable attention in academic discuss as well as operations of organisations in Nigeria for a number of decades now. The concept has been severally used in both manufacturing and service organisations like textile, hotels, petroleum and health related organisations (Osisioma., Nzewi & Ifechi, 2015). The attention on flexible working arrangements is evident among managers of organizations as they continue to experiment with various employment arrangements. It can be deduced that interest in employment flexibility is an integral part of the diffusion of Human Resource Management (HRM), since flexibility is considered as one of its cardinal objectives (Guest, 1987).

Flexible work arrangements in many Nigerian organisations has been aided and challenged by rapid technological development. It has been adopted by many Nigerian organisations including hospitals as a policy but their implementations still remain worrisome. Literature has pointed to the fact that the health sector in Nigeria largely focuses on flexitime through the use of shift work, job sharing and contract working while other aspects of flexible working arrangements like tele-commuting and flexible career path are indirectly ignored (Osisoma., Nzewi & Ifechi, 2015, Erick, 2001, Ggolipour, Bod, Zehtabi, Pirannejad & Kozekanan, 2010, Bliss & Thornton, 2010, Maestro & Heras, 2011, Kiprono, 2018).

Service quality remains a critical issue of discuss and occupies the major aspect of decision making in many service organisations especially the health care. It has gained a lot of attention by health care organisations due to customers' concerns and increasing competition (D'Cunha & Suresh, 2015). High quality and care is the principal differentiator of one healthcare institution from another. As a result, administrators of healthcare institutions have continually preoccupied themselves with implementing approaches to deliver services that meet patients' expectations and have concentrated on constantly assessing and trying to improve the quality level that their organisations offer. The challenge for health organisations is to ensure high level of service the customer wants and expects every time, perfectly. Even more challenging is that the service quality and service value are defined not only by the administrator but also by the patient who is the consumer of the service (D'Cunha & Suresh, 2015). Inadequate service quality may provoke a number of reactions in the patients, their family members and their healthcare attendants ranging from frustration and despair, anxiety over costs and complexities of care, tension due to inconvenience in getting what is needed for care and, alienation from care system which has little time in understanding and meeting their needs (Ransom Joshi & Nash, 2005, p. 6; Upadhyai, Jain, Roy & Pant, 2019).

More recently, the very nature of patient care which requires around-the-clock presence of medical personnel has complicated work and the nature of the work environment in such areas of work and family, personal career opportunities and professional development, and the level of remuneration particularly in acute care hospital backgrounds. This has necessitated the need for flexible working arrangements to help improve service quality of health employees as well as retain such skilled and talented employees (Drouin & Potter, 2005). The use of flexible working arrangement especially flexitime is therefore expected to help such hospitals to manage their employees better in terms of work-life balance, employee retention and stress management and in the long run enhance service quality (Venzon, 2015).

STATEMENT OF THE PROBLEM

The provision of quality healthcare services remains integral to the sustainability of lives especially when it is adequate. Several nations are determined to keep pace with healthcare delivery since the

sustainability and capability of any nation's economic and social growth is dependent on the healthcare sector. This is because a nation of sick people would certainly not live up to its basic responsibilities since there is sufficient evidence associating productivity with well-being.

However, it has been observed that healthcare provision in public hospitals in Nigeria especially teaching hospitals is not of and far from the desired quality. Concerns have been raised about the poor attitude of healthcare workers to their jobs, various harm and complications that patients experience in the hands of medical employees which in all results to poor service quality. Healthcare workers have also raised concerns over inflexible working hours, overwhelming workload, burnout among others (Howard, Hordacre, Morenti & Spoker, 2014).

The poor attitude, workload and stress level of healthcare practitioners is often attributed to lack of flexibility practices in the form of flexible working arrangements such as flexitime. As a consequence, the performance of public healthcare institutions in terms of service quality, clinical efficiency, patient focus, medical efficacy, patient safety and its ability to retain talented employees has often been questioned. The response to above calls for need for a study in the area of flexitime in the Nigerian teaching hospitals, particularly the Teaching Hospitals in North Central. However, dearth of research in the area of flexible working arrangement in teaching hospitals has created a huge research gap hence the need for more investigation. It is against this background that the study was undertaken to investigate the effectiveness of flexitime on service quality of medical employees and the subsequent performance of teaching hospitals in terms of service quality.

OBJECTIVE OF THE STUDY

The major objective of this research is to investigate the relationship between flexitime and service quality of medical employees of Teaching Hospitals in North Central Nigeria. The specific objectives arising from the major objective include to;

- i. Assess the relationship between flexitime and tangibility of medical employees of Teaching Hospitals in North Central Nigeria.
- ii. Ascertain the relationship between flexitime and reliability of medical employees of Teaching Hospitals in North Central Nigeria.
- iii. Determine the relationship between flexitime and of responsiveness medical employees of Teaching Hospitals in North Central Nigeria.
- iv. Evaluate the relationship between flexitime and empathy of medical employees of Teaching Hospitals in North Central Nigeria.
- v. Establish the relationship between flexitime and assurance of medical employees of Benue State University Teaching Hospitals in North Central Nigeria.

Hypotheses

H₀₁: There is no significant relationship between flexitime and tangibility of medical employees of Teaching Hospitals in North Central Nigeria.

H₀₂: There is no significant relationship between flexitime and reliability of medical employees of Teaching Hospitals in North Central Nigeria.

H₀₃: there is no significant relationship between flexitime and responsiveness of medical employees of Teaching Hospitals in North Central Nigeria.

H₀₄: there is no significant relationship between flexitime and empathy of medical employees of Teaching Hospitals in North Central Nigeria.

H₀₅: There is no significant relationship between flexitime and assurance of medical employees of Teaching Hospitals in North Central Nigeria.

LITERATURE REVIEW

Flexitime

Flexitime also known as flexible hours is an arrangement whereby employees choose their starting time and finishing time from a spectrum of available hours and are required to work during core times and an agreed number of hours during a settlement or accounting period (Whittard, 2005, Osioma, Nzewi & Ifechi, 2015). In essence outside the core times, at the beginning or end of each day are flexible bands when employees may choose whether to be at work. Flexitime has previously been considered as a rare and pioneering workplace arrangement; however, it is now frequently practiced in a wide variety of industries. The majority of users of flexitime specify their own daily or weekly schedule, and consistently follow to this particular routine because it knits well with their schedules and obligations outside work. In establishing their personal schedules employees also take into account targets, deadlines, co-workers' schedules, and other workplace contingencies (Gottlieb, Kelloway & Barham, 1998). Ridgley, Scott, Hunt and Harp (2005) suggest that, organisations must provide employees the needed training to enable them fill out timesheets and reminders on daily basis. Employees need to be reminded that staff working over 6 hours must record a 30 minutes break during each work day. Where employees have not experienced flexitime before, they may need more guidance on what they can and cannot do. Kiprono (2018) provides that, letting employees schedule their work will enhance work-life balance which in return translate to professional service delivery by employees.

Service Quality

Service quality is a concept that has provoked substantial attention and deliberation in the research literature because of the difficulties in both its definition and measurement. In the healthcare literature, numerous models/concepts for assessing the quality of care have been suggested. In the traditional medical approach, the major attentions of healthcare organisations is on increasing the possibility of desirable healthcare outcomes, given the state of knowledge and technology (Thawesaengskulthai,

Wongrukmit & Dahlgaard, 2015).

Crosby (1981) defined quality as consistency with fixed specifications. Karim (as cited in Mohammad & Alhamadari, 2011) defined quality as anything that accords with the characteristics of the product or service to meet the external client's needs. Service on the other hand is defined by Kotler (2003) as 'any behaviour or act based on a contact between two parties: The provider and the receiver, and the essence of the reciprocal process is intangible'. Hakesver (2000) in Mohammad & Alhamadari (2011) consider service as a set of economic activities that provider time, location form and psychological benefits. While Beer (2003), defined service as a set of characteristics and overall properties of the service which aim to satisfy the client and meet their needs, there are two prospective of service quality, the outcome of the work or service (technical quality) and the manner in which the service is delivered (functional quality) (Mohammad & Alhamadari, 2011). Thus Ranjith (2018) defines service quality as the variance between customer anticipations of service and perceived service. If expectations are superior to performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs.

Health care quality is defined as having three domains: patient safety, clinical effectiveness and patient experience (compassion, dignity and respect) (Black, Varaganum, & Hutchings, 2014). WHO (200) as explained in Upadhyai, Jain, Roy and Pant (2019) assert that the quality in health services should be safe (circumventing harms to people for whom the care is intended), effective (providing evidence-based healthcare services to those who need them), people-centred (giving care that responds to individual inclinations, needs and values) and timely (reducing waiting times and sometimes harmful delays)?

Parasurama, Zeithal and Barry (1988) assert that there are ten criteria and dimensions for measuring service quality:

- i. Reliability: the ability of an organisation to accurately achieve its service in the proper time and according to the promises it has made to its client.
- ii. Responsiveness: the tendency and willingness of service providers to help clients and satisfy their needs, immediately reply to their inquiries, and solve their problems as quickly as possible.
- iii. Competence: having adequate skills and knowledge that enables the employee to perform their jobs properly.
- iv. Accessibility: providing easy access to a service in term of location and through service provided via the telephone, the internet, or any other means of communication.
- v. Courtesy: treating clients respectfully in a polite friendly manner, understanding their feelings and answering their phone call gently.

- vi. Communication: this occurs through gentlemanly listening to the clients conveying information to them clearly and facilitating external communication with workers.
- vii. Credibility: this can be achieved through full trust and confidence in the service provider as well as his honesty and straight forwardness.
- viii. Security: this depends on whether the service is free from risk and hazard, defects or doubts so that it provides bodily safety, financial security as well as privacy.
- ix. Understanding/knowing the customer: this can be made achievable through the ability to pin-point the customer’s needs as well as understanding their individual problem.
- x. Tangibility: this includes physical aspects connected with service such as instrument and equipment, person, physical facilities like building and nice decoration and other observable service facilities.
- xi. Empathy: deals with individualized attention and care that the organisation provides its customers.
- xii. Assurance: this includes Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Table 2.1: SERVQUAL Dimensions and Definition in Healthcare Industry

| S/N | Servqual Dimensions | Definition | Modified definitions for Healthcare |
|-----|---------------------|--|---|
| 1 | Reliability | Ability to accurately and dependably perform the promised service | <ul style="list-style-type: none"> ▪ General Speed of Service ▪ Speed of registration ▪ Accuracy of treatment |
| 2 | Responsiveness | Willingness to help customers and provide prompt service | <ul style="list-style-type: none"> ▪ Speed of response to complaints ▪ Concern for patient ▪ Desire for helping |
| 3 | Competence | Possession of required skills and knowledge to perform the service | <ul style="list-style-type: none"> ▪ Doctors qualification ▪ Qualification of staff in hospital ▪ Experience of doctors ▪ Reputation of doctors |
| 4 | Accessibility | Approachability and ease of Contact | <ul style="list-style-type: none"> ▪ Number of hours of availability of doctors in the consultation rooms ▪ Number of ward rounds taken/day/week |
| 5 | Courtesy | Politeness, respect , and Friendliness | <ul style="list-style-type: none"> ▪ Politeness of the health care staff to Patient. |

| | | | |
|----|--------------------------------|--|---|
| | | | <ul style="list-style-type: none"> ▪ Behaviour of the health care staff |
| 6 | Communication | Keeping customers informed in language they can understand and listening to them. | <ul style="list-style-type: none"> ▪ Counseling facility ▪ Communication and ITC ▪ Computerized registration facility ▪ Computerized billing facility ▪ Computerized dispensary |
| 7 | Credibility | Trustworthiness, believability, honesty. It involves having the customer's best interests at heart | <ul style="list-style-type: none"> ▪ Trustworthiness ▪ Doctors faith ▪ Belief |
| 8 | Security | The freedom from danger, risk, or doubt. | <ul style="list-style-type: none"> ▪ Alarm provided for danger ▪ Fire proof arrangement ▪ Accidental facility ▪ General safety |
| 9 | Understanding/Knowing customer | Making an effort to understand the Customer's needs | <ul style="list-style-type: none"> ▪ To know what type of diseases patient suffering from ▪ What type of problem arises to patient |
| 10 | Tangibility | Physical facilities, equipment, and appearance of personnel | <ul style="list-style-type: none"> ▪ Availability of medical equipment ▪ Cleanliness and tranquility of patient room ▪ Choices of menu and portion' ▪ Availability of furniture in patient rooms and waiting areas ▪ Available of electricity for emergency, wards, labs ▪ Pathology lab and their conditions ▪ Employee performance |
| 11 | Empathy | Caring, individualized attention the firm provides its customers | <ul style="list-style-type: none"> ▪ Ease of communication ▪ Attention and patience of the nurses |
| 12 | Assurance | Knowledge and courtesy of employees and their ability to inspire trust and confidence | <ul style="list-style-type: none"> ▪ Health care personnel's concern for patients ▪ Health care workers' attitude towards patients ▪ Room security |

Adapted with modification from Amejeriya and Malviya (2012). Measurement of service quality in health care organisations. *International Journal of Engineering Research and Technology*, 1(8)1-18.

Flexitime and Service Quality

The above-mentioned dimensions of service quality indicate that for health care institutions to provide quality health service, they must have highly committed, experienced and engaged workers who are willing to provide prompt and accurate service to patients, and also listen to their complains patiently and treat them affectively. Consequently, providing an enabling environment that allows employees to balance their work and personal life will enhance employee satisfaction, engagement and commitment to attaining high service quality (Moen, Kelly, Tranby & Huan, 2011). Within the quality initiative there is a strong recognition that a lot can be accomplished by appealing to individual practitioners, and that additional effort needs to be expended on understanding how the organisation and management of care affects outcomes such as service quality (West, 2015).

Forret and de Janasz (2005) asserts that employees perceived support by their organization in a way of flexible working arrangements enable them have greater control over work time and thus demonstrate higher affective commitment and lower turnover intention. Moreover, there exists ample research evidence linking the commitment and engagement of employee to the quality of service in organizations. Employee engagement and morale have been shown to have a direct relationship to customers' satisfaction, particularly in the exchange of service (Graffith, 2001; Ivar Roseberg, Melle, Opjordsmoen, & Fris 2008).

A study by Gracia, Salanova, Gram and Cifre (2013) found positive correlations between flexible working arrangement and customer satisfaction, loyalty, profitability, productivity and employee turnover. However, Scheider, white and Paul (1998) maintain that employees can only deliver a quality service if the organisation supports them through resources, training, management practices and assistance. In particular, flexible working practice such as flexitime among others is key to the enhancement of service quality (Osman et al, 2011; Popescu et al 2012). These principles are also held true in public sector hospitals (Tucker, 2004). Kiprono (2016) provides that, flexitime allow employees to schedule their work time in such a way that allow them control over their assigned duties and in turn it leads to professional service delivery.

Research also suggests that allowing employees some locus of control over their job responsibilities improved workers' self-reported performance on the job (Kossek & Lee, 2008). This supports submissions that employer provision of flexible working arrangement practices such as flexitime is associated with considerably higher productivity and self-assessed performance (Bloom et al., 2009). Greater availability of flexitime is further strongly associated to lower negative spillover from life off the job to work among nurses and doctors (Golden, 2012). Bond and Galinsky, (2006) support this by buttressing that, employees who experience fewer adverse spillover from home to work are more likely to be productive on the job, show concern for patients, are courteous, and responsive in the discharge of their duties. Empirically, studies also suggest that employer flexibility programmes

contribute in improving attitudes of healthcare workers, their productivity, and hence their service quality (Golden, 2012). Nevertheless, further research is needed to identify the mechanisms whereby flexible work options result in improved productivity (Clifton and Shepard, 2004). Theoretically, the paper is anchored on Psychological work control theory propounded by Karasek in 1979.

METHODOLOGY

The paper employed a sample survey design to answer the research questions and test the hypotheses formulated. The sample survey design was considered suitable for study because of the dearth of information on flexitime and service quality of medical employee of teaching hospitals in North Central, Nigeria. The population for this study comprised all the medical employees of the Teaching Hospitals in North Central Nigeria, as contained in the Federal Ministry of health (2019) Draft National Human Resources for Health Policy amounting to 5473. The medical employees comprised Doctors, Midwives, Radiologists, Nurses, Pharmacists, Laboratory Technicians and Physiotherapists. Such employees were considered because they represent the hem of medical care and the issue of flexibility matter in the cadre if optimal health care performance must be achieved. The teaching hospitals in North Central Nigeria were; Jos University Teaching Hospital, Jos (1,850), University of Abuja Teaching Hospital, Gwagwalada, Abuja (1,010), Benue State University Teaching Hospital, Makurdi (456), Bingham University Teaching Hospital, Jos (280), University of Ilorin Teaching Hospital, Ilorin (1,455) and Kogi State University Teaching Hospital, Anyigba (422). Taro Yamane (1967) formula was used to determine a sample size of 373 and Bowley, (2004) formula was used to determine the individual sample size for each of the teaching hospitals as follows: University of Jos (126), University of Abuja (69), Benue State (31), Bingham (19), University of Ilorin (99) and Kogi State (29). The Cronbach alpha values were used to determine the reliability and internal consistency of the instrument while the use of construct measure was adopted to test the validity of the instrument. Data analysis was carried out using linear regression with the aid of SPSS version 23.

MEASURE

Service Quality (SQ): Parasurama, Zeithaml and Berry (1985) SERVQUAL scale was adopted with modification to measure service quality. The Scale was modified to reflect the health care perception of service quality. The SERVQUAL scale was adopted because it provides a proper method for determining healthcare services by measuring both the patient service expectations and perceptions of the provider's performance. This model has been extensively used in the service quality literature and has demonstrated to be valid and reliable for a number of service situations. The questionnaire primarily dealt with 5 important dimensions of tangibility, reliability, responsiveness, empathy and assurance. The paper used a five-point Likert scale of [Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1)]. Sample items comprised 'There is availability of medical devices for the treatment of patients' (for Tangibility), 'There is accuracy of diagnosis of patients' (for Reliability), 'There is timely response to emergency and other cases (for Responsiveness), 'Patients

are informed of their medical condition by medical personnel' (for Empathy) and 'Medical personnel care about safety of patients' for (for Assurance).

The flexitime scale and patients perception of service quality scale were self-designed and based theoretical framework from relevant literature and comprised of a total of 10 items, 5 each for flexitime and patients' perception respectively. All used a five-point Likert scale of [Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1)]. A pilot survey was conducted involving 31 medical employees at the Benue State University Teaching Hospital, Makurdi.

Reliability Test

Validity analysis was not conducted because the questionnaires for the dimensions of flexitime and service quality were developed from previous validated studies. However, internal consistency reliability was used to test the relatedness of the individual items design to measure same construct. Cronbach's alpha value was used to test for internal consistency of individual items. After the analysis, the Cronbach's alpha value for five service quality dimensions was above 0.7 which is the standard minimum value suggested by Nunally (1978).

Table 1 presents the result of the reliability test on individual service quality dimensions.

Table 1.1 Reliability Test

| SERVQUAL Dimensions | No Observation | Cronbach's Alpha value |
|----------------------------|-----------------------|-------------------------------|
| Tangibility | 4 | .901 |
| Reliability | 4 | .992 |
| Responsiveness | 4 | .935 |
| Empathy | 4 | .934 |
| Assurance | 4 | .918 |
| Flexitime | 5 | .882 |

Source: SPSS output version 23.

Data Analysis and Results

Table 2. Demographic Characteristics of Respondents

| Characteristics | Frequency | Percentage (%) |
|---------------------------|------------|----------------|
| Gender | | |
| Male | 229 | 62.2 |
| Female | 139 | 37.8 |
| Total | 368 | 100.0 |
| AGE | | |
| 50yrs | 39 | 10.6 |
| 42-49yrs | 110 | 29.9 |
| 34-41yrs | 180 | 48.9 |
| 26-33yrs | 24 | 6.5 |
| 18-25yrs | 15 | 4.1 |
| Total | 368 | 100.0 |
| Working Experience | | |
| 1-5yrs | 3 | .8 |
| 6-10yrs | 132 | 35.9 |
| 11-15yrs | 115 | 31.3 |
| 16-20yrs | 65 | 17.7 |
| ABOVE 20yrs | 23 | 6.3 |
| Total | 368 | 100.0 |
| Cadre | | |
| Lab Technician | 21 | 5.7 |
| Pharmacist | 43 | 11.7 |
| Physiotherapist | 14 | 3.8 |
| Radiologist | 54 | 14.7 |
| Midwifery | 98 | 26.6 |
| Nurse | 80 | 21.7 |
| Doctor | 58 | 15.8 |
| Total | 368 | 100.0 |

Source: Field Survey, 2020.

The result in Table 2 shows that, 229 respondents (representing 62.2%) were males, while 139 respondents (representing 37.8%) were female. This implies that majority of the respondents were male. 39 respondents (representing 10.6%) were 50 years and above, 110 respondents (representing 29.9%) were from 42-49 years, 180 respondents (representing 48.9%) fall under the age of 34-41 years, 24 respondents (representing 6.5%) were from 26-33 years and 15 respondents (representing 4.1%) 18-25 years. This implies that the respondents were old enough to provide valid responses to

the questions.

The result in Table 2 also revealed the working experience of the respondents as follows: 3 respondents (representing 0.8%) have 1-5 years working experience, 132 respondents (representing 35.9%) have 6-10 year working experience, 115 respondents (representing 31.3%) have 11-15 years working experience, while 65 respondents (representing 17.7%) and 23 respondents (representing 6.3%) have 16-20 years and Above 20 years working experience respectively. This indicates that the respondents are experienced enough to offer reliable information on the subject matter.

The result in Table 2 further revealed that, 21 respondents (representing 5.7%) were Lab Technician, 43 respondents (representing 11.7%) were Pharmacist, 14 respondents (representing 3.8%) were Physiotherapist, 54 respondents (representing 14.7%) were Radiologist, 98 respondents (representing 26.6%) were Midwifery, 80 respondents (representing 21.7%) and 58 respondents (representing 15.8%) were nurses and doctors respectively. This implies that majority of the respondents in the sampled population were midwiferies.

Test of Hypotheses

H₀₁: There is no significant relationship between flexitime and tangibility of medical employees of Teaching Hospitals in North Central Nigeria.

Table 3 Model Summary 1

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .199 ^a | .039 | -.021 | .89766 | .039 | .657 | 1 | 16 | .430 |

a. Predictors: (Constant), Flexitime

The result in Table 3 show that coefficient of determination (R-Square) explains the variation in the dependent variable due to changes in the independent variable. The R-Square value (.039) indicates that there was 0.39% variation in tangibility as a result of flexitime at 95 % confidence interval.

Table 4 Regression Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 9.017 | 388 | | .864 | .400 |
| Flexitime | -8.63 | 649 | -.199 | -.811 | .430 |

a. Dependent Variable: Tangibility

The result in table 4 show that, holding Flexitime to a constant zero, Tangibility would be 9.017% and a unit increase in Flexitime would affect Tangibility by -8.63%. The research findings from the regression coefficient showed Tangibility had coefficients of estimate which was significant (t= -.811%; p-value = 0.430 <0.05). The study therefore accepts the null hypothesis and concludes that, there is no significant positive relationship between flexitime and tangibility of medical employees of Teaching Hospitals in North Central Nigeria.

H02: There is no significant relationship between flexitime and reliability of medical employees of Teaching Hospitals in North Central Nigeria.

Table 5 Model Summary 2

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .747 ^a | .558 | .557 | .78237 | .558 | 461.661 | 1 | 366 | .000 |

a. Predictors: (Constant), FLXT

The result in table 5 shows that coefficient of determination (R-Square) explains the variation in the dependent variable due to changes in the independent variable. The R-Square value (.558) indicates that there was 55.8% variation in Reliability of medical employees of Teaching Hospitals in North Central Nigeria as a result of flexitime at 95 % confidence interval.

Table 6 Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -2.127 | .301 | | -7.065 | .000 |
| | FLXT | 1.421 | .066 | .747 | 21.486 | .000 |

a. Dependent Variable: Reliability

The result from the data presented in Table 6 shows that holding flexitime to a constant zero, Reliability would be -2.127% and a unit increase in flexitime would affect Reliability of medical employees of Teaching Hospitals in North Central Nigeria by 1.421%. The research findings from the regression coefficient showed that flexitime had coefficients of estimate which was significant ($t=21.486$; $p\text{-value} = 0.000 < 0.05$). Therefore, the study rejects the null hypothesis and accepts the alternative hypothesis and concludes that, there is a significant relationship between flexitime and reliability of medical employees of Teaching Hospitals in North Central Nigeria.

H03: There is no significant relationship between flexitime and responsiveness of medical employees of Teaching Hospitals in North Central Nigeria.

Table 7. Model Summary 3

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .658 ^a | .433 | .432 | .67435 | .433 | 279.932 | 1 | 366 | .000 |

a. Predictors: (Constant), Flexitime

The result in table 7 shows that coefficient of determination (R-Square) explains the variation in the dependent variable due to changes in the independent variable. The R-Square value (.433) indicates that there was 43.3% variation in responsiveness of medical employees of Teaching Hospitals in North Central Nigeria as a result of flexitime at 95 % confidence interval.

Table 8. Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .328 | .260 | | 1.265 | .207 |
| | Flexitime | .954 | .057 | .658 | 16.731 | .000 |

a. Dependent Variable: Responsiveness

The result from the data presented in Table 8 shows that holding flexitime to a constant zero, responsiveness would be 32.8% and a unit increase in flexitime would affect responsiveness of medical employees of Teaching Hospitals in North Central Nigeria by 95.4%. The regression coefficient showed that flexitime had coefficients of estimate which was significant ($t= 16.731$; $p\text{-value} = 0.000 < 0.05$). The study rejects the null hypothesis and accepts the alternative hypothesis and concludes that, there is a significant relationship between flexitime and responsiveness of medical employees of Teaching Hospitals in North Central Nigeria.

H04: There is no significant relationship between flexitime and empathy of medical employees of Teaching Hospitals in North Central Nigeria.

Table 9. Model Summary 4

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .726 ^a | .527 | .526 | .70008 | .527 | 407.526 | 1 | 366 | .000 |

a. Predictors: (Constant), Flexitime

The result in table 9 shows that coefficient of determination (R-Square) explains the variation in the dependent variable due to changes in the independent variable. The R-Square value (.526) indicates that there was 52.6% variation in empathy of medical employees of Teaching Hospitals in North Central Nigeria as a result of flexitime at 95 % confidence interval.

Table 10. Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.938 | .269 | | -3.480 | .001 |
| | Flexitime | 1.195 | .059 | .726 | 20.187 | .000 |

a. Dependent Variable: Empathy

The result from the data presented in Table 10 shows that holding flexitime to a constant zero, empathy would be -.938% and a unit increase in flexitime would affect empathy of medical employees of Teaching Hospitals in North Central Nigeria by 1.195%. The regression coefficient showed that flexitime had coefficients of estimate which was significant (t= 20.187; p-value = 0.000 < 0.05). the study rejects the null hypothesis and accepts the alternative hypothesis and concludes that, there is a significant relationship between flexitime and empathy of medical employees of Teaching Hospitals in North Central Nigeria.

H05: There is no significant relationship between flexitime and assurance of medical employees of Teaching Hospitals in North Central Nigeria.

Table 11. Model Summary 5

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .680 ^a | .463 | .462 | .79726 | .463 | 315.545 | 1 | 366 | .000 |

a. Predictors: (Constant), Flexitime

The result in table 11 shows that coefficient of determination (R-Square) explains the variation in the dependent variable due to changes in the independent variable. The R-Square value (.463) indicates that there was 46.3% variation in assurance of medical employees of Teaching Hospitals in North Central Nigeria as a result of flexitime at 95 % confidence interval.

Table 12. Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -1.286 | .307 | | -4.191 | .000 |
| Flexitime | 1.197 | .067 | .680 | 17.764 | .000 |

a. Dependent Variable: Assurance

The result from the data presented in Table 12 shows that holding flexitime to a constant zero, Assurance would be -1.286% and a unit increase in flexitime would affect Assurance of medical employees of Teaching Hospitals in North Central Nigeria by 95.4%. The regression coefficient showed that flexitime had coefficients of estimate which was significant ($t= 17.764$; $p\text{-value} = 0.000 < 0.05$). The study rejects the null hypothesis and accepts the alternative hypothesis and concludes that, there is a significant relationship between flexitime and assurance of medical employees of Teaching Hospitals in North Central Nigeria.

DISCUSSION OF FINDINGS

This research studied the relationship between flexitime and service quality of medical employees of teaching hospitals in Nigeria concentrating on those in North Central Nigeria. The analysis of the survey instruments retrieved from the research are found to be suitable showing a balance in the gender, age and working experience of the respondents that took part in the research. The findings of the research are significantly and positively related to four dimensions of service quality but significantly and negatively related to one of the dimensions of service quality.

Specifically, it was discovered from the research that there is no significant positive relationship between flexitime and tangibility of medical employees of Teaching Hospitals in North Central Nigeria. The research by Parasurama, Zeithal and Barry (1988) looks at tangibility in terms of physical facilities and equipment which are not supported by flexitime. This aspect is expected to be taken care of by the owners of the teaching hospitals and do not have direct link to flexitime.

It was also discovered from the research that there is a significant positive relationship between flexitime and reliability of medical employees of Teaching Hospitals in North Central Nigeria. This

position is in line with previous studies by Atambo Kabare & Munene, (2013) and Aveling, Kayonga, & Nega (2015).

Additionally, the research found a significant positive relationship between flexitime and responsiveness of medical employees of Teaching Hospitals in North Central Nigeria. This finding is supported by Gile, Buijac-Samardzic, & De Klundet, (2018).

More so, the research discovered a significant positive relationship between flexitime and empathy of medical employees of Teaching Hospitals in North Central Nigeria. This position is in line with previous research by Galukande, Kaggwa, Sekimpi, Kakaire, Katamba, & Munabi, (2013).

Lastly, the research found that there is a significant positive relationship between flexitime and Assurance of medical employees of Teaching Hospitals in North Central Nigeria. This position has gained support from research by Lasebikan, & Oyetunde, (2012) and Ferrinho, Sidat, Goma, Dussault, (2012).

CONCLUSION AND RECOMMENDATIONS

The research discussed the relationship between flexitime and service quality of medical employees of teaching hospitals in Nigeria concentrating on those in North Central Nigeria. A total sample size of 373 medical employees was used to collect data for the research from the teaching hospitals considered. From the findings, we conclude that flexitime has significant positive relationship with reliability, responsiveness, empathy and assurance, but has no positive relationship with tangibility. It was therefore concluded that flexitime is positively and significantly related to service quality. This to say that the availability of flexitime improves the quality of service delivery in teaching hospitals in the areas of reliability, responsiveness, empathy and assurance.

Based on the above conclusion, it is recommended that;

- i. There should be a focus on tangibility by government in the management of teaching hospitals. It is a well-known fact that there is generally lack of equipment and facilities in most government owned medical institutions which teaching hospitals are not exception. Additionally, this cannot be provided with the use of flexitime. Conscious efforts must be made by relevant government agencies and parastatals to provide the required equipment and facilities in in the hospitals. This area should be considered as top priority since hospitals deal with the health of human beings.
- ii. It is equally recommended that there should be massive improvement in the reliability of service delivery in the areas of speed of service, speed of registration and reliability of treatment. There should be a focus on the waiting time for registration, consultation with doctors, diagnostic time and collection of results and how reliable the medical care service

- is.
- iii. Additionally, it is recommended that medical employees must be encouraged to be more responsive to patients which have to do with willingness to help patients and provide prompt services. It should be appreciated that most employees of government owned medical facilities are not willing to help patients. Their always sluggish in attending to complaints from patients. This attitude has to change since the whole essence of working in medical facilities is to ensure that patients get the desired medical attention required. It should be appreciated that the attitude of medical employees is capable of increasing or reducing the medical condition of patients.
 - iv. It is also recommended that medical employees should show more empathy to their patients. This can be done by showing individualised attention to patients. They should exercise patience with them considering their medical condition. The show of love, affection, tenderness and ease of communication is important here.
 - v. More so, we recommend that medical employees should be more assuring to their patients. They should be able to inspire trust and build confidence between them and the patients. Additionally, ward security must be guaranteed.

Limitations of the Study

This study is limited in a number of ways. The study design is one of such limitation since the choice of survey design exclude the use of other designs. The use of questionnaire as well as the choice of teaching hospitals excluding other numerous government and private hospitals also prevents the research from complete generalisation.

Suggestions for further study

We suggest that other researchers can consider the use of a different design and method of data collection in carrying out the research. We also suggest a comparative study of government and privately owned hospitals for the study.

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