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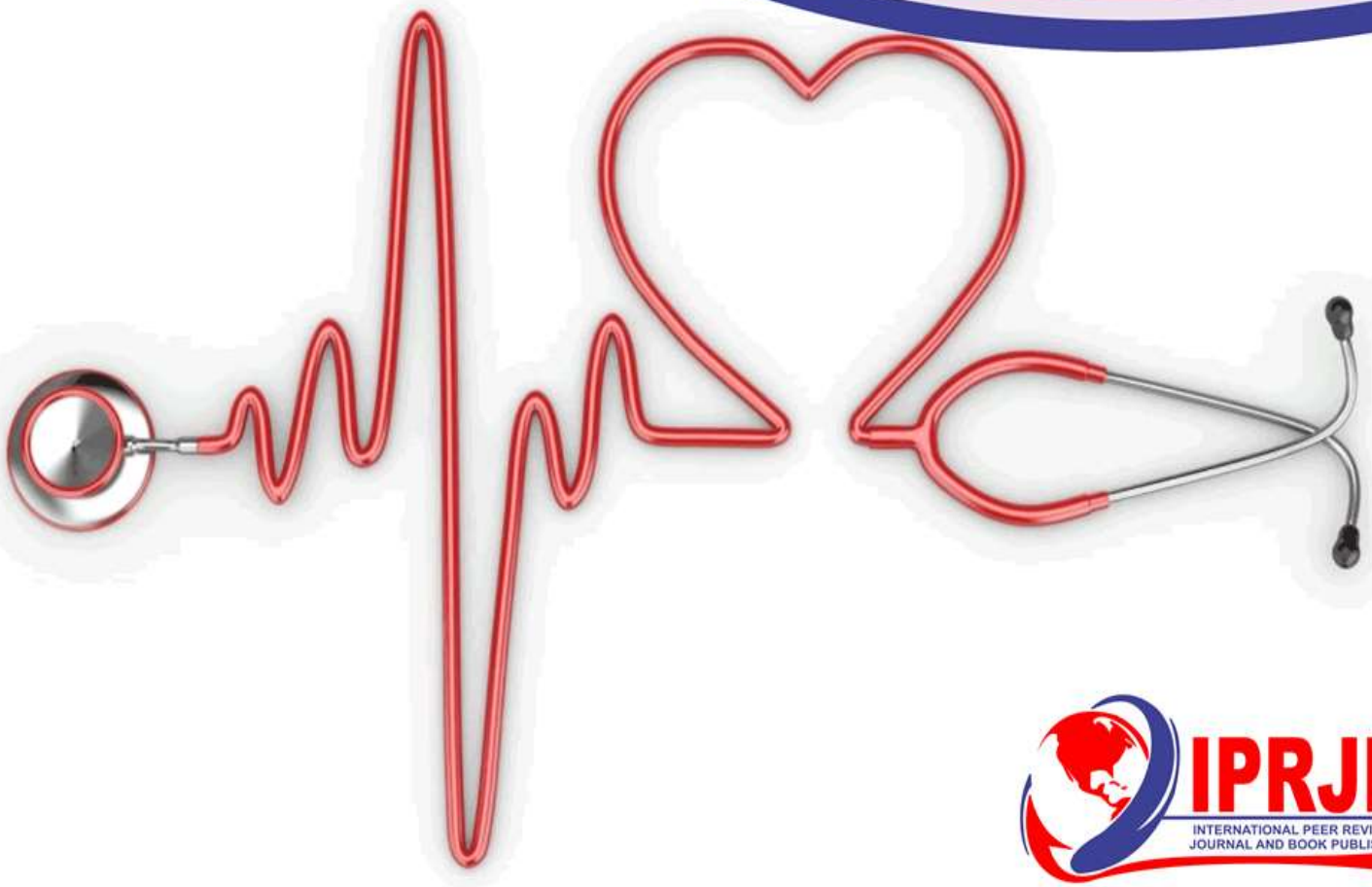

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Assessment of the Provision of Quality Midwifery Care Service at Women's and New Born Hospital, Lusaka Using a Modified Servqual Scale

[1*]Namayipo Wamukankamba Stella Nankamba
Lecturer, Department of Midwifery, Women's and Child Health, Faculty of Midwifery, University of Zambia, School of Nursing Sciences, Lusaka, Zambia

[2]Prof. Erastus Mwanaumo
Director, Directorate of Post Graduate Studies, Faculty of Engineering, University of Zambia, Lusaka, Zambia

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Abstract

Purpose: The aim of the study was to assess the quality of midwifery care service provided to women by midwives at Women and New-Born Hospital (WNBH) in Lusaka District of Zambia using a modified SERVQUAL scale questionnaire. The study intended to evaluate the quality of the service from the viewpoint of service providers and recipients of the service (Women).

Methodology: The research design was a non-experimental design utilisation a quantitative cross-sectional method. Systematic sampling was used to select 385 women and 185 midwives from the various health units. Quantitative data was analysed by employing descriptive statistics using the IBM Statistical Package for Social Sciences (SPSS) version 24. Chi-square and Fisher's exact was conducted to test statistical significance between the independent and dependent variables.

Findings: Majority of women (321, 83.4%) mentioned that midwives provide poor quality of midwifery service while majority of midwives (183, 99.5) termed their quality service level as fair. The service quality gap between the perceived and expected quality service from the SERVQUAL questionnaire ranged from 0 to -15 for all the dimensions under study showing that standards were not reached.

Unique Contribution to Theory, Practice and Policy: Utilizing the SERVQUAL (service quality) theoretical model the research sought to identify service quality gaps which could enhance customer satisfaction if addressed. Recommendation includes a targeted effort by health facility to improve service quality through in-depth look at the tangibility, assurance, responsiveness, empathy and reliability dimensions of service quality. Quality should be a concern of every health care provider in the delivery system. Health institutions in Zambia, should make it as a mandate to understand client's quality expectations in order to meet their quality needs leading to improved patient's satisfaction, and ultimately increased facility utilization.

Keywords: *Midwifery, Quality Care, SERVQUAL Scale, Service-Quality*

JEL Codes: *I10*

INTRODUCTION

The cornerstone of all activities in health facilities has always been recognized in terms of 'service' carried out by the healthcare systems. Serving others is frequently seen as the foundation of all that is done in healthcare and medical institutions around the globe. The manner in which patients evaluate the services they receive is determined by the calibre of treatment given. In this instance, patients, who are customers of healthcare, perceive care given as high-quality service based on the degree to which the healthcare system fulfils their expectations about the treatment they will receive and the level of satisfaction they have with it (Martinez-Fuentes, 2018).

Midwifery care is a type of medical intervention carried out by midwives in the clinical area of a hospital. It is often used in the maternal and child health departments to assure the well-being of mothers and their children who seek medical attention. In the prevention of mother and child morbidity and death, the provision of quality midwifery care has been demonstrated to be particularly favourable (WHO, 2018; Filby et al., 2016). High-quality maternal health services will contribute to the improvement of outcomes related to sexual and reproductive health, breastfeeding, and immunization problems; further, prevent smoking or over-indulgeous in tobacco use during pregnancy or during the management of postpartum depression (WHO, 2018).

Background

Midwifery care is a service that is delivered to people and has a distinct beginning, middle, and finish, therefore it is a unique endeavour as each patient encounter differs from the other and the service itself is a 'project' that is done by healthcare providers. The researchers decided to conduct a study to evaluate the quality of midwifery care services provided by midwives at the University Teaching Hospital (UTH) specifically at Women's and Newborn Hospital (WNBH), with a focus on the five dimensions of service quality that are a standard measure of service quality (Parasuraman, 1988).

In reality, quality may be viewed differently depending on the individuals, situation or the product being looked at. It might be characterized from the standpoint of the patient or from the viewpoint of the healthcare professionals themselves. For the patient, quality may be defined in terms of how content they are with the treatment they receive (Grondahl et al, 2018), and this can be done by observing how the service is being provided to them. On the other hand, if a professional is requested to explain quality, they may mention the particular delivery method used for the service as well as how well the delivery may have adhered to the criteria set by the healthcare institution for that type of treatment.

ISO 8402 (1994) defined quality as the "totality of features and characteristics of a product or service that bear upon their ability to satisfy both planned and unplanned needs." Midwifery service quality may also refer to a variety of things, which would include compliance with regulatory requirements, clients' degree of preference, and the capacity of midwives to assess if commitments made to the consumer were kept. (Teston, 2019). The World Health Organization (WHO), (2024) further defined it as those midwifery activities which are effective, safe and people centred, with added benefits such as timeliness, equitability, and are integrated and efficient in nature.

There are several ways to assess the quality of services in the service industry if customer satisfaction is a measurement factor. Among all the tools and methods, the SERVQUAL

approach has been shown to be the most effective way to measure service quality in a hospital context (Jonkisz, Karniej and Krasowska, 2021). Known also by its other name, the gap model, the ServQUAL scale, is a research instrument which measures discrepancies between the expectations and consumer perceptions of quality. It does this by employing five (5) dimensions that, if present, are assumed to represent service quality standards (Parasuraman, Berry, and Zeithaml, 1991). The dimensions include tangibility, assurance, responsiveness, empathy, and reliability (GeeksforGeeks, 2024).

The ServQUAL questionnaire comprises 22 items for each quality indicator, comprising 4 questions on tangibility, 5 questions on dependability, 4 questions on responsiveness, 4 questions on assurance, and 5 questions on empathy. These dimensions seek to quantify elements of high-quality service, including the provider's physical appearance, level of compassion and attentiveness, appearance, knowledge, and responsiveness to the wants and inquiries of the client (Lee, 2016).

Therefore, the quality service dimensions in the SERVQUAL scale model were utilized to measure quality of midwifery care service at WNBH in Lusaka.

Statement of the Problem

The quality of midwifery care services offered at the Women and Newborn Hospital (WNBH) remains a critical factor in determining patient satisfaction and health outcomes. Studies in Zambia highlight that patients' expectations of care significantly influence their overall satisfaction with health services (Dansereau et al., 2015). High-quality midwifery care has far-reaching benefits, such as building trust and confidence in midwives, which, in turn, encourages more women to seek out maternity services. This increased trust can lead to higher service uptake, contributing to a significant reduction in preventable maternal deaths—by as much as 80% (Khakbazan et al., 2020).

However, despite these benefits, the delivery of quality midwifery care at WNBH is hindered by various social, cultural, economic, and professional barriers (Filby et al., 2016; Khakbazan, Ebadi, & Momenimovahed, 2021). Reports from patients indicate poor attitudes among healthcare workers, inadequate monitoring during labour, and insufficient communication regarding their conditions and outcomes. These shortcomings reflect gaps in service quality, suggesting that the midwifery care provided is not meeting established standards.

To address these issues, this study aims to assess the quality of midwifery care services at WNBH, focusing on the five dimensions of service quality—assurance, empathy, responsiveness, reliability, and tangibility—as outlined by Parasuraman (1988). Recognizing the need for a structured approach to improving healthcare quality, this study adopts quality management principles within the realm of project management. By systematically identifying service gaps and proposing targeted interventions, the study seeks to enhance the delivery of midwifery care through continuous monitoring, risk management, and stakeholder engagement. Ultimately, this approach aims to align midwifery services at WNBH with best practices, improving patient satisfaction and reducing maternal mortality.

This study was essential for Zambia and specifically to WNBH as it is one of the first of its kind which focuses on quality of service provision by providers. Most of the studies conducted on quality of healthcare in Zambia focuses more on specific aspects of care such as HIV/AIDS (Ntalasha et al, 2018), antenatal care (Hibusu et al, 2018), Family planning (Kriel et al, 2021), to mention a few. None of the studies the researcher encountered throughout the process of the

study highlighted on the quality of service provided by healthcare workers themselves making this study necessary and vital.

Research Objective

- To investigate the quality of midwifery care provided at the university teaching hospital (UTH), WNBH, using the quality dimension for service quality such as assurance, empathy, assurance, responsiveness and reliability in a SERVQUAL scale.

LITERATURE REVIEW

The American Customer Satisfaction Index (2022) developed benchmarks for customer satisfaction. These benchmarks state that each healthcare facility in the United States is expected to meet a certain percentage target, such as 71% for all hospitals and 74% for in-patient departments. This data demonstrate that patients and consumers of healthcare have extremely high expectations for the service they receive. Additional further data indicates that since 2021, the customer indexes have risen by 3% (Ibid). Therefore, studying the standard of health care services is essential to comprehending the discrepancy that usually occurs between the expectations of patients and the reality of healthcare delivery in practice.

Theoretical Framework: The SERVQUAL or GAP Model

The model SERVQUAL scale by Parasuraman, Zeithaml and Berry (1985) has been widely used to assess the service quality of service providers worldwide. The SERVQUAL models evaluates service quality gaps that hinder provision of service that consumers will find satisfactory. The model suggests that there are 10 service quality dimensions of service quality. These include tangibility, reliability, courtesy, access, assurance, competence, responsiveness, communication, communication and courtesy. All these dimensions lead to improved understanding of customers where the service provider take time to recognize customer needs.

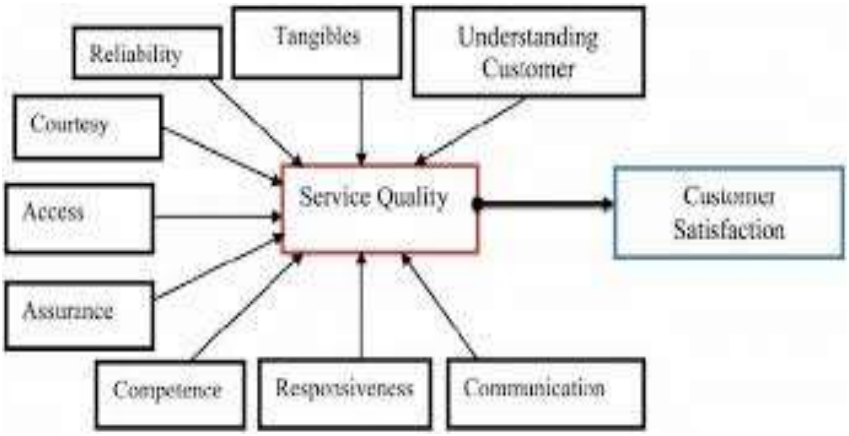

Figure 1: The SERVQUAL or GAP Scale

The service quality dimensions denote various aspects of midwifery care service and therefore can be used to measure the service. This ranges from the appearance of the midwives and wards, the way the midwives interact with the clients, how helpful or prompt they are, including how dependable and accurate they are in managing their clients as they provide the service.

Conceptual Framework

Independent Variables

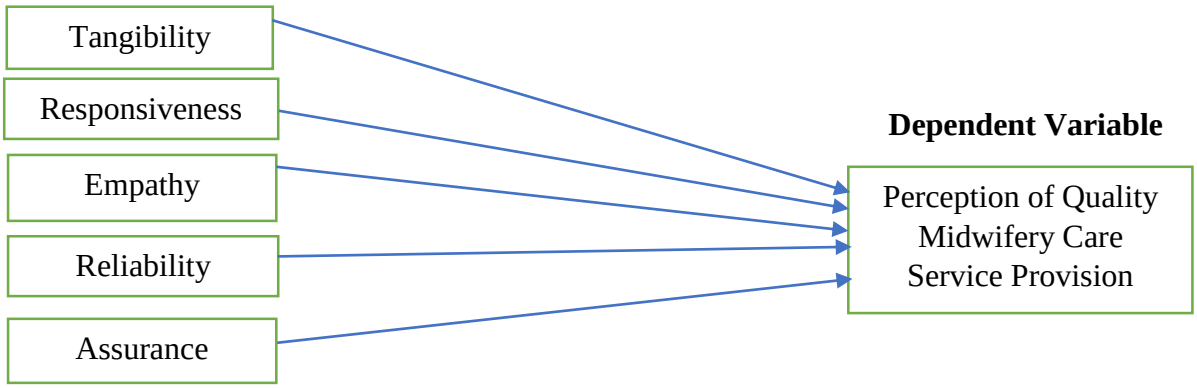

Figure 2: Conceptual Framework

The Quality service dimensions such as tangibility, responsiveness, empathy, reliability, and assurance influence the perception of quality midwifery service provided by midwives. A deficiency in one of these aspects may affect satisfaction levels and perceived quality of the service leading to poor uptake of midwifery service.

Empirical Review

Offering high-quality services is essential for any industry that provides services because it creates and maintains a competitive advantage in the market place (Vencataya et al, 2019; Ramya, Kowsalya and Dharanipriya, 2019; Ali et al, 2021). Within the healthcare sector of Zambia, the public and private health facilities that offer maternity services are in competition with one another. The competition also originates from untrained community members, such as Traditional Birth Attendants (TBAs), who offer individuals an alternative location for the delivery of their newly born children. The use of TBAs may put the lives of the mother and the infant in danger because most of the utilized venues are unclean and the practices are poorly done, which can lead to problems that can cause maternal or neonatal fatalities.

For this reason, it is crucial for the services offered at maternal health facilities to be of excellent quality and will be linked to increased patient satisfaction (Gonzalez et al, 2016; Shafii et al, 2016). Patient satisfaction will cause positive word-of-mouth reports which increase uptake of the services by customers who require them since mothers will have more faith in the health care providers. The reported perceived quality of treatment by consumers demonstrates patient satisfaction with the service, which serves as a foundation for higher patient intake. In a similar vein, Danzereau et al. (2015) discovered that patients' perceived quality of treatment is one of the most significant elements that promotes patient's satisfaction with the health sector services in Zambia.

Furthermore, Sandall (2023), found that quality midwifery care is a service offered to women in a way that does not harm them; it is timely, sufficient, and equally supplied to them with a focus on their needs rather than because of arbitrary outside factors. The author went on to say that the care should be directed toward the individual and it should be given to them in such a way that they satisfy their requirements, which have been recognized and are constant in nature. This result was comparable to a qualitative meta-analysis study carried out in 2022 by Ahmed, Mahimbo, and Dawson. The study revealed that the provision of women-centred care, along

with client involvement in the decision-making process regarding their care, will ultimately increase patient satisfaction with their choice of delivery centre.

Additionally, in another study done in Vietnam by Cham and Johnson (2016), researchers discovered a relationship between patients' perceived quality of treatment and their actual behaviour in the future. Future behaviour of patient may encompass a range of variables, such as areas where the patient would travel to obtain healthcare services. It might be as easy as deciding whether the woman goes to the hospital when she becomes pregnant or needs prenatal care, or it can include making costly choices like going to an untrained attendant to deliver her baby.

Numerous characteristics have been recognized in literature with the potential to either enhance quality, provide better service, or act as a barrier to it. In 2016, Kamanga and Kalungia, at UTH and Ndola Central Hospital (NCH) in Zambia, found through their study that the type of services being offered, the length of time patients must wait, and the privacy they enjoy when receiving the service including empathy from the staff members has an influence on patient satisfaction levels. These results contrast slightly with those by Filby, McConville, and Portela (2016), who discovered that poverty, culture, and some professional impediments, including overwork, have an impact on quality care provision for the mothers.

There are many causes which can be attributed to poor quality service provision. An example are findings from a cross-sectional study involving health professionals conducted by Loerbroks, Weigl, and Angerer (2016), where authors found that one of the causes of the poor quality of care delivered by health professionals was the imbalance between high work effort put in by employees and poor work results from employers. As a result, the introduction of equal incentives for the quantity of labour performed might enhance midwives' performance in completing their tasks to the necessary levels of quality. On the other hand, according to Shafii et al. (2016), patients' perceived quality of care is negatively impacted by perceived security concerns. Furthermore, Ruotsalainen et al (2020), discovered that teamwork should be promoted as a technique of enhancing healthcare quality through raising job satisfaction among healthcare workers.

In a systematic study undertaken (2020) in India by McFadden, Marshall, and Sharma, the authors focused on facilitators and constraints related to the provision of high-quality reproductive healthcare. The researchers found that factors like poverty and poor structures for midwifery care serve are barriers to equality, while factors like hands-on care provided to patients by midwives during training and improving the woman's experience through care, when in contact with midwifery staff at all levels, serve as enablers for midwifery care provision. Additionally, Khakabazan et al., (2020), conducted a qualitative study which found that factors affecting the provision of high-quality midwifery care include personal factors such as individual values and professional factors such as staff empowerment. According to them these factors could be considered the most critical influencers that affect the provision of high-quality midwifery care. Furthermore, Amjeriya and Malviya in their study discovered that hospital quality and service delivery are determined by various factors which included competence, credibility, tangible quality, reliability, courtesy, and assurance. They stated that these factors are the most important ways to guarantee hospital quality and service delivery.

When Kazemi et al. (2013) tried to determine whether there was a substantial influence of hospital quality on the aspects of quality described in the SERVQUAL model, they found comparable results. These results can be supported by those found by Ali et al. (2021) which

stated that only four factors—responsiveness, empathy, assurance, and tangibleness—of the five service dimensions actually had a positive relationship with customer satisfaction, which raises the calibre of care provided. Conversely, Jonkisz, Karniej and Krosowska (2021) highlighted a number of limitations and challenges with using the SERVQUAL model such as its failure to take into consideration other aspects such as cultural influences which may affect quality service provision.

Research Gap

The drawback of the study by Danzereau et al, (2015) was that their study was a cross-sectional survey that focused on patients from both urban and rural health clinics. This focus may have made it challenging to find an effective method to obtain information from these diverse groups.

A discrepancy was found in the literature review between the findings from Kalungia and Kamanga and Filby, McConville, and Portela. These differences could be explained by the fact that patients made up the population for Kalungia and Kamanga (2016); however, Filby, McConville, and Portela (2016) in their systematic search of multiple electronic databases, used professionals in the field of health care as the population group and the perceptions of the two populations were clearly different.

Consequently, there exists a knowledge gap concerning assessment of quality service in the Zambian health sector. The focus of most of the quality studies in Zambia focus on process and skill standards of care and not the service itself.

METHODOLOGY

The study adopted a positivistic philosophy approach and a cross sectional study design. The study focussed on one healthcare facility, the women's and new-born hospital (WNBH), part of the hospitals at the University Teaching Hospitals (UTH) in Lusaka, Zambia. The research used purposive sampling method to choose the study settings and systematic sampling method to select the study participants. The two sampling techniques were chosen because women's and new-born hospital are one of the referral hospitals in the country responsible for setting standards of quality other public health institutions emulate. Furthermore, as to get a more representative sample of the participants systematic sampling was adopted. The respondents were 184 midwives working at the facility for at least 6 months and 385 women seeking reproductive health services in various units such as antenatal or postnatal clinics and wards and the labour wards. Primary data was collected from all the respondents. Self-administered questionnaire was issued to collect raw data. An adapted SERVQUAL scale for both Midwives and Women in a form of a self-administered questionnaire was used. The SERVQUAL scale was modified and incorporated into a questionnaire. The data was entered in Statistical Package for Social Sciences (SPSS) software which was used to analyse the data. Descriptive statistic techniques were used to describe the basic characteristics of the variables. Inferential statistics were used to test the association between the dependent and independent variables.

RESULTS

Demographic Characteristics

The demographic characteristics were collected through asking questions in the self-administered questionnaire to women. Then data was presented using frequencies and percentages as shown in Table 1.

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Table 1: Demographics for Women (n=385)

Variable	Indicator	Frequency (n)	Percentage (%)
Age	Below 20 years	17	4.4
	20-30 years	230	59.7
	30-40 years	131	34.0
	Above 40 years	7	1.8
Marital Status	Married	260	67.5
	Single	120	31.2
	Divorced	3	0.8
	Widowed	2	0.5
No of Children	First Child	78	20.3
	1-2 Children	181	47.0
	3.4 Children	119	30.9
	More than 4 Children	7	1.8
Religion	Christian	373	96.9
	Muslim	5	1.3
	Buddhism	1	0.3
	Other	6	1.6
Residential Address	High density area	137	35.6
	Medium density area	153	39.7
	Low density area	52	13.5
	Outside Lusaka	43	11.2

Table 1 indicates that the majority of the study's female participants were married (260, 67.5%), had one or two children (181, 47%), were Christian (373, 96.9%), and lived in medium-density regions (153, 39.7%). The majority of the women were between the ages of 20 and 30.

The demographic characteristics were collected through asking questions in the self-administered questionnaire to midwives. Then data was presented using frequencies and percentages as shown in Table 2.

Table 2: Demographics for Midwives (n=184)

Variable	Indicator	Frequency (n)	Percentage (%)
Sex	Male	61	33.2
	Female	123	66.8
		184	100
Age	Below 20 years	1	0.5
	20-30 years	114	62
	30-40 years	65	35.3
	Above 40 years	4	2.2
		184	100
Years in Service	Below 5 years	120	65.2
	6-20 years	62	33.7
	21-30 years	1	0.5
	Above 30 years	1	0.5
		184	100
Years working at UTH	Below 5 years	131	71.2
	5-10 years	51	27.7
	11-20 years	2	1.1
		184	100

As shown in Table 2 majority of midwives who participated in this study were female (123, 66.8%) and that they fell within the 20-30-year age group (114, 62%). Furthermore, more than two thirds (120, 65.2%) and (131, 71.2%) had been in service and have worked at UTH for less than 5 years respectively.

Quality of Midwifery Care

This section presents results for perceptions of women and midwives on the level of quality of midwifery care provided by midwives at UTH, WNBH. A modified SERVQUAL assessment tool was used to collect this data.

A modified SERVQUAL scale self-administered questionnaire was used to collect data about the expected and perceived midwifery service quality among women accessing the care. Participants were expected to provide responses on a 5-point Likert scale with whether they strongly agree, agree, neutral, strongly disagree and disagree.

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Table 3: Women's Perception of Midwife's Quality Service Provision (n=385)

Variable	Expected Quality of Service	Perceived Quality Indicator	Freq (n)	Perc (%)
Tangibility	All equipment is available to use on me	Strongly disagree	10	2.6
		Disagree	128	33.2
		Agree	223	57.9
		Strongly agree	24	6.2
	Midwife appears neatly and professionally dressed	Strongly disagree	1	0.3
		Disagree	7	1.8
		Agree	224	58.2
		Strongly agree	153	39.7
	The ward is visually appealing	Strongly disagree	6	1.6
		Disagree	125	32.5
		Agree	206	53.5
		Strongly agree	48	12.5
	Posters on the wall are visually appealing	Strongly disagree	6	1.6
		Disagree	72	18.7
		Agree	267	69.4
		Strongly agree	40	10.4
Assurance	Midwife is always quick and efficient in doing her duty	Strongly disagree	12	3.1
		Disagree	83	21.6
		Agree	276	71.6
		Strongly agree	14	3.6
	Midwives are always courteous with me	Strongly disagree	65	16.9
		Disagree	129	33.5
		Agree	183	47.5
		Strongly agree	8	2.1
	All midwives showed high knowledge and answered my questions	Strongly disagree	4	1.0
		Disagree	108	28.1
		Agree	245	63.6
		Strongly agree	28	7.3
	Midwife's behaviour and actions makes me confident	Strongly disagree	6	1.6
		Disagree	113	29.4
		Agree	238	61.8
		Strongly agree	28	7.3
Responsiveness	Midwives ensured I don't wait long for care	Strongly disagree	17	4.4
		Disagree	184	47.8
		Agree	180	46.8
		Strongly agree	4	1.0
	Midwives are quick to solve problems I faced	Strongly disagree	21	5.5
		Disagree	196	50.9
		Agree	165	42.9
		Strongly agree	3	0.8
	There is a place to lodge my complaints in the ward	Strongly disagree	23	6.0
		Disagree	287	74.5
		Agree	71	18.4
		Strongly agree	4	1.0
Empathy	Midwife gave individual attention to me	Strongly disagree	10	2.6
		Disagree	68	17.7
		Agree	204	53.0
		Strongly agree	103	26.8
	Midwife shows they have my best interest at all times	Strongly disagree	9	2.3
		Disagree	98	25.5
		Agree	237	61.6
		Strongly agree	41	10.6
	Midwife understands my needs at all times	Strongly disagree	7	1.8
		Disagree	126	32.7
		Agree	238	61.8
		Strongly agree	14	3.6
Reliability	Midwife always met promises made to me	Strongly disagree	22	5.7
		Disagree	189	49.1
		Agree	171	44.4
		Strongly agree	3	0.8
	No reports of negligence from patients	Strongly disagree	5	1.3
		Disagree	91	23.6
		Agree	244	63.4
		Strongly agree	45	11.7
	Adverts on the walls reflects reality of care	Strongly disagree	50	13.0
		Disagree	173	44.9
		Agree	158	41.0
		Strongly agree	4	1.0
	I feel safe with the midwife always	Strongly disagree	8	2.1
		Disagree	117	30.4
		Agree	198	51.4
		Strongly agree	62	16.1

As shown in Table 3, varied answers were solicited from the women on various statements which measure service quality. Majority of the women agreed that equipment was available (223, 57.9%), midwives were neat (224, 58.2%), posters (206, 53.5%), and wards (267, 69.4%) visually appealing. More than half of the women further agreed that midwives were quick and efficient (276, 71.6%) and that their actions made patients confident (237, 61.6%). On the other hand, the majority of women disagreed on all the statements under the responsiveness dimension. Close to half of the women (184, 47.8%) disagreed that midwives ensured they do not wait long for care, (196, 50.9%) disagreed that midwives where quick to solve their problem and more than half (287, 74.5%) also disagreed that the units where they were had places to log their complaints from. A good number of the patients (125, 32.5%) though worryingly disagreed to feeling safe with the midwife always.

Table 4: Assessment of Dimensions of Service Quality According to Women (n=385)

Variable	Indicator	Gap Indicator	Freq (n)	Perce (%)	Unweighted total averages
Tangibility	Poor	-8 to -15	348	90.4	-4
	Fair	0 to -7	37	9.6	
Assurance	Poor	-8 to -15	272	70.7	-5
	Fair	0 to -7	113	29.3	
Responsiveness	Poor	-8 to -15	359	93.3	-5
	Fair	0 to -7	26	6.7	
Empathy	Poor	-8 to -15	375	97.4	-3
	Fair	0 to -7	10	2.6	
Reliability	Poor	-8 to -15	251	65.2	-6
	Fair	0 to -7	134	34.8	

Table 4 shows that dimensions of quality in the modified SERVQUAL tool with the calculated gap indicator showing good or poor provision of service under each service dimension. The gap was calculated through subtracting of the perceived service provision from women and the expected service provision; which are the totals under each dimension. The formulae used is Perceived service received – expectation of service = Gap Score.

Overall, the table shows that there is poor quality midwifery service provision from the perspective of women receiving the care. The women felt that their expectations of midwifery service were not being met shown by the negative unweighted averages of the score under each dimension which ranged from -3 to -6 (Table 4)

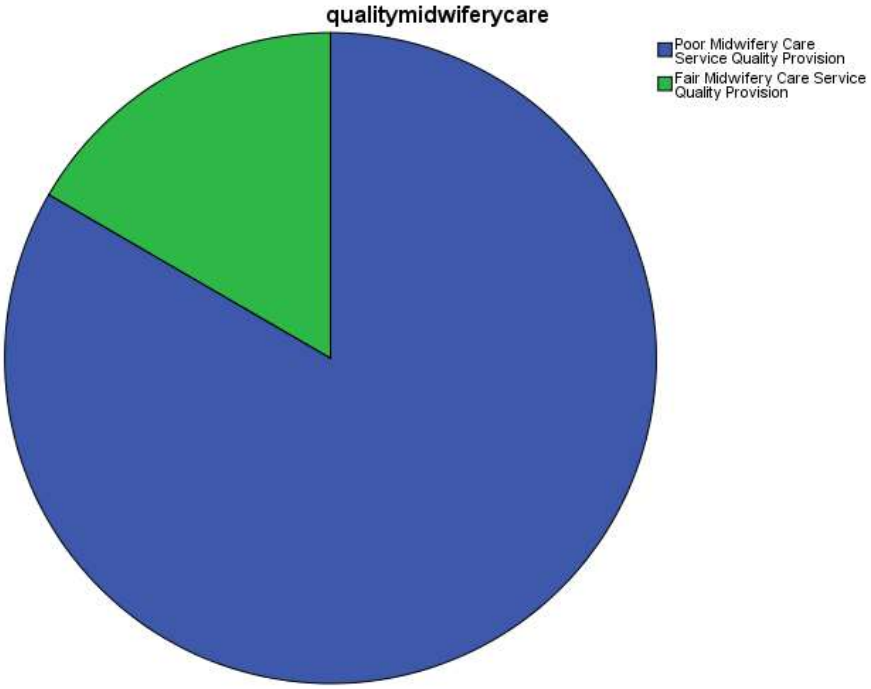

Figure 1: Quality of Midwifery Service Provision at WNBH - Women (n=385)

Figure 1 shows that the majority of women (321,83.4%) believed that midwives provided poor quality of midwifery care service, while (64, 16.6%) mentioned that the quality of midwifery care service was fair.

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Table 5: Midwives Perception of the Quality of the Service They Provide (n=184)

Variable	Expected Quality for Service	Perceived Quality Indicator	Freq (n)	Perc (%)
Tangibility	All equipment is available to use on me	Strongly disagree	9	4.9
		Disagree	167	90.8
		Agree	7	3.8
		Strongly agree	1	0.5
	I always appear neatly and professionally dressed	Strongly disagree	0	0
		Disagree	0	0
		Agree	146	79.3
		Strongly agree	38	20.7
	The ward is visually appealing	Strongly disagree	2	1.1
		Disagree	60	32.6
		Agree	113	61.4
		Strongly agree	9	4.9
	Posters on the wall are visually appealing	Strongly disagree	2	1.1
		Disagree	28	15.2
		Agree	139	75.5
		Strongly agree	15	8.2
Assurance	I am always quick and efficient in doing my duty	Strongly disagree	1	0.5
		Disagree	1	0.5
		Agree	154	83.7
		Strongly agree	28	15.2
	I am always courteous with Patients	Strongly disagree	1	0.5
		Disagree	1	0.5
		Agree	154	83.7
		Strongly agree	28	15.2
	I show high knowledge and answered patient's questions	Strongly disagree	0	0
		Disagree	2	1.1
		Agree	153	83.2
		Strongly agree	29	15.8
	My behaviour and actions make patients confident	Strongly disagree	0	0
		Disagree	1	0.5
		Agree	150	81.5
		Strongly agree	33	17.9
Responsiveness	I ensured patients don't wait long for care	Strongly disagree	1	0.5
		Disagree	0	0
		Agree	156	84.8
		Strongly agree	27	14.7
	I am quick to solve problems patients faced	Strongly disagree	0	0
		Disagree	1	0.5
		Agree	156	84.8
		Strongly agree	27	14.7
	There is a place to lodge patient's complaints in the ward	Strongly disagree	2	1.1
		Disagree	10	5.4
		Agree	149	81.0
		Strongly agree	23	12.5
Empathy	I gave individualised attention to patients	Strongly disagree	0	0
		Disagree	1	0.5
		Agree	153	83.2
		Strongly agree	30	16.3
	I showed i have the patients' best interest at all times	Strongly disagree	0	0
		Disagree	0	0
		Agree	153	83.2
		Strongly agree	31	16.8
	I understand patients' needs at all times	Strongly disagree	0	0
		Disagree	2	1.1
		Agree	152	82.6
		Strongly agree	30	16.3
Reliability	I always meet promises made to patients	Strongly disagree	0	0
		Disagree	2	1.1
		Agree	158	85.9
		Strongly agree	24	13.0
	I have no reports of negligence from patients	Strongly disagree	2	1.1
		Disagree	0	0
		Agree	159	86.4
		Strongly agree	23	12.5
	Adverts on the walls reflects reality of care	Strongly disagree	1	0.5
		Disagree	3	1.6
		Agree	158	85.9
		Strongly agree	22	12.0
	Patients feel safe with me always	Strongly disagree	1	0.5
		Disagree	1	0.5
		Agree	157	85.3
		Strongly agree	25	13.6

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Table 5 shows that at least three quarters of the midwives interviewed under each service dimension agreed to providing the service in that way and also that the equipment exists as needed for quality service provision.

Table 6: Assessment of Dimensions of service quality according to Midwives (n=184)

Variable	Indicator	Gap Indicator	Freq (n)	Perce (%)	Unweighted total averages
Tangibility	Poor	-8 to -15	4	2.2	-5
	Fair	0 to -7	180	97.8	
Assurance	Poor	-8 to -15	0	0	-3
	Fair	0 to -7	184	100	
Responsiveness	Poor	-8 to -15	0	0	-3
	Fair	0 to -7	184	100	
Empathy	Poor	-8 to -15	0	0	-3
	Fair	0 to -7	184	100	
Reliability	Poor	-8 to -15	0	0	-4
	Fair	0 to -7	184	100	

Table 6 shows that majority of midwives stated that they provide quality midwifery care services to clients; with responsiveness, assurance, empathy, and reliability at (184,100%). Though from the findings gap still exists between the expected and perceived quality midwifery care service provided by the midwives seen from the unweighted total average calculations ranging from -3 to -5.

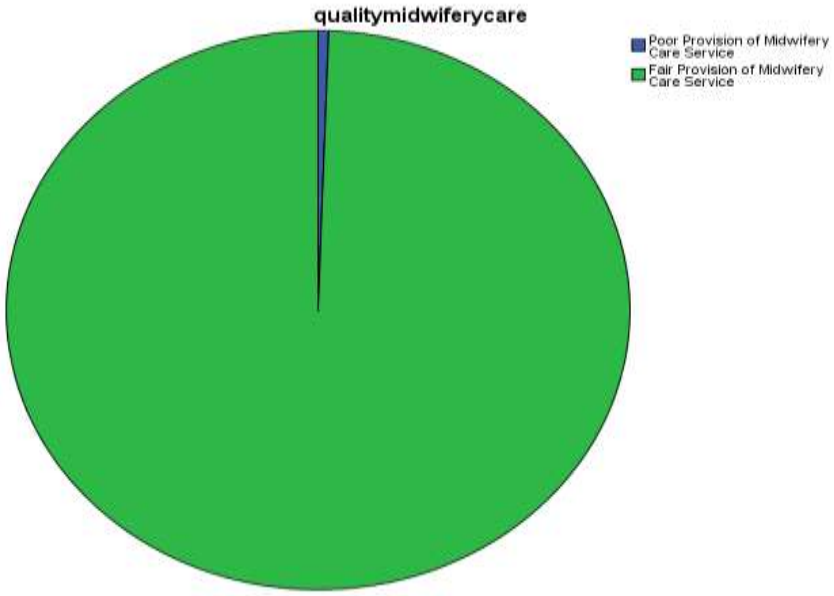

Figure 2: Quality of Midwifery Service Provision at WNBH according to Midwives (n=184)

According to figure 2, it shows that majority of midwives (183,99.5%) stated that they provide quality midwifery care service to their clients in a fair way.

Table 7: Other quality independent variables (Women- n=385; Midwives – n=184)

Variable	Indicator	Poor Midwifery Care Service Provision	Poor Midwifery Care Service Provision	P-Value
Independent Variables				
For Women				
Tangibility	Poor	284	64	0.002
	Fair	37	0	
Assurance	Poor	208	64	0.000
	Fair	113	0	
Responsiveness	Poor	295	64	0.012
	Fair	26	0	
Empathy	Poor	311	64	0.380
	Fair	10	0	
Reliability	Poor	187	64	0.000
	Fair	134	0	
For Midwives				
Tangibility	Poor	1	179	1.000
	Fair	0	4	
Assurance	Poor	0	0	N/A
	Fair	184	0	
Responsiveness	Poor	0	0	N/A
	Fair	184	0	
Empathy	Poor	0	0	N/A
	Fair	184	0	
Reliability	Poor	0	0	N/A
	Fair	184	0	

Table 7 highlighted that in women there was a statistical significance between Tangibility (p-0.002), Assurance (p-0.000), Responsiveness (p-0.012) and Reliability (p-0.000) and the women's perception of provision level of quality midwifery care service by midwives. On the other hand, it was not so for midwives as the findings for these dimensions among midwives where contestant and therefore chi-square/fisher's exact test could not be done.

Discussion

In the health care industry, quality service provision can be loosely known as the level to which the service increases the probability of wanted well-being of populations and individuals (WHO, 2024). Additionally, a range of dimensions and methodologies may be used to quantify quality, further concentrating on different interconnected elements of the phenomenon being studied. In fact, the current investigation discovered that every participant had concurred that quality is crucial for the delivery of midwifery services. This is a significant discovery as quality issues in healthcare have been shown to benefit all parties involved and to have a significant impact on patient satisfaction (Webb, 2024). In contrast to a research by Goshu et al. (2018), which found that less than 35% of midwives reported that they lacked proper equipment in their work places, the study found that the majority of the women participants reported that equipment was readily available.

When assessing assurance on the modified SERVQUAL scale, built on the premise of the expectancy – disconfirmation paradigm (Shukla et al, 2023), the current study found that more than half of the women felt that midwives were quick and efficient and that their actions made patients confident in their service. This finding contrasted sharply with reports from women accessing midwifery care services who had reported a contrary attitude. Additionally, this study

had findings that painted a picture that some women did not feel safe in the presence of midwives. Furthermore, the majority of women disagreed on all the statements under the responsiveness dimension. The perceived lack of responsiveness from midwives could be attributed to the fact that midwives have a larger number of patients to attend to on a given day, with added reported poor working conditions (Carvajal et al, 2023).

Additional research revealed that over 50% of the women disapproved of the notion that midwives guarantee short wait times for care, promptly address patients' concerns, or provide spaces for patients to register their grievances at the hospital. The high patient load cited in some literature papers such as in Carvajal et al, (2023)'s systematic review paper on global midwives' working conditions, where it was reported to be varied and not completely easy, could be the cause for these short comings. This could have led to why a good number of patients worryingly disagreed to feeling safe with the midwife always.

Women who feel unsafe around medical staff may have difficulties seeking care from the facility or asking the midwife for assistance, which might result in complications and a rise in maternal deaths from preventable reasons (Turner et al., 2024). According to the study's findings, the majority of women thought that midwives generally provide low-quality midwifery care. The findings are consistent with the research done by Ambo (2024); however, the authors' emphasis was on providing students in tertiary education with high-quality services.

Upon utilizing the modified SERVQUAL method to gauge their level of satisfaction, a minimum of 75% of midwives acknowledged that they were able to provide high-quality midwifery care and that the necessary equipment was readily available. In stark contrast to the results of Bogren, Kaboru, and Berg (2020), who suggested that inadequate equipment was the cause of midwives' inadequate training. The fact that the two-research focused on distinct sample groups may account for the discrepancy in the results.

With full scores for the dimensions of responsiveness, assurance, empathy, and reliability, midwives claimed to provide clients with high-quality midwifery care service. However, they also acknowledged that their own standards for quality midwifery care services were not met, despite their belief that their practice is of the highest standard.

The quality service dimensions affect the level of perceived quality measure of customers accessing the services. The study findings highlighted that for women, a statistical significance exists between Tangibility, Assurance, Responsiveness and Reliability and the women's perception of provision level of quality midwifery care service by midwives. This finding is similar to that discovered by Shukri, Yajid and Tham in their study on the impact of tangibility, reliability and responsiveness on customer satisfaction in Malaysia. Additionally, Nguyen et al, (2018), also found that tangibility, responsiveness and assurance as the drivers to services provision in the food industry in the United Kingdom. In a study conducted in South Africa, on Visa Facilitation services, it was discovered contrary that reliability, responsiveness and empathy have more influence on customer satisfaction (Modiri and Mokoena, 2020). Furthermore, Nyambundi, Aliata and Odondo (2021), suggested that institutions should train employees on various aspects of tangibility.

Limitations

One of the study limitations was that some of the data was collected from midwives which could be subject to self-reporting bias which may have led to difficult for midwives to truthfully

evaluate themselves. To mitigate this limitation, the researchers ensured that midwives were aware that their data would be kept confidential. Further anonymity was ensured throughout the data collection process as no identifiers were attached to the data collected.

Implication to Research and Practice

Further research with focus on service measurement should be conducted among midwives and women. The research should be qualitative in nature which focuses on an in-depth look on actual service needs women expect from their midwives. There is need to increase education on quality service and its importance to both midwives and women.

Conclusion

There is need for Women and New Born Hospital management to emphasize quality service provision among its health care personnel, especially midwives who are the front-line workers. The hospital management should further ensure that midwives are responsive, assured, reliable and that tangibility aspects of care are put in place in order to improve service quality provision at the institution.

Future Research

A qualitative study could be conducted in order to understand the actual needs women seeking care at various reproductive health centers expect from their midwives. More research could also be done on how best service could be incorporated and highlighted during quality assessment measures in various public health hospitals could also be done. Furthermore, more hospitals both in urban and rural healthcare settings could be included in a research for extensive comparisons to be made.

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