

Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



# GENERAL PERCEPTION ON QUALITY DELIVERY OF HEALTHCARE SERVICES IN GENERAL HOSPITAL KUMO

### BILKISU YAYAJI AHMED

Geography Department Gombe State University
P.M.B 127 Tudun Wada Gombe, Gombe State

Corresponding Author: bilkisuyayajiahmed@gsu.edu.ng

### **ABSTRACT**

The study is to ascertain the general perception of people on quality delivery of healthcare services in general hospital Kumo Akko LGA, with a view to finding out the changes that are happening with the health sector for proper planning and improvement. The specific objectives are to examine the socio-economic and demographic characteristics of the respondents, to assess the client perception on quality services at the outpatient clinics in Kumo General Hospital and to examine the role of hospital management board in provision of quality healthcare services in Kumo general hospital. Both qualitative and quantitative data were utilised. Data were generated primarily through questionnaire's and revalidated the data using Nominal Group Technique. 400 respondents were randomly selected. The questionnaire was designed in a five Likert scale with 1= strongly disagree, 2= disagree, 3= neutral, 4=agree and 5= strongly agree. The sociodemographic findings show that majority of the clients were females who had at least a secondary education. The Service quality was assessed using the five SERVQUAL dimensions of Tangibles, Reliability, responsiveness, assurance, empathy and an additional dimension of affordability and accessibility. Majority (60.7%) of respondents agreed that the clinic they were attending was clean. Similarly, majority (59.8%) of respondents agreed that the clinic had a comfortable environment. It can be concluded that clients perceived the service quality at the outpatient's clinic to be good. The highest score was recorded in the assurance domain while the lowest score was recorded in the responsive domain. The study recommended that Government Health facilities must have an awesome physical environment such as water, sitting facilities, waste disposal, and toilet facilities among others. This will encourage more people to access the service and make the patients to feel more comfortable.

**Keywords:** Perception, Services, healthcare, Hospital and Patient

#### INTRODUCTION

Service delivery refers to the systematic arrangement of activities in service giving institutions with the aim of fulfilling the needs and expectations of service users and other stake-holders with optimum use of resources (Zarei *et al.*, 2012). Quality in healthcare service delivery refers to services that meet set standards, implying excellence and satisfing the needs of both consumers and healthcare practitioners in a way that adds significant meaning to both parties (Arries,

2008). In the last three decades, assessment of quality of care has assumed increasing importance (I'M, 2001; Rao, Peters and Bandeen, 1995). Quality of care is important as it influences the utilization of the services (Otami & Haris, 2003; Carr, 1992), compliance with treatment (Carr, 1992; Sitzia, 1999) and ultimately health outcome (Dagger & Sweeney, 2009; Coulter, 2005). Quality of care can be accessed from the perspective of the clients, service providers and managers of institution (Denabedein & Ann, 2009).



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



Assessment of client perception of quality of care and satisfaction with services has assumed a more prominent role in the last two decades especially with the advent of movement organizations consumer developed countries (Coulter, 2006). It provides a feedback about services rendered highlighting areas of strengths as well as deficiencies that need to be improved upon. Service quality is a measure of the degree of discrepancy between consumer's perception and expectations. Consumer dissatisfaction occurs when the expectations are greater than the actual performance of service delivered by the organization. In contrast, clients have high degree of satisfaction when the perception of service is clearly in excess of expectations (Sofar, 2005).

Surveys from various parts of the world have shown varying degrees of client overall satisfaction with health services in developed and developing countries. The Rate of satisfaction from the surveys ranges from 22% to 95% (Margeret et al 2003; Hatchinson et al. 2003). Many of these surveys have identified various problems with quality of service in hospitals such as long waiting times, overcrowding at clinics, poor attitude of staff, lack of drugs among others (Net et al., 2018; Aldana, 2018). In Nigeria, the health care system is organised at three level; primary, secondary and tertiary. The primary health care services are provided by local government in primary health centres, secondary care services by state governments in general hospitals while the federal government provides tertiary care in teaching hospitals (FMOH, 2019). Surveys in Kumo have shown that just unlike in many parts of the world were 60%-70% of population utilise private health facilities for their health needs (WHO, 2018). One of the reasons for the lower level of utilisation of public health facilities compared to private ones is the poor

perception of the quality of services in government hospitals (Yasilida, Periodic assessment of client perception of service quality is crucial to identify area of critical need for improvement as well as to provide a baseline to assess the effect of interventions to improve quality of care in the spirit of quality assurance (Andeleeb, 2001). Hospitals exist to provide service to clients and as such providing high quality of care should be of topmost priority as clients are major stakeholders in health care delivery. The Kumo general hospital is a secondary level facility in Gombe State. It provides outpatient and inpatient services to residents of Kumo town and its surrounding community. It has a mission to provide prompt and affordable health care services to all patients in a clean and healthy environment. There is a need to determine how well or otherwise, the hospital has been able to achieve its mission statement.

As a consequence, several researches on general perception on healthcare services at various healthcare institutions have been carried out in the state. However, much of the studies have appropriately centered on epidemiological, clinical, and entomological perspectives. These studies include that of Ahmed (2013); Salisu and Abdulhadi (2015); Abubakar et al. (2016) Jennifer and Musa (2016); Shuaibu et al. (2017); and Michael et al. (2019). These authors carried out a cross sectional study on patients attending health care centres in the State to determine the prevalence various diseases infection. None of such studies was conducted at Kumo general hospital hence the need to conduct such research to fill the vacuum.

### Aim and Objectives

The aim of this research is to evaluate the general views of people on services rendered at general hospital Kumo, Akko L.G.A



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



Gombe State. This can be achieved through the following objectives;

- 1. To examine the socio-economic and demographic characteristics of the respondents
- 2. To assess the client perception of service quality at the outpatient clinics in Kumo General Hospital
- 3. To examine the role of hospital management board in provision of quality healthcare services in Kumo general hospital

# **Study Area**

Kumo town is the headquarters of Akko Local Government Area of Gombe State, is located in the Sudan savannah region of the country at the North-East of river Benue and East of Yankari Game Reserve bordering, Bauchi, Gombe, Billiri, Yamaltu Deba and Kwami L.G.As of the State covering a total area of 8,256.5sq/km. the approximate altitude of Kumo ranges from 400-500m above mean sea level. Topography is mainly mountainous, undulating and hilly to the Southeast and open plains in the central Northeast, west and northwest (Abbas, 2012).

Kumo urban area is located approximately in the center of Gombe State which lies between latitudes 10<sup>0</sup>0<sup>1</sup> and 10<sup>0</sup> 20<sup>1</sup>N and on longitudes 11<sup>0</sup>1<sup>1</sup> and 11<sup>0</sup>19<sup>1</sup>E (Gombe Master Plan, 2003).

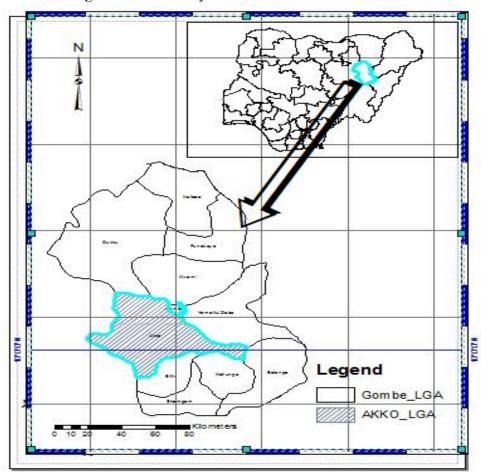


Figure 1: Study Area

Source: Gombe State University GIS Lab



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



Kumo urban area is divided into different residential quarters which include, Anguwan Sarki Yaki, Shidde, Kan Hawa, Banbur, Unguwar Direbobi, Jauro Malle, Anguwan Asibiti, Kan Bariki etc. The population of the study area as at 2006 was 337,435 people. (National Population Commission, 2006) and it has been projected to 495,535 as of 2021. The ethno-linguistic composition of Kumo Urban Area includes; Fulani, Tangale, Tera, Bolewa, Jukun, Hausa, Kanuri, Yoruba, and Igbo. In addition to the speaking of all these various languages, Hause language serves as a linga-franca in the course of daily interaction among peoples. English language remains the official language as obtains in all part of the country (Abbas 2012).

The Kumo is well known for vegetable and cattle market and main CBD is almost located at the center of the town. Rearing of domesticated animals are also practiced by the inhabitants.

### MATERIALS AND METHODS

Both qualitative and quantitative data were utilized for this study. Data were generated primarily. The study uses a questionnaire and revalidated the data using Nominal Group Technique to collect information on the patient's perceptions of reform in healthcare products delivery in Kumo general hospital. Specifically, the research measures the level of patient's satisfaction with the waiting time before being attended by the medical Doctor or specialists in the clinics, on whether there is an improvement in the treatment being received in the clinics and whether or not they are getting genuine drugs from both the private and public hospitals after the reform. questionnaire was designed structured in a five Likert scale with 1= strongly disagree, 2= disagree, 3= neutral, 4=agree and 5= strongly agree.

The target populations for the study are out patients and their relatives (who escorted their loved ones to hospital) and were found in the hospital premises at the time of data collection.

400 respondents were randomly selected. The questionnaire was distributed through a trained research assistant from Kumo town. The questionnaire administration was done in the month of January 2021. Kumo General hospital was chosen because it is the only Government Secondary Healthcare Institution in the study area.

The data were analysed using inferential statistical tool of log linear regression in SPSS 10.1 software. It determines the differences between the variables under investigation. And to establish whether the factors are really very important in the determination of the perception of patient's level of satisfaction with the services rendered by the hospital staff after reform. Simple percentage was also adopted. The result was presented in tables and in narration form.

### RESULTS

# Socio-Economic and Demographic Characteristic of Respondents

A total of 400 respondents were interviewed in various units of Kumo general hospital. Regarding socio-demographic the characteristics of respondents, slightly more than one quarter (26%) of the respondents were aged 30-39 years while only 3% were below 20 years. The mean age was 40 years with a standard deviation of 15.2 years. Majority (78.7%) of respondents were female while almost two thirds (64%) were Muslims of Hausa/Fulani extraction. About three quarters (77.2%) of the respondents did not have secondary education while slightly more than half (52%) of them were in occupations that can be classified as unskilled. Almost two



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



fifth (39.5%) of the respondents in the study were from those attending the general outpatient clinic and more than half (51%) had visited the clinics in the hospital at least three times. Majority (52.7%) of respondents spent more than three hours before they saw the doctor while only 1.2% spent less than 30 mins before seeing the doctor. More than one third of respondents (41%) estimated that they spent more than 15minutes with the doctor.

# **People Perception on Effective Service Delivery**

Table 1 shows the respondents perception of the tangible domain of service quality. Majority (60.7%) of respondents agreed that the clinic they were attending was clean. Similarly, majority (59.8%) of respondents agreed that the clinic had a comfortable environment. More than half of the respondents (54.5%) were uncertain about the clinic having information brochure about their activities. Almost half (47.5%) of respondents strongly agreed that privacy was observed when given care and 56.5% of respondents agreed that the staff were neat in appearance. More than one third (38.5%) of respondents strongly agreed that there were well maintained medical facilities in the hospital. On a scale of 1 to 5 with strongly disagree on 1 and strongly agree on 5, the mean score for the clinic is clean statement was  $4.30 \pm 0.63$ . while that for the statement the clinic had a comfortable environment was  $4.33 \pm 0.60$ .

The mean score for the statement the clinic had an information brochure was  $3.50 \pm 0.83$ while the mean score for privacy been observed when given care was 4.27± 0.84. With regards to staff being neat in appearance, the mean score was  $4.41 \pm 0.52$ . The mean score for the statement, there are well maintained facilities in the clinic was  $4.05 \pm$ 0.85. Table 2 shows the respondents perception of reliability domain of service quality. Slightly more than one- third (38%) of respondents agreed that services were provided at appointed time. Majority (58.7%) of respondents agreed that services were carried out right the first time. Majority (61.5%) of respondents strongly agreed that the doctors were professional and competent. Similarly, majority (62.8%) of respondents agreed that there was fast retrieval of documents in the clinics. Slightly less than half (46%) of respondents agreed that there was consistency of service charges in the clinics in the hospital. The mean score for the statement services were provided at appointed time was 3.90± 0.82 while for services been carried out right the first time was  $4.37 \pm 0.55$ . The mean score for the statement doctors are professional and competent was  $4.54 \pm 0.66$ . Regarding the statement there is fast retrieval of document, the mean score was  $3.85 \pm 0.66$ . The mean score for the statement there is consistency of service charges was  $4.16 \pm$ 0.96.



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



Table 1: Respondents Perception of Tangible Domain of Service Quality

Variables	Strongly disagree	Disagree (N%)	Uncertain (N%)	Agree (N%)	Strongly Agree	Total (N%)	Mean Score	SD
	(N%)	,	,	,	(N%)	, ,		
The clinic is clean	2(0.5)	9(2.3)	3(0.7)	243(60.7)	143(35.8)	400(100)	4.30	0.63
The clinic has a comfortable environment	0(0)	9(2.3)	2(0.5)	239(59.8)	150(37.4)	400(100)	4.33	0.60
The clinic has information brochure	0(0)	21(5.3)	219(54.5)	94(23.5)	67(16.7)	400(100)	3.50	0.68
Privacy is observed when given care	1(0.3)	15(3.8)	49(12.2)	145(36.2)	190(47.5)	400(100)	4.27	0.84
Staff are neat in appearance	0(0)	0(0)	6(1.5)	226(56.5)	168(42.0)	400(100)	4.41	0.52
There are well maintained medical facilities in the clinic	0(0)	3(0.7)	129(32.3)	114(28.5)	154(38.5)	400(100)	4.05	0.85

Source: Fieldwork 2021

NB. OVERALL MEAN: 4.16; OVERALL STANDARD DEVIATION: 0.54

**Table 2:** Respondents' Perception of Reliability Domain of Service Quality

Variables	Strongly disagree (N%)	Disagree (N%)	Uncertain (N%)	Agree (N%)	Strongly Agree (N%)	Total (N%)	Mean Score	SD
Services are provided at appointed time	3(0.7)	3(0.7)	139(34.8)	152(38.0)	103(25.8	400(100)	3.90	0.8
Services are carried out rightly at the first time	1(0.3)	3(0.7)	4(1.0)	235(58.7)	157(39.3	400(100)	4.37	0.5 5
Doctors are professional and competent	1(0.3)	2(0.5)	27(6.7)	124(31.0)	246(61.5)	400(100)	4.54	0.6 6
There is fast retrieval of document	0(0)	12(3)	86(21.5)	251(62.8)	51(12.8)	400(100)	3. 85	0.6 6
There is consistency of service charges	1(0.3)	21(5.3)	71(17.7)	123(30.7)	184(46.0	400(100)	4.16	0.9 6

Source: Field work 2021

NB: OVERALL MEAN: 4.18; OVERALL STANDARD DEVIATION: 0.57

Table 3 shows the respondents perception of responsiveness domain of service quality. Almost half (49.5%) of respondents strongly agreed that clients are given prompt service. Slightly more than half (50.7) of respondents strongly agreed that doctors are responsive to client needs. Furthermore, 51% of that respondents agreed nurses were responsive to client needs. Majority (58.5%) of respondents strongly agreed that the attitude of doctors instils confidence in clients while 42.7% of them agreed that attitude of nurses instils confidence in clients. Almost half of respondents (47.5%) were uncertain regarding the statement that the waiting time does not exceed one hour while 35.5% of



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



them disagreed with the statement. The mean score for the statement clients are given prompt service was  $4.39 \pm 0.73$  while that for the statement doctors are responsive to client needs was  $4.43 \pm 0.66$ . The mean score for the statement of nurses responsive to client needs was  $4.35\pm0.79$ . Similarly, the mean score for the statement attitude of doctors instils confidence in clients was  $4.54 \pm 0.62$  while that for the statement attitude of nurses instils confidence in clients was  $4.04 \pm 0.10$ . Regarding the statement waiting time does not exceed one hour, the mean score was  $2.78 \pm$ 0.75. Table 4 shows the assurance domain of service quality. Majority (51.2%) of the respondents strongly agreed that doctors are courteous and friendly while 44.2% of respondents strongly agreed that nurses are courteous and friendly. Only 37.2% of respondents strongly agreed that the doctors possess a wide spectrum of knowledge. Majority (56.2%) of respondents strongly agreed that clients were treated with dignity and respect. Similarly, 51.7% of respondents agreed that clients get explanation thoroughly about their medical condition. The mean score for the variables in assurance domain was lowest for the statement nurses are courteous and friendly at  $4.16 \pm 0.92$  and highest for the statement clients are treated with dignity and respect at  $4.49 \pm 0.70$  Table 5 shows the empathy domain of service quality. Only 42.2% of the respondents strongly agreed that feedback is obtained from clients.

Majority (52.5%) of respondents strongly agreed that doctors have the best interest of clients at heart while 42% of them strongly agreed that nurses have the best interest of patients at heart. Majority (52.5%) of respondents agreed that doctors understand specific needs of patients. The mean score for the variables under the empathy domain ranged from  $4.9 \pm 0.79$  for the statement nurses have the best interest of clients at heart to  $4.46\pm 0.64$  for the statement doctors understand specific needs of patients. Only about one-third (38.0%) strongly agreed that the charges in the clinic in the hospitals were affordable while majority (57.5%) agreed that the clinic is easily accessible Overall, majority (72.5%) of the respondents perceived that the overall service quality was good while 18.6% perceived that the overall service quality was average. Only (0.8%) perceived that the overall service quality was poor. Linear regression showed that assurance domain was the most important predictor of perceived overall service quality in the hospital as shown in Table 6.

**Table 3:** Respondents Perception of Responsiveness Domain of Service Quality

Variable	Strongly disagree (N%)	Disagree (N%)	Uncertain (N%)	Agree (N%)	Strongly agree (N%)	Total (N%)	Mean score	Standard deviation
Patients are given prompt service	2(0.5)	8(2.0)	27(6.8)	165(41.2)	198(49.5)	400	4.39	0.73
Doctors are responsive to client needs	1(0.3)	3(0.7)	25(6.3)	168(42.0)	203(50.7)	400	4.43	0.66
Nurses are responsive to client needs	2(0.5)	9(2.3)	41(10.2)	144(36.0)	204(51.0)	400	4.35	0.79
Attitude of doctors instil confidence in clients	1(0.3)	8(2.0)	3(0.7)	154(38.5)	234(58.5)	400	4.54	0.62



Attitude nurses

clients Waiting

does

exceed

confidence

4(1.0)

6(1.5)

of

instil

in

time

not

one

Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041

63(15.8)

171(42.7)

57(14.2)

138(34.5)

5(1.3)

400

400

	PATHOLS INTERPORTE	
4.04	0.10	
2.78	0.75	

hour
OVERALL MEAN: 4.00; OVERALL STANDARD DEVIATION: 0.60

142(35.5) 190(47.5)

24(6.0)

Table 4: Respondents' Perception of the Assurance Domain of Service Quality

Variable	Strongly disagree (N%)	Disagree (N%)	Uncertain (N%)	Agree (N%)	Strongly agree (N%)	Total (N%)	Mean score	Standard deviation
Doctors are courteous and friendly	3(0.7)	11(2.8)	12(3.0)	169(42.3)	205(51.2)	400(100)	4.41	0.74
Nurses are courteous and friendly	1(0.3)	26(6.5)	58(14.5)	139(34.7)	176(44.0)	400	4.16	0.92
Doctors possess wide spectrum of knowledge	1(0.3)	1(0.3)	15(3.7)	234(58.5)	149(37.2)	400	4.33	0.57
Clients are treated with dignity and respect	3(0.8)	8(2.0)	4(1.0)	160(40	225(56.2)	400	4.49	0.70
Clients get explanation thoroughly about their medical condition	7(1.8)	14(3.5)	18(4.5)	154(38.5)	207(51.7)	400	4.37	0.86

OVERALL MEAN SCORE: 4.35; OVERALL STANDARD DEVIATION: 0.58

**Table 5:** Respondents' Perception of the Empathy Domain of Service Quality

Variable	Strongly disagree (N%)	Disagree (N%)	Uncertain (N%)	Agree (N%)	Strongly agree (N%)	Total (N%)	Mean score	Standard deviation
Feedback is obtained from clients	1(0.3)	4(1.0)	37(9.3)	189(47.2)	169(42.2)	400	4.31	0.70
Doctors have clients best interest at heart	1(0.3)	3(0.7)	23(5.8)	210(52.5)	163(40.7)	400	4.33	0.64
Nurses have clients best interest at heart	2(0.5)	10(2.5)	47(11.8)	172(43.0)	169(2.2)	400	4.29	0.79
Doctors understand specific needs of patients	1(0.3)	4(1.0)	15(3.7)	170(42.5)	210(52.5)	400	4.46	0.64

OVERALL MEAN SCORE: 4.33; OVERALL STANDARD DEVIATION: 0.61



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



**Table 6:** Multiple Linear Regression of Overall Perception of Service Quality in Outpatient Clinics of Kumo General Hospital Based on Domains of Service Quality

Domains of service	Coefficient	standard	F-TEST	P-value
quality		error		
Tangibles	-0.140	0.085	2.723	0.101
Reliability	- 0.056	0.104	0.297	0.587
Responsiveness	0.139	0.091	2.343	0.126
Assurance	0.327	0.096	11.634	0.001
Empathy	0.111	0.096	1.342	0.247
Affordability and	-0.071	0.059	1.421	0.234
Accessibility				

### **DISCUSSION**

This study utilized the modified SERVQUAL Ouestionnaire to assess service quality in Kumo general hospital. This study has provided the opportunity to identify areas of strengths and weakness in quality of health care services provided in the hospital. The socio-demographic findings show majority of the clients were females who had at least a secondary education. This finding is in harmony with that of Hutchison, 2003; and Iliyasu, 2010 who in their separate studies indicated that majority of patients who visit hospitals are women of reproductive age 18 – 49.

The Service quality was assessed using the five SERVQUAL dimensions of Tangibles. responsiveness, Reliability, assurance, empathy and an additional dimension of affordability and accessibility. The overall mean score of Tangibles dimensions was 4.16 out of a possible 5 with a standard deviation of 0.54. This generally suggests that the clinics had a good and conducive environment. However, the lowest score on the tangibles domain was with regards to availability of brochure about the clinic facilities. This is an area of weakness that can be improved upon by the hospital management through the production of brochure and information pamphlets detailing the activities in each specific clinic. The brochure should also include client duties and client rights,

information on safety in the hospital and contact details in case of safety issues, map of the hospital and information on strategic locations. This is despite the fact that the hospital is a public one which unlike private hospitals may not place a high premium on the marketing of the available services. The Overall mean score in the reliability domain was 4.18 with a standard deviation of 0.57 implying a good performance. The lowest scores of 3.85 was recorded on the issue of how fast documents are retrieved and whether services are provided at the appointed time. This area need to be improved upon by the management through an assessment of the current processes in the record section of the hospital with a view to identifying ways to reduce the time spent in the retrieval of documents such as case files. The overall mean score for the responsive domain was 4.00 with a standard deviation of 0.60 which implies an overall good performance. The lowest score of 2.78 was recorded on the issue of waiting time not exceeding 1hour. This implies a long waiting time which needs to be addressed through client flow analysis to identify the areas with the greatest delay and the required interventions to reduce it. The highest score of 4.54 was recorded on how the attitude of doctors instils confidence in the clients. This is a positive development that should be encouraged and sustained. With regards to the assurance domain, the overall mean score was 4.35 with a standard deviation of 0.58. All the items in the domain



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



had mean score above 4.0 which implies a good performance. The findings should be sustained to ensure that clients are assured of a high level of quality healthcare delivery. The overall mean score for the empathy domain was 4.33 with a standard deviation of 0.61. This implies that clients perceived that health workers had the best interest of clients at heart and understood the specific needs of The mean score for the the client. affordability domain was 4.04 while that for the accessibility domain was 4.56 which implies that clients perceived that services were affordable and the clinics were accessible. Overall, the mean service quality across all domains was 4.20 with a standard deviation of 0. 51. Other studies have assessed service quality with various tools and methodologies which makes comparison with this study inappropriate (Margaret, 2003; Net, et al., 2018).

The study showed that assurance domain was the most important predictor of overall service quality. This implies that hospitals must place a high premium on this domain in order to achieve optimal service quality. This study however has its limitations. The study focused only on outpatients so the findings cannot be generalized to inpatients. Secondly, as with most quality assessment studies, courtesy bias is a possible limitation to finding.

### **CONCLUSION**

In conclusion, this study, which utilised the modified SERVQUAL tool, showed that clients perceived the service quality at the outpatient's clinic of Kumo General Hospital to be good. The highest score was recorded in the assurance domain while the lowest score was recorded in the responsive domain. The assurance domain was the most important factor influencing the overall perceived service quality in the outpatient clinics. The hospital management need to prioritize

interventions to improve the responsiveness of the services provided in the hospital in order to further improve the service quality in the hospitals.

- 1. Health facilities must have an appropriate physical environment these include water, proper sitting facilities, hand hygiene waste disposal facilities, functional, reliable and safe toilet facilities among others. This will make patients feel more comfortable while waiting to be served.
- 2. All women and children must receive care that prevents hospital-acquired infection. It has been observed that many relatives of out-patients are at the risk of acquiring hospital-acquired infections which increases the risk of death and diseases. This further adds to the cost of care and duration of stay in the hospital.
- 3. In order to ensure patient satisfaction, there must be effective communication with women and their families and their needs should be attended to promptly. Patients should receive all information in all decisions made regarding their treatment.

### REFERENCES

Abubakar, S., Yunusa, I., Ahmed, M.K., Abdullahi, M.K., Ibrahim, I. and Zakariya, M. (2016). Cross sectional study of malaria parasite among patients attending general hospital Hadejia, State, Nigeria. *Bayero Journal of Pure and Applied Sciences*, 9(2):57-60.

Abbas A.M. (2012). Locational Analysis of Vital Registration Centres and implications on Birth Registration Coverage in Gombe State, Nigeria. Unpublished Ph.D Thesis submitted to Department of Geography Bayero University, Kano.

Ahmed, U.A (2013a) Morphological identification of malaria vectors within



### Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



- anopheles species at Hadejia and Jahun. *BAJOPAS* 6 (1): 92-94.
- Aldana MJ, Piechulek H, Sabir AA. (2001). Client satisfaction and quality of health care in rural Bangladesh. Bulletin of the World Health Organization.;79:512–6.
- Andaleeb SS. (2001). Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social Science Medical Journal*. 52(9):1359–70.
- Arries ES, Newman O. (2008). Outpatients experience of quality service delivery in a teaching hospital In Guanteng Health SA. *Gasoncheid Journal*. 13(1):40–54.
- Bello, A.M. and Adamu, Y.A. (2015) Clinical benefits to pregnant women on the use of Rapid Diagnostic Test to Microscopy in malarial diagnosis in Jigawa State, Nigeria. *Journal of Public Health and Epidemiology*, 7(2):46-50.
- Carr- Hill R. (1992). The measurement of patient satisfaction. *Journal Public Health Medicals* 14(3):34–38.
- Coulter A. (2006). Can patient assess the quality of health care? BMJ. 1;333(7557) 1–2.
- Dagger T, Sweeney JC. (2006). The effect of service evaluation on behavioural intentions and quality of life. *Journal of science research*. 19(6)3–19.
- Donabedian A. Ann Arbor MI (2009). Health Adminstration press. Exploration in Quality assessment and monitoring The definition of quality and approaches to its assessment.
- Emelumadu O.F, Ndulue C.N. (2018). Patient characteristics and perception of quality of care in a teaching hospital in Anambra state Nigeria. *Nigerian Journal of Medicine*. 21(1)4–9.
- Federal Ministry of Health. Nigeria: National

- Health Policy; (2019).
- Gombe State Government Diary (2012). An annual publication.
- Hutchison B, Ostbye T, Barnsley J, Stewart M, Mathews M, Campbell MK, (2003). Patient satisfaction and quality of care in walk in clinics, family practices, and emergency department: the Ontario walk in study. CMAJ. 168(8):980–983.
- Iliyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. (2010). Patient's satisfaction with services obtained from Aminu Kano Teaching hospital, Kano, Northern Nigeria. *Nigerian Journal of Clinical Practice*. 13(4):371–37.
- Institute of Medicine (2001). Crossing the quality: A new health system for the 21st century. Washington DC: National Academy press.
- Jennifer, O.A. and Musa, D.M. (2016)
  Prevalence of malaria and risk factors among patients attending Dutse General Hospital, Jigawa State, Nigeria. International Research Journal of Public and Environmental Health, 3(11):270-277.
- Margaret S West Away, Paul Rheeder, Daniel G Vanzyl, John R Seager (2003). Interpersonal and organizational dimensions of patient satisfaction. *Journal for Quality in health care*. 15(4):337–44.
- Manaf N, Nooi P. (2009). Patient satisfaction as an indicator of service quality in Malaysian public hospitals. *Asian journal on Quality*.10 (1):77–87.
- Michael, G.C., Aliyu, I., Idris, U., Ibrahim, H., Olalere, O.S., Grema, B.A., Shittu, M.A. and Abah, S. (2019) Investigation of malaria by microscopy among febrile outpatients of a semi-rural Nigerian Medical center: What happened to malaria



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



- control programs? *Nigeria Journal General Practice*, 17(6):23-30.
- Net N, Chompikul J, Sermisri S. (2018).

  Patient satisfaction with health services in the outpatient department clinic of Nangmamyen Community hospital Sakeao province, Thailand.

  Journal of public health development. 5(2):33–42.
- Otani K, Harris LE. (2003). A paradigm shift in patient satisfaction assessment. Journal of Medical Care Research. 60(3):347–65.
- Rao KD, Peters DH, Bandeen Roche K. (2006). Towards patient centred health services in India--a scale to measure patient perception of quality. Int J Qual Health Care. 18(6):414–21.
- Ross CK, Stewart CA, Sincore JM. (1995). A comparative study of seven measures of patient satisfaction. *Journal of Medical care*. 33(4):392–406.
- Salisu, A. and Abdulhadi, Y. (2015)
  Prospective study on the incidence of malaria parasite infection among children (0-15 years age) attending Dutse General Hospital, Jigawa State, Nigeria. Nigerian Journal of Microbiology, 28:2915-2918.
- Sitzia J. (1999). How valid and reliable are patient satisfaction data? An analysis of 195 studies. *International Journal of Quality Health Care*. 11(4):319–28.
- Shu'aibu, T., Balogun, J.B., Ringim, A.S., Balogun, S.U., Yakubu, A., Ali, S., Abubakar, Z. and Balogun, E.O. (2017) Prevalence of plasmodium falciparum malaria in Gwaram local government area, Jigawa state, North western Nigeria. *Dutse Journal of Pure and Applied Sciences* (DUJOPAS), 32(2):352-359.
- Sohail, A. (2002). Comparative analysis of malaria diagnostic tests and prevalence of malaria infection among

- blood donors at general hospital Hadejia, Jigawa State, Nigeria. *UMYU Journal of Microbiology Research*, 2(1):54-60.
- Sohail M.S. (2003). Service quality in hospitals more favourable than you might think. Managing service quality. 13(3):197–206.
- Sofaer S, Firminger K. (2005). Patient perception of the quality of health services. Annual Revisit of Public Health. 26:513–59.
- Vinagree MH, Neves J. (2008). The influence of service quality and patients emotion on satisfaction. *International journal of health care quality assurance*. 21(1):87–103.
- Wanga S, Lemeshow S. (1991). Sample size determination in health studies A practical manual. Geneva: World Health Organization.
- WHO. Geneva: WHO; 2004. Quality improvement in primary health care.
- WHO. (2018). Better out-patient services are the keys to health gains for the poor. Geneva: World health organization. WHO/47.
- WHO (2017) *World Malaria Report*, 2016: Country profiles. Geneva, Switzerland.
- WHO (2018) World Malaria Report, 2018. Switzerland.
- Yusuf FN, Jones R, Hunt N, Nel D, Bovaird T. (2016). Health care quality in NHS hospitals. Int J Health Care Qual Assur. 9(1):15–28.
- Yesilada F, and Direcktor I. (2010). Health care service quality A comparison of public and private hospitals. *African journal of Business management*. 4(6):962–971.
- Zarei A, Mohammed A, Abbas RF, Arash R, Tabatabaei MG. (2012). Service quality of private hospitals: The Iranian patient perspective. BMC Health Service Research. 2;12:31.



Bima Journal of Science and Technology, Vol. 7 (2.1) August, 2023 ISSN: 2536-6041



Zineldon M. (2006). The quality of health care and patient satisfaction An exploratory investigation of the 5Q's model at some Egyptian and Jordanian

medical clinics. *International Journal* of Health Care Quality Assurance Incorporation Leadership Health Survey. 19(1):60–92.