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## *Institutional Framework as a Determinant of Variations in Service Quality Between Public and Private Hospitals in Tanzania*

**Keywords:** institutional framework; service quality; quality variations; determinants of quality variations

**JEL:** L2; L25

**How to quote this paper:** Habi, R., & Matiku, E. (2023). Institutional Framework as a Determinant of Variations in Service Quality Between Public and Private Hospitals in Tanzania. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 57(3), 99–122.

### **Abstract**

**Purpose of the article:** This study was set to determine the influence of institutional framework on service quality in both private and public hospitals. The paper sought to establish the perception of respondents regarding the institutional factors that explain the existence of variations in service quality between public and private hospitals. The institutional framework aspects that were considered in comparing health service quality in public and private hospitals were: institutional culture, control, stability and structure. A descriptive survey design was used because the study sought to know the perception of respondents regarding the factors that influence quality of service in hospitals.

**Research methods:** A multistage sampling method was used to select three public hospitals and three private hospitals from the health service sector. The three public hospitals were Muhimbili referral hospital in Dar es Salaam City, Dodoma regional referral hospital and Geita referral hospital in Geita municipality. Private hospitals included in the study were Bugando referral hospital in Mwanza City, St Francis referral hospital in Ifakara town in Morogoro region and Nkinga referral hospital in Tabora region. Medical doctors, nurses and patients were selected using a systematic random sampling method and patients were selected using a convenience sampling method. The total population for the study comprised 10,650 people (i.e. 2,610 doctors and nurses and 8,040 patients) and the selected sample size, which was determined using McCall's Table was 400 people. Both primary and secondary data collection sources were used. Analysis of the quantitative data was done using the Statistical Package for Social Sciences (SPSS) and qualitative data were transcribed verbatim, coded and analysed manually. All ethical considerations were observed.

**Main findings:** The findings revealed that private hospitals were better in cleanliness compared to public hospitals and physical arrangement was user friendly in private hospitals compared to public hospitals. There was also more control in private hospitals compared to public hospitals in management of resources and this demonstrates an application of strong institutional framework in private hospitals compared to public hospitals in terms of control, structure and culture. Likewise, there was a more friendly atmosphere in private hospitals compared to public hospitals. However, there was more stability in public hospitals compared to private hospitals in terms of financial stability, affordability of service and medical supplies. It is concluded that quality of service provided in private hospitals is higher compared to quality of service in public hospitals. The possible explanation for the causes for differences in levels of service quality could be the existence of strong institutional framework in private hospitals. It is recommended that for higher service quality, organizations should practice the institutional framework aspects in terms of culture, control, stability and structure.

## Introduction

Feldman (2003), O'Toole and Kenneth (2003) and Lewis (2006) argue that at a general level, organizational performance environments in the public hospitals differ from those in the private hospitals in many respects. These dimensions include the 1) legal structure, 2) management style, including options to take risks, 3) level of corruption, 4) employee satisfaction, and 5) quality of service. This study was set to determine the factors that influence the variations in the last dimension (i.e. service quality) between public and private hospitals in Tanzania. Specifically, the study was aimed at determining the influence of institutional framework on service quality in both private and public hospitals.

In Tanzania, the national health system comprises of a diverse range of both for-profit and not-for profit health service organizations. The private health sector involvement in the Tanzanian health system has grown relatively quickly over the past 20 years, in part responding to government policy changes such as removing the ban on private practice in 1991 (USAID Report, 2013). The Health Sector Strategic Plan July 2009 to June 2015 (HSSP 111) reinforces the private sector in several key strategies. However, unlike the public hospitals, private hospitals face a number of challenges such as unfavourable business environment, poor financing and lack of other incentives, inadequate access to continuing professional development and other training opportunities, shortage of trained health staff and overhead costs and price

of non-essential commodity inputs like medicines and equipment (USAID Report, 2013). Despite all these setbacks, community demand for quality private health services is rated high and healthcare delivery is satisfactory (USAID Report, 2013).

The observation by the authors above (Feldman, 2003; O'Toole & Kenneth, 2003; Lewis, 2006) and the findings by USAID have prompted the researchers to find out what makes the difference in performance between public and private hospitals. Focusing on hospitals, three public and three private (see below), the study applied the institutional framework to explain the difference in health service quality between public and private hospitals. The following components of institutional framework were applied in determining the difference in health service quality between private and public hospitals in Tanzania:

- the influence of control on health service quality,
- the influence of stability on health service quality,
- the influence of structure on health service quality,
- the influence of culture on health service quality.

A number of studies (Camilleri & O'Callaghan, 1998; Irfan & Ijaz, 2011; You-sapronpaiboon & Johnson, 2013; Alumran et al., 2020) have documented the differences in service quality between public and private hospitals. However, these studies have not identified the institutional factors which influence the existence of these differences. This study, therefore, sought to establish the perception of respondents regarding the institutional factors influencing service quality between public and private hospitals.

## **Literature review**

There is a growing consensus among researchers that patient satisfaction is an important indicator of health service quality and many hospitals are searching for ways to change the delivery of patient care through quality improvement initiatives (Damen, 2017). Mosadeghrad (2013) defines health service quality as “consistently delighting the patient by providing efficacious, effective and efficient healthcare services according to the latest clinical guidelines and standards, which meet the patient’s needs and satisfies providers”. On their part, Bolton and Drew (1991) define health service quality as the discrepancy between (patients’) perceptions of services and their expectations from such services. Health services need to be of sufficient quality to achieve the desired outcomes. However, according to Government of Tanzania, the main challenges that affect health service quality in the country are 1) lack of enough, well-trained and motivated staff, 2) inadequate financial and physical resources, and 3) insufficient and/or limited medical resources (URT, 2012).

There exist a number of conceptual and analytical frameworks that serve to assess and explain the role of institutional framework in influencing service quality in a hospital setting. The term “institutional framework” refers to a set of formal

organisational structures, rules and informal norms for service provision. Improved performance has to do with sound institutional arrangements and strong institutions (Zenger et al., 2001). Grief (2006) regards institutional framework as a humanly formulated arrangement that is capable of structuring social interactions among organizational actors (Peng & Meyer, 2011, p. 38). Nevertheless, Greif (2006, p. 30) adopts a broader view, with the aim of reducing uncertainties in any exchange of economic values. Peng and Meyer emphasize that the institutional framework is concerned with governing individual and economy by submitting that institutional framework is a system of rules, beliefs, norms and organized procedures that together generate a regularity of (social) behaviour. Peng and Meyer further describe informal institutions as unformalized rules that exist in norms and values, that define what is morally right and wrong, as well as what is important and what is unimportant within an organizational setting (Peng & Meyer, 2011, p. 38).

In a nutshell, therefore, institutional framework is an organisation's principles, ideas, customs, practices, beliefs, norms, procedures, rules and regulations established for social, educational, professional, political or religious purposes and these principles guide or mould the behaviour of individual members when making judgments and decisions about what to do and what not to do (Hornby, 1995). Lin and Nugent (1995) provide the characteristics of institutional framework as comprising 1) institutional culture, 2) control, 3) stability, and 4) structure.

The first among the essential components of institutional framework provided by Lin and Nugent (1995) is institutional culture. A number of studies (Agwu, 2014; Denison, 1990) indicate that managers and employees in hospital setting do not work in a value-free environment, but are surrounded by an invisible culture that serves as a thread that holds the organization together. Denison (1990) defines institutional culture as the underlying values, beliefs, principles and practices that constitute organizational management system. A strong corporate culture indicates that employees are like-minded and hold similar beliefs/ethical values that direct their perception on organizational performance. Chung (2014) provides that service quality culture is an essential component of an overall hospital organizational culture. According to Makarem and Al-Amin (2014), Senic and Marinkovic (2012), Naidu (2009), as well as Pilgrimien and Buciuniene (2008), hospital service quality culture involves general cleanliness, promptness and timely attendance to patients, physician and staff friendliness and approachability, cooperation among service providers and confidentiality over patient records. Chung (2014) further argues that understanding of customers' needs and wants, motives and preferences is part and parcel of service quality and must be thoroughly investigated by hospital managers as an essential aspect in guiding managerial decision-making. Patients prefer a service environment that is generally clean and appealing. Promptness and timely attendance by service delivery staff is also an important cultural component that characterize patient preference attendance (Senic & Marinkovic, 2012). Accordingly, service quality is judged by the promptness with which doctors and nurses respond to patient needs and wants.

These service providers, need not only be prompt in meeting patient needs, but should cultivate a culture of friendliness as well as cooperation among themselves (Naidu, 2009). Cohen and Bailey (1999) say that teamwork is an essential occupational skill that is necessary to accomplish and achieve the visions, goals, plans and objectives of the organization and to activate and enhance the quality performances of the workers. Through cooperation, members enhance the skills, knowledge and abilities while working in a team (Froebel & Marchington, 2005; Jones et al., 2007). Bucic et al. (2010) and Piligrimiene and Buciuniene (2008) provide that another essential component of health service delivery culture is the *degree of confidentiality* maintained by doctors and nurses, based on their interaction with patients. George and Bhila (2019) amplify this aspect by saying that since the priority for any human being is privacy to information especially related to health, it is the duty of professionals who have the ingress to serve and communicate with patients to keep confidentiality in health. This is important because every individual prefers security to enable them to live peacefully, without anxiety.

The second component of institutional framework, as provided by Lin and Nugent (1995) is control. According to Kutzin (2008), control refers to the ways of maintaining influence over what individuals or organizations should or can do. This covers formal aspects such as laws, rules, regulations, as well as mandates, strategies and policies that regulate performance behaviour. Rules and regulations, which constitute an important element of institutional framework, are principles or norms adopted by an organization and backed up by some threat of consequences in the form of penalties (Coglianese, 2012). Control also covers informal rules, which may be deeply intertwined with meaning-making systems. Control includes such aspects as task control, decision control, control over the physical environment, and control of resources (Brager et al., 2004), and (Krishnamoorthy & Srinivasan, 2014). In healthcare, control is essential to ensure service is provided in accordance with and in adherence to hospital procedures, availability and deployment of the right staff as well as control over the use of resources. Control of resources is essential in ensuring availability of essential drugs as well as effective supervision of operations to ensure availability of staff at all times. This ensures that patients are effectively and satisfactorily attended to (Garrison et al., 2004; Otani et al., 2010; Krishnamoorthy & Srinivasan, 2014). Lee and Brand (2005) postulate that control over the work environment can have a positive influence on patient satisfaction, group cooperation, and effectiveness and other perceptions associated with health service quality. Therefore, control in health service delivery facilities is an important element of institutional framework which influences improved patient satisfaction.

The third component of institutional framework provided by Lin and Nugent (1995) is stability. According to O'Toole and Kenneth (2003) and Boyne and Kenneth (2009), organizational stability has a positive influence on improved service quality. Organizational stability include such essential aspects as financial stability (Baltussen et al., 2002), affordability of service (Tucker & Adams, 2001; Thiakarajan & Krish-

naraj, 2015) and personnel stability which, among other things, includes workplace harmony and unquestionable competence of service providers (Ramsaran-Fowdar, 2008). An organization which places a high value on stability is predictable and has the ability to meet its financial requirements.

The fourth aspect of institutional framework, in the view of Lin and Nugent (1995), is structure. Structure in the context of health service quality entails such important aspects as the physical arrangement and appearance of the hospital (Kondasani & Panda, 2015), the overall organization of the hospital service (Mohamed & Azizan, 2015) and the convenience and comfort experienced by patients in using the service (Choi et al., 2004). Mushtaq et al. (2014) Kondasani and Panda (2015), and Choi et al. (2004) provide that when health service is provided in a well structured hospital environment characterized by a well defined physical arrangement and a well organized service, it significantly promotes satisfaction on account of the convenience and comfort enjoyed by both patients and service providers.

## Methodology

A total of six hospitals, three public and three private, were involved in this study. The study was mainly focused on national and regional referral hospitals. There were 30 public referral hospitals and 12 private referral hospitals. A random sampling procedure was applied in selecting three public and three private hospitals from their respective lists. The hospitals from which the three public and three private hospitals were selected are shown in Table 1 and Table 2, respectively.

**Table 1.** Public national and regional referral hospitals in Tanzania

	Referral facility		Referral facility
1	Amana Hospital, Dar es Salaam	16	Morogoro Hospital, Morogoro
2	Bariadi Hospital, Simiyu	17	Mt Meru Hospital, Arusha
3	Benjamin Mkapa Hospital, Dodoma	18	Muhimbili Hospital, Dar es Salaam
4	Bombo Hospital, Tanga	19	Musoma Hospital, Mara
5	Bukoba Hospital, Kagera	20	Mwananyamala Hospital, Dar es Salaam
6	Dodoma Hospital, Dodoma	21	Njombe Hospital, Njombe
7	Geita Hospital, Geita	22	Sekou-Toure Hospital, Mwanza
8	Iringa Hospital, Iringa	23	Shinyanga Hospital, Shinyanga
9	Katavi Hospital, Katavi	24	Singida Hospital, Singida
10	Kitete Hospital, Tabora	25	Sokoine Hospital, Lindi
11	Ligula Hospital, Mtwara	26	Songea Hospital, Ruvuma
12	Manyara Hospital, Manyara	27	Songwe Hospital, Songwe
13	Maweni Hospital, Kigoma	28	Sumbawanga Hospital, Rukwa
14	Mawenzi Hospital, Kilimanjaro	29	Temeke Hospital, Dar es Salaam
15	Mbeya Hospital, Mbeya	30	Tumbi Hospital, Pwani

Source: Authors' own study.

**Table 2.** Private regional referral hospitals in Tanzania

	Referral facility		Referral facility
1	Arusha Lutheran Hospital, Arusha	7	Ndanda Hospital, Mtwara
2	Bugando Hospital, Mwanza	8	Nkinga Hospital, Tabora
3	Ilembula Hospital, Njombe	9	Nyangao Hospital, Lindi
4	Hydom Hospital, Manyara	10	Peramiho Hospital, Ruvuma
5	Kabanga Hospital, Kigoma	11	St Gaspar Hospital, Singida
6	Kilimanjaro Christian Medical Centre, Kilimanjaro	12	St Francis Hospital, Moorogoro

Source: Authors' own study.

For respective samples to be representative, the country was divided into six zones as shown in Table 3.

**Table 3.** Zonal regions in Tanzania

Coastal Zone	Northern Zone	Lake Zone	Southern Highlands	Central Zone	Western Zone
Dar es Salaam Morogoro Mtwara Lindi Coast (Pwani)	Arusha Kilimanj-aro Manyara Tanga	Mwanza Shinyanga Mara Kagera Geita Simiyu	Iringa Mbeya Ruvuma Rukwa Songwe Njombe	Dodoma Singida Tabora	Katavi Kigoma

Source: Authors' own study.

A multistage sampling procedure was used as follows:

Stage 1: Applying systematic sampling procedure three zones were selected from the six zones by picking the first zone and every second zone in the list. The three zones selected through this procedure were Coastal Zone, Lake Zone and Central Zone.

Stage 2: The study identified all regional public and private referral hospitals in each of the three zones as shown in Table 4 and Table 5.

**Table 4.** Public national and regional referral hospitals in three selected zonal regions

Coastal Zone	Lake Zone	Central Zone
Muhimbili Hospital (DSM) Amana Hospital (DSM) Mwananyamala Hospital (DSM) Temeke Hospital (DSM) Morogoro Hospital (Morogoro) Ligula Hospital (Mtwara) Sokoina Hospital (Lindi) Tumbi Hospital (Coast)	Sekou-Toure Hopspital (Mwanza) Shinyanga Hospital (Shinyanga) Bukoba Hospital (Kagera) Musoma Hospital (Mara) Geita Hospital (Geita) Bariadi Hospital (Simiyu)	Dodoma Hospital (Dodoma) Singida Hospital (Singida) Tabora Hospital (Tabora)

Note: DSM, Dares salaam Region

Source: Authors' own study.

**Table 5.** Private regional referral hospitals in three selected zonal regions

Coastal Zone	Lake Zone	Central Zone
St Francis Hospital (Morogoro) Ndanda Hospital (Mtwara) Nyangao Hospital (Lindi)	Bugando Hospital (Mwanza)	St Gaspar Hospital (Singida) Nkinga Hospital (Tabora)

Source: Authors' own study.

Stage 3: Simple random sampling was applied to select one public referral and one private referral hospital from each of the three zonal regions. Where there was only one hospital in a particular zone, a purposive sampling method was applied to select the hospital. The three public referral hospitals selected through random sampling methods were Muhimbili Hospital (Coastal Zone), Dodoma Hospital (Central Zone) and Geita Hospital (Lake Zone). The three randomly selected private referral hospitals were St Francis Hospital (Coastal Zone), Bugando Hospital (Lake Zone) and Nkinga Hospital (Central Zone). While the selected public hospitals are 100% government owned, the selected private hospitals are privately owned with private majority shareholdings. They are autonomous with their own Boards of Directors.

Stage 4: The study sought to establish the population in the six selected hospitals in terms of staff and weekly patient attendance. The six selected hospitals had a population of medical staff and nurses as shown in Table 6 and Table 7, and the average number of patients as shown in Table 8 and Table 9.

**Table 6.** Population of medical staff and nurses in 3 public hospitals

Hospital	Medical staff	Nurses/Midwives	Total
Muhimbili	300	900	1,200
Dodoma	31	155	186
Geita	24	35	59
Total	355	1,090	1,445

Source: Hospital documents (Muhimbili, Dodoma, Geita).

**Table 7.** Population of medical staff and nurses in 3 selected private hospitals

Hospital	Medical doctors	Nurses/Midwives	Total
Bugando	250	750	1,000
St Francis	21	100	121
Nkinga	20	25	45
Total	291	875	1,165

Source: Hospital documents (Bugando, St Francis, Nkinga).



**Table 8.** Average number of patients per week in three selected public hospitals

Hospital	In-patients (per week)	Out-patients (per week)	Total
Muhimbili	1,000	1,200	2,200
Dodoma	290	700	990
Geita	100	400	500
Total	1,300	2,300	3,690

Source: Hospital documents (Muhimbili, Dodoma, Geita).

**Table 9.** Average number of patients per week in three selected private hospitals

Hospital	In-patients (per week)	Out-patients (per week)	Total
Bugando	950	1,000	1,950
St Francis	300	800	1,100
Nkinga	600	700	1,300
Total	1,400	2,500	4,350

Source: Hospital documents (Bugando, St Francis, Nkinga).

According to Tables from 6 to 9, the study population comprised 10,650 people (i.e. 2,610 medical staff and nurses and 8,040 patients). To select a sample size from a population of 10,650 people, the study used McCall’s Table which shows the population and the sample size to be selected when the true proportion is 0.50 and the confidence level is 95%.

Using McCall’s Table, the sample size should have been 370 respondents. However, the researchers decided to pick a larger sample size of 400 respondents, 200 medical staff (i.e. doctors and nurses) and 200 patients (McCall, 1980). In order to get the respondents into the sample of doctors/dentists and nurses from a population of each hospital, the researchers used a systematic random sampling method. Table 10 presents the sample sizes of various categories or respondents (i.e. patients, medical staff and nurses) in both public and private hospitals. The figures in Table 10 for different categories of respondents were calculated based on percentages of the total population of the respective category in public and private hospitals. For example, the number of patients at Muhimbili hospital was calculated as follows:

Total number of patients in public hospitals = 3,690

Number of patients at Muhimbili hospital = 2,200

2,200 as a percentage of 3690 = 59.6

Thus, the number of respondents in this category = 60

**Table 10.** Number of respondents in public and private hospitals

S/N	Hospital	Patients	Doctors and dentists	Nurses and midwives
1	Muhimbili	60	33	50
2	Dodoma	26	5	8
3	Geita	14	1	3
4	Bugando	45	36	50
5	St Francis	25	4	6
6	Nkinga	30	2	2
	Total	200	81	119

Source: Authors' own study.

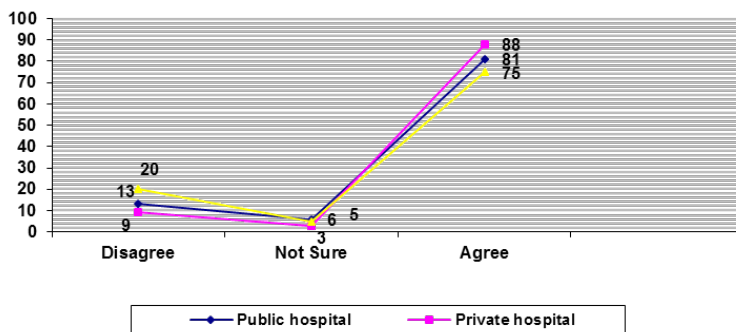
Both primary and secondary data collection sources were used. Primary data source entailed the application of questionnaires, interview guides, focus groups and observation. Secondary data entailed the application of relevant documents review. Analysis of the quantitative data was done using the Statistical Package for Social Sciences (SPSS) (version 8.0). SPSS was used for cross tabulation and establishment of statistical correlation and significance. Statistical calculations were done using descriptive statistics. The qualitative data obtained from observation and interviews in six hospitals were transcribed verbatim, coded and analysed manually. Notwithstanding, all ethical considerations were observed.

### **Findings on the influence of institutional framework on health service quality**

This study was set to establish the influence of institutional framework in influencing service quality in both private and public hospitals. In section two of this study, the institutional framework aspects that were considered in comparing public and private hospitals were:

- 1) institutional culture (i.e. cleanliness, promptness and timely attendance, physician and staff friendliness, cooperation among service providers and confidentiality),
- 2) control (i.e. supervision, adherence to procedures, availability of staff, availability of drugs/medicine),
- 3) stability (i.e. finance, competence of the providers, competence of the providers, affordability of service), and
- 4) structure (i.e. physical arrangement, organization of service and convenience and comfort).

In general, the findings showed that 88% of the patients in private hospitals admitted that quality of service provided has improved, while 81% of the patients and workers in public hospitals said so (see Figure 1). Also, the findings showed that 60% of the patients and workers in private hospitals said that the behaviour of services providers was above average, while 46% of patients and workers in public hospitals said so.



**Figure 1.** Patients’ overall satisfaction with service in private and public hospitals

Source: Authors’ own study.

These levels of satisfaction indicates that the overall patient satisfaction with the quality of service provided in private hospitals is higher compared to the the level of satisfaction in public hospitals. The possible explanations for the causes for differences in performance between public and private hospitals could be the existence of strong institutional framework in private hospitals, as revealed in this study. Details on the application of institutional framework to explain differences in service quality between public and private hospitals are provided below.

**Institutional culture**

According to Maqsood et al. (2017), hospital service quality greatly influences behavioural intention of doctors and nurses and enhances patient satisfaction. Under institutional culture, the identified elements for quality of service provided were cleanliness in hospitals and in the wards; timely attendance and treatment; physician and staff friendliness and confidentiality. McNamara emphasizes that performance should be directed towards effectiveness in terms of efficiency, quality of service and timeliness (McNamara, 2008). Von Rosentiel (2007) argues that organizational values are very powerful non material incentives in guiding a members’ behaviour because such values are based on principles, faith, beliefs and norms which are established within the organizational institutional framework.

**Table 11.** Respondents perception on institutional culture in public and private hospitals

Item	Public hospitals	Private hospitals
Cleanliness	67%	81%
Timely attendance/treatment	46%	69%
Friendly reception of patients	54%	72%
Handling of patients with dignity	69%	75%
Confidentiality	58%	79%
Collaboration among service providers	45%	78%

Source: Authors’ own study.

### **Cleanliness in hospitals and in the wards**

Makarem and Al-Amin (2014) provide that cleanliness in hospitals is an important non-medical aspect of health service quality which should be given due attention. The findings showed that private hospitals with a percentage of 81% are better in cleanliness in hospitals and in the wards compared to public hospitals with 67%. Likewise, patients in private hospitals are treated faster with a percentage of 69% than patients in public hospitals with 46%.

Cleanliness has improved both in public and private hospitals, however, private hospitals were slightly doing better than public hospitals. St Francis Hospital (Ifakara), a private one, was the best having scored 88%. The doctor-in-charge of the Ifakara hospital said in an interview that the reason for this success was that they employed the cleaners on a three-month contract and renewal of the contract depended on the performance of the cleaners during the just ended contract (St Francis Hospital, 2018). During the study, it was observed that cleaners were constantly passing around to ensure that the hospital remained clean throughout the day, while this was not the case in any of the public hospitals under study. Cleanliness is an aspect of culture in institutional framework. However, the manner in which the management of the St Francis Ifakara Hospital ensured cleanliness of the hospital is a good example of control (another component of institutional framework) in private hospitals. Agwu (2014) provides that work place culture is a thread that holds people together and also serves as a very powerful force that influences an employee's work life. Workplace culture includes keeping the hospital environment clean.

### **Timely treatment**

The results obtained from the workers' and patients' responses in the private and public hospitals indicated that private hospitals offered faster services than public hospitals. 76% of respondents indicated that there was timely treatment in private hospitals compared to 42% of respondents who said the same for public hospitals. Respondents pointed out that it takes a long time, almost the whole day, to get attended in a public hospital. One of the doctors at Dodoma Regional referral hospital pointed out that the underlying reason for untimely treatment of patients in many public hospitals is that these hospitals face enormous pressure in providing treatment due to an influx of patients. Since public hospitals are funded by the government, patients regard it as providing them the right to be treated in public hospitals. Due to the many patients seeking treatment in public hospitals, patient queues are long, leading to prolonged time of treatment. A patient who requires immediate treatment may be forced to spend long hours in waiting before he or she can see a doctor. In Dodoma referral hospital long queues of patients waiting for treatment were observed. The patients were complaining of having spent a long time at the hospital without being attended by a doctor. In private hospitals, there was a limited number of patients and hardly any queues were observed.

### **Friendly reception of patients**

This is another aspect of institutional culture which is a component of institutional framework. The results of the study indicated that there was a more friendly atmosphere in the reception of patients in private hospitals compared to public hospitals. This was the view of 72% of respondents in favour of private hospitals against 54% who provided an opposite view in favour of public hospitals. According to respondents in public hospitals, there was hardly any person to provide instruction or guidance to patients on what to do or where to go upon arrival in hospital. This led to confusion and frustration among patients. Baron (1990) provides that situational control over the workspace can improve individuals' mood and reduce their mental tension.

At Bugando Hospital, a private hospital, a receptionist was seen receiving patients in a friendly manner and guiding them accordingly. A contrast situation was observed at Geita referral hospital, a public hospital in Geita municipality, where patients were seen asking one another where to go.

### **Handling of patients with dignity**

The findings show that patients in private hospitals are handled with dignity and receive high regard with a score of 75% compared to patients in public hospitals with a score of 69%. It was expected from the medical staff to get an answer that they handle the patients with dignity. Otherwise they would be judging their own credibility. The patients on the other side reflected the true picture of how patients were handled in public and private hospitals. The researchers observed a glaring difference from the way the patients were handled. In private hospitals, medical staff were friendly and approachable in comparison with medical staffs in public hospitals who appeared to be pensive.

### **Collaboration among service providers**

Mosadeghrad (2014) argues that quality in healthcare is a product of collaboration among the healthcare providers and cooperation between the patient and the providers in a supportive environment. Responding to a question to this issue, 78% of respondents from private hospitals said that there was cooperation among healthcare providers which was extended to the patients, and hence contributing to quality healthcare environment. When the same question was put forth to respondents in public hospital only 45% of the responses were affirmative.

O'Daniels and Rosenstein (2008) define the collaboration among healthcare providers as involving health care professionals assuming complementary roles and cooperatively working together, sharing responsibility for problem-solving and making decisions to formulate and carry out plans for patient care. It is provided

that collaboration between physicians, nurses, and other healthcare professionals increases team members' awareness of each other's type of knowledge and skills, leading to continued improvement in decision making.

Workers in private hospitals work more as a team than workers in public hospitals. This was observed at St Francis Hospital in Ifakara, where doctors met daily in the morning to deliberate on difficult cases encountered on the previous day, and share experiences on how best to attend and handle them. At Geita public hospital, such meetings were not held daily. However, when it came to awareness of the health sector strategic plan, respondents in public hospitals scored 50% as compared to 43% in private hospitals. Also, with regard to awareness of the Health Service Development Programme, public hospitals scored 47% as compared to 27% in private hospitals. Likewise, awareness of Health Sector Policy scored 50% in public hospitals and 35% in private hospitals. There are organs in public hospitals like Trade Unions and Workers Council which force the management in public hospitals to promote staff awareness while these organs are rarely found in private hospitals.

### Control

According to Kutzin (2008), control often comes to mind when the term "institutional framework" is invoked, and refers to the ways of maintaining control over what individuals in organizations should or can do and *vice versa*. This covers formal aspects such as laws, rules, regulations, as well as mandates, strategies and policies. Control as an aspect of institutional framework includes supervision, availability of staff, availability of drugs, adherence to procedures and abiding to professional ethics. Table 12 are the findings on these aspects in both public and private hospitals.

**Table 12.** Respondents perception on institutional control in public and private hospitals

Item	Public hospitals	Private hospitals
Supervision	44%	64%
Availability of staff	53%	77%
Availability of drugs	50%	83%
Adherence to procedures	48%	61%
Abiding to professional ethics	60%	67%

Source: Authors' own study.

### Supervision

According to Bengali et al. (2018), effective supportive supervision of healthcare services is crucial for improving and maintaining quality of care. This is supported by Mpaata et al. (2017) who provide that there is a close relationship between supervisory leadership practised in hospitals and perceived healthcare service quality. Responding to a question about which public and private hospitals has effective

supportive supervision, many respondents were in favour of private hospitals with a percentage of 61% against 44% for public hospitals. Ineffective supervisory leadership may partly explain why the availability of doctors in public hospitals was a problem despite the government employing a large number of doctors compared to private hospitals.

Such kind of supervisory support could be observed at Bugando Referral Hospital, a private hospital in Mwanza, where during the time of this study, there was someone who was observed passing around to ensure that doctors and nurses were where they were supposed to be. Such a feature was not observed in any of the public hospitals under study.

#### **Availability of staff**

Availability of staff is an aspect of control in institutional framework. Responding to the question whether doctors and nurses are always at work, the doctors and nurses in public and private hospitals said that they were available all the time. However, when the same question was asked to the patients in public and private hospitals, patients were of the view that the availability of doctors and nurses was higher in private hospitals than in public hospitals. For example, 66% of the patients in private hospitals said that doctors and nurses were available all the time, while 47% of the patients in public hospitals said so.

One of the reasons given by respondents (73%) in both public and private hospitals for this difference was that many experienced doctors in public hospitals work in private hospitals during office hours, leaving behind medical students and interns to serve the patients. Private hospitals experience a shortage of doctors and can afford to pay doctors from public hospitals on part-time basis. Another reason provided by respondents was that there was more control of the movement of doctors in private hospitals than was the case in public hospitals. This led to many doctors absenting themselves from work in public hospitals. The researchers observed that despite public hospitals having more doctors compared to private hospitals, doctors in the latter were always readily available to serve patients.

#### **Availability of medicine**

Availability of prescribed medicine is one of the critical factors in health care and an aspect of control in institutional framework. Again, workers and patients in private hospitals gave more percentage to medicines given to patients than the percentage given by workers and patients in public hospitals. An interview with the Director of Hospital Services in the Ministry of Health, Community Development, Gender, Elderly and Children revealed that during the year 2017/2018, there had been an improvement in the supply of pharmaceuticals and medical supplies in public health facilities (Department of Medical Services, 2018). This should have

made the public hospitals to give most of the medicines prescribed to the patients. However, 68% of respondents in public hospitals said that the hospitals did not have the medicines prescribed to patients by doctors, while 22% in private hospitals gave the same answer. Many respondents explained that some doctors in public hospitals prescribe medicine to patients and then direct them to private pharmaceutical shops to buy them. It was pointed out that in most cases, the shops which doctors direct patients to buy medicine are owned by the same doctors or their associates.

The second reason given by respondents was corruption. Commenting on this aspect, respondents pointed out that public hospital employees were more corrupt compared to employees in private hospitals. Public hospitals scored 19% while private hospitals scored 8%. This shows that there was less corruption in private hospitals than in public hospitals. It was further observed that corruption resulted in discrimination in the sense that patients who could bribe got more medicines and better services than those who could not. A study conducted by SIKIKA (2015) on corruption in public hospitals sighted the supply side constraints involving shortage of drugs as a major factor that create incentive for hospital staff to engage themselves in corruption. Patients are confronted with a situation whereby they have to buy drugs from hospital staff workers instead of getting them from the hospital pharmacy. The institutional factors cited to account for corruption in public hospitals include absence of limited accountability for health workers' actions; failure to abide by professional ethics; and absence of effective supervision.

With regard to professional ethics and morality, the researchers observed that employees in Bugando, St Fransis (Ifakara) and Nkinga private hospitals started work with prayers indicating reverence to God. This demonstrates that workers in private hospitals were morally inclined to fear God while performing their duties. This is supported by Von Rosentiel (2007) who provides that religious beliefs and value are very powerful non material incentives in guiding a member's behaviour because such a behaviour is based on principles, faith, beliefs and norms which are established within the religious institutional framework.

### **Abiding to professional ethics**

Professional ethics refer to the personal and corporate rules that govern the behavior of doctors and nurses within the context of the medical profession. The medical profession offers ethical principles to aid in the healthcare quality professionals' execution of their duties as members of the profession.

Responding to a question about the extent to which staff (doctors and nurses) observe and abide by professional ethics in providing service to patients, 60% of respondents in public hospitals said that doctors and nurses observe and abide by professional ethics against 67% in private hospitals. In reference to inadequate professional ethics in public hospitals, respondents pointed out situations where nurses abuse, harass and even slap expectant mothers in labour wards. Limentani (1999) stipulates that profes-



sional ethics in healthcare play a vital role in promoting quality in healthcare, as they influence the attitudes one can have in response to the situation which determine the rights and wrongs of the case and guide what action should follow.

**Stability**

With reference to quality in healthcare, stability includes such aspects as finance and effective management of resources (Baltussen et al., 2002), competence of the providers (Fowdar, 2008), affordability of service, medical supplies (Tucker & Adams 2001), movement of staff and cooperation among health providers (Thiakarajan & Krishnaraj, 2015). Table 13 presents the findings on aspects of stability in both public and private hospitals.

**Table 13.** Respondents perception on institutional stability in public and private hospitals

Item	Public hospitals	Private hospitals
Financial stability	74%	52%
Leadership competence	61%	69%
Affordability of service	84%	63%
Medical supplies	64%	61%
Effective management of resources	51%	72%

Source: Authors' own study.

**Financial stability**

Financial stability seems to favour more public hospitals than private. The findings showed that 74% of respondents said that public hospitals enjoy more stability in terms finances compared to 52% for private hospitals. According to Mosadeghrad (2014), there is a correlation between financial stability and healthcare service quality. Such stability enables health service providers to procure essential medical equipment and medicines as well as employing adequate competent staff. In public hospitals, financial stability results from the almost 100% subsidy received from the government to facilitate effective provision of medical services. When it comes to training and employee advancement, public hospitals have an edge over private hospitals.

**Leadership competence**

This aspect tends to favour private hospitals whereupon 69% of respondents said that there was a higher degree of manifestation of leadership competence in dealing with healthcare issues compared to 61% who said so in regard to public hospitals. Feldman (2003) argues that the willingness and ability of managers in private hospitals to take risks, exploit available options and reinvent themselves in various ways are larger in private hospitals compared to that of managers in public hospitals. Although public hospitals receive subsidy from government, where the

exploitation of the environment requires the investment of new funds, the variance in actions that management can take in a public hospital is more limited than the range of actions taken by managers in private hospitals. This may explain the reason why despite grappling with financial difficulties, private hospitals manage to provide higher quality healthcare service than public hospitals.

### **Affordability of service**

Abu-Salim et al. (2017) provide a positive correlation between service cost, service quality, and customer satisfaction. Responding to a question on affordability of service, 84% of respondents acknowledged that service in public hospitals was more affordable compared to 63% for private. In responding to the same question, the Director of Medical Services in the Ministry of health said that this scenario has influenced what is called “the new public/private mix in health care”. The government in acknowledging the *de facto* role of private health service providers in increasingly promoting pluralistic health system in the country, is deliberately converting some private hospitals into designated hospitals, by assisting them with supplies and staff, and using these to alleviate the funding constraints faced by private health care providers. This is done in the hope that such assistance will lead to a reduction in service cost and render the health care service affordable to the ordinary user.

### **Medical supplies**

According to Khamis and Njau (2016), perceived quality of healthcare is identified to include physical infrastructure, availability of medical equipment and essential medicines, staffing levels, remuneration and promotion. Results of interviews of respondents in both public and private hospitals indicate that public hospitals (i.e. 64%) were better on this aspect compared to private hospitals with 61%. In explaining the reason for this difference, the Director of Medical Services in the Ministry of Health said that the centralised medical procurement procedure in the government ensures that enough funds are set aside to meet medical supplies requirement in public hospitals.

### **Effective management of hospital resources**

Ramirez et al. (2012) categorize hospital resources into hard and soft resources. The hard resources include funds, drugs and medicines, buildings, machinery, vehicles and equipment, while soft resources include technology, skills, methods and procedures. According to Lewis (2006), the main challenges facing effective resource management in hospitals in developing countries, includes absenteeism, corruption, informal payments, and mismanagement. In many public hospitals, bribes, corrupt officials and malpractice in procurement undermine effective healthcare delivery; and on account of this, priorities cannot be met because the scarce resources are either mismanaged or wasted.

Responding to a question about the effective management of resources, 72% of respondents said that resources in private hospitals were well managed compared to 51% of respondents who said so about public hospitals. These responses were corroborated by the researchers’ observation hereby at St Francis Hospital buildings were well maintained while buildings at Geita Hospital were dilapidated and required a facelift. Regarding drugs and medicines, patients were relatively satisfied with availability of drugs and medicines at St Francis Hospital compared to patient satisfaction of availability of drugs and medicines at Geita Hospital.

**Structure**

Structure in a hospital settings includes physical arrangement (Kondasani & Panda, 2015), organization of service (Mohamed & Azizan, 2015), convenience and comfort (Choi et al., 2004). Table 14 below presents the findings on aspects of structure in both public and private hospitals

**Table 14.** Respondents perception on institutional structure in public and private hospitals

Item	Public hospitals	Private hospitals
Physical arrangement	53%	62%
Organization of service	55%	68%
Convenience and comfort	59%	65%

Source: Authors’ own study.

**Physical arrangement**

The healthcare service quality aspects (i.e. physical environment, customer-friendly environment, responsiveness, communication, privacy and safety) are positively related with patient loyalty which is mediated through patient satisfaction (Fatima et al., 2018). Planning a good service for healthcare users is an important component of quality healthcare. Such planning should include the designing of spaces and facilities in a hospital setting to provide the necessary comfort for both healthcare providers (i.e. doctors and nurses) and users.

In considering this aspect in both public and private hospitals, respondents were asked to give their opinion and assessment. While 53% of respondents in public hospitals indicated satisfaction with the physical arrangement, 62% of respondents from private hospitals gave a similar opinion with regard to private hospitals. This tells us that when it comes to properly designed healthcare facilities and spaces, private hospitals stood a higher ground compared to public hospitals. Most patients interviewed from the private hospitals under study observed that physical arrangement in these hospitals was user friendly, while patients interviewed from the public hospitals under study expressed dissatisfaction with physical arrangement.

### **Organization of service**

Respondents from both private and public hospitals were asked to provide their considered opinion on the extent the organization of service in these hospitals met their needs. Such organization includes delivery systems that are safe, accessible, high quality, people-centred, and integrated. While 55% of respondents from public hospitals indicated that the organization of service met their expectations, 68% respondents from private hospitals provided the same response. This response supports the overall findings in this study, of the users' level of satisfaction which is higher in private hospitals compared to public hospitals.

### **Convenience and comfort**

Choi et al. (2004) associate health service quality with the convenience with which it is provided as well as the comfortability enjoyed by the patient in receiving the service. Convenience and comfortability, in the view of this authors, include such aspects as support from medical staff, reduced waiting time, easy to use medications, and reduced documentation. When asked about how convenient and comfortable it was receiving health care service, 65% of respondents in private hospitals said that provision of health service was convenient, a feature that made them comfortable in waiting to receive it. However, 59% of respondents in public hospitals said so. It is indicated above that due to free medical care in public hospitals, there is an influx of patients to the extent that healthcare providers are overwhelmed. This may explain the inconvenience and discomfort experience experienced by patients in pursuing and receiving treatment in public hospitals.

### **Discussion and conclusions**

This paper was set to establish the influence of institutional framework in service quality in both private and public hospitals. The study sought to establish the perception of respondents regarding the institutional factors influencing service quality between public and private hospitals. The institutional framework aspects that were considered in comparing health service quality in public and private hospitals were institutional culture, control, stability and structure. A descriptive survey design was used because the study sought to know the perception of respondents regarding the quality of service in hospitals.

A purposive sampling method was used to select three public hospitals. The three public hospitals were Muhimbili referral hospital in Dar es Salaam City Council, Morogoro regional hospital and Geita referral hospital in Geita Municipality. Private hospitals included Bugando referral hospital in Mwanza City Counsel, St Francis hospital in Ifakara town in Morogoro region and Nkinga hospital in Tabora region.

Medical staff and nurses were selected using a systematic random sampling method and patients were selected using a convenience sampling method.

The population comprised 10,650 people (2,610 medical staff and 8,040 patients). The selected sample size was 400 people (200 medical staff and 200 patients) using McCall's Table. Both primary and secondary data collection sources were used. Analysis of the quantitative data was done using the Statistical Package for Social Science (SPSS) and qualitative data were transcribed verbatim, coded and analyzed manually. All ethical considerations were observed.

The findings revealed that patients in private hospitals were more satisfied with overall quality of service provided in these hospitals compared to their counterparts in public hospitals. Specifically, patients in private hospitals were more satisfied with the institutional culture in the areas of cleanliness, timely treatment, friendly reception of patients, handling of patients with dignity and confidentiality and collaboration among service providers compared to the satisfaction obtained by patients in public hospitals in these areas. Also, patients in private hospitals were more satisfied with the quality of control in the areas of supervision, leadership competence, effective management of resources, availability of staff, availability of drugs, adherence to procedures and abiding to professional ethics compared to the satisfaction obtained with patients in public hospitals. Likewise, perception of respondents on institutional structure in private hospitals in the areas of physical arrangement, organization of service and convenience and comfort was higher compared to the perception of respondents in public hospitals. However, perception of respondents in public hospitals on institutional stability in the areas of financial stability, affordability of service and medical supplies was better compared to the perception of respondents in private hospitals.

From what has been discussed above, it can be firmly concluded that the level of quality of service provided to patients in private hospitals was higher compared to the quality of service provided in public hospitals. The possible explanations for the causes for differences in the quality of service between public and private hospitals could be the existence of strong institutional framework in private hospitals. Hence, the role of institutional framework in influencing service quality is more observed in private hospitals than in public hospitals. It is, therefore, recommended that both public and private health service providers should apply institutional framework parameters in defining the quality of their services.

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