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Evaluating Patient Satisfaction with Community Clinic Services: Evidence from Meherpur District, Bangladesh

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ABSTRACT: This study explores how satisfied patients are with the services provided by community clinics (CCs) in rural areas of Meherpur, Bangladesh. The main goals are to understand the background of the patients who use these clinics, to assess the level of patient satisfaction with the services they receive, and determine what problems exist in service delivery. Patient satisfaction was evaluated using the SERVQUAL model, which looks at five key areas: physical facilities and equipment (tangibility), dependability of service (reliability), prompt response from staff (responsiveness), trust in healthcare providers (assurance), and caring behavior (empathy). In addition, the study examined how easy it is for patients to access the clinic and whether they find treatment costs affordable. Data were collected using a purposive sampling technique through a survey of 300 patients, using structured questionnaires, and analyzed through descriptive statistics and multiple regression techniques. The results showed that all five SERVQUAL dimensions and the two extra factors—access and cost significantly influenced patients' satisfaction. Reliability was the most influential factor, followed by assurance, empathy, tangibility, responsiveness, and access. Conversely, treatment cost had a negative and significant effect, indicating that an increase of expense reduces patient satisfaction. The model's R-squared value of 0.81 confirms its robustness in explaining patient satisfaction. The study also found significant service barriers include a lack of trained doctors, inefficient nursing staff, insufficient medicine, and poor sanitation. The findings emphasize the need for better staffing, infrastructure, cost transparency, and community engagement to improve community clinics' service quality and patient outcomes in rural Bangladesh.

KEYWORDS: Community Clinic, Patients' Satisfaction, SERVQUAL Model, Reliability, Tangibility

1.0 INTRODUCTION

Community Clinics (CCs) are an important phase in improving basic healthcare in rural areas of Bangladesh. The Government of Bangladesh started this program in the late 1990s to reduce the gap in healthcare services between urban and rural populations. Now, approximately 14,000 community clinics are running across the country, providing healthcare to more than 50 million people. These clinics deliver essential services, including maternal and child healthcare, vaccinations, basic treatments, and health education. Despite their success, challenges like inadequate doctors and nurses, medicine shortages, and inconsistent service quality persist. These issues often hinder their capacity to effectively meet the healthcare needs of rural communities. Therefore, assessing patient satisfaction is critical in understanding the actual performance of community clinics from the users' perspective and identifying areas in need of improvement. This study applies the SERVQUAL model to evaluate patients' perceptions of service quality and to identify key gaps in service delivery. The findings are expected to inform evidence-based policy recommendations aimed at strengthening healthcare delivery through CCs, ensuring they continue to offer accessible, equitable, and patient-centered care to underserved populations.

1.1 Background of the Study

Bangladesh, one of the most densely populated and low-income countries in the world, continues to face challenges in providing accessible and affordable healthcare, particularly in rural areas. A significant portion of the population lives in poverty, with rural communities experiencing the most severe healthcare deficits due to limited infrastructure, inadequate medical staff, and poor access to services (Bangladesh Economic Review, 2020). In response, the Government of Bangladesh launched the Community Clinic (CC) initiative between 1996 and 2001 to strengthen primary healthcare at the village level (Pasa, 2016). These clinics were envisioned to provide affordable, accessible, and essential health services directly to village populations who previously had to

travel long distances for basic care. The original plan included establishing 18,000 CCs—13,500 newly constructed and 4,500 integrated into existing facilities. Since their official launch in 1998, these clinics have played a vital role in bridging the urban-rural healthcare gap by offering essential services such as maternal and child healthcare, family planning, immunizations, and basic treatments (Joarder et al., 2019; Mahmood et al., 2020). Over time, the network has expanded to more than 14,000 operational clinics, serving over 50 million people nationwide (BBS, 2018). They have contributed to major national goals, including the Millennium Development Goals (MDGs) and Vision 2021. Moreover, CCs have helped improve public health awareness, promote preventive care, and offer health education in marginalized communities. Despite their success, challenges such as medicine shortages, staffing gaps, outdated equipment, and inconsistent service quality remain. These issues hinder the full potential of the clinics and affect patient satisfaction. However, the government continues to invest in revitalizing the CCs through increased budget allocations and community involvement. The Community Clinic Health Assistance Trust Act has further institutionalized support for this initiative. Given their critical role, evaluating the effectiveness and user satisfaction of community clinics is essential to guide future health policy and ensure sustainable, equitable healthcare delivery in Bangladesh.

1.2 Importance of Community Clinics

Community clinics are an integral part of Bangladesh's public health infrastructure, especially for rural populations. These clinics provide frontline healthcare, including reproductive health, nutrition support, immunization, general treatment, and COVID-19 vaccinations. With the backing of legal frameworks and increased government funding—from Tk 241 crore to Tk 250 crore—CCs now also distribute 30 types of free medical supplies (BBS, 2018). Despite these positive developments, systemic issues continue to undermine clinic performance. Studies show that 93% of patients at public facilities lack access to essential medicines, while 64% pay for medication out of pocket and 85% rely on private diagnostic services, pointing to significant gaps in affordable care (BER, 2020). Moreover, challenges such as shortages of skilled healthcare workers, poor infrastructure, and irregular clinic operations remain prevalent (Nur Ullah, 2021). Addressing these issues is vital for improving the equity, efficiency, and sustainability of Bangladesh's healthcare delivery system.

1.3 Problem of the Statement

Despite their notable contributions to rural healthcare access in Bangladesh, community clinics continue to face several persistent challenges that hinder their overall effectiveness. Critical concerns include inconsistent availability of essential medicines, inefficiency among medical staff, poor infrastructure, and limited patient-centered services (Mahmood et al., 2020; Nur Ullah, 2021). Patients often report dissatisfaction with long wait times, limited diagnostic services, and the absence of medical officers (Hossain et al., 2022). Infrastructural gaps such as poor sanitation, lack of modern equipment, electricity shortages, and insufficient trained personnel further exacerbate the situation (Sultana & Tania, 2015). These shortcomings affect not only the physical health outcomes of patients but also their trust and satisfaction with public healthcare services (Andaleeb, 2001). While previous research has recognized the success of community clinics in promoting basic health awareness and primary care, there is limited empirical evidence on how effectively these clinics fulfill patients' expectations in real-world rural settings like Meherpur. Additionally, socio-demographic factors such as age, gender, education, and occupation may influence how services are perceived and accessed (Khandakar, 2014). Yet, comprehensive studies that link these factors with service quality perceptions remain scarce. Furthermore, while the government has increased investments in community clinic development, the long-term sustainability of the model depends on consistent monitoring and evaluation of patient satisfaction (Riaz et al., 2020). Therefore, this study aims to identify the service quality gaps in community clinics using the SERVQUAL model and assess patient satisfaction to provide evidence-based recommendations for policy improvements.

1.4 Objectives of the Study

The primary objective of this study is to assess patient satisfaction with community clinic (CC) services in rural Meherpur, Bangladesh. To achieve this goal, the research pursues the following specific objectives:

1. To examine the socio-demographic profiles of rural patients utilizing community clinic services.
2. To measure patient satisfaction levels using the SERVQUAL model, evaluating five service quality dimensions (tangibles, reliability, responsiveness, assurance, empathy);
3. To identify key challenges hindering service quality and propose evidence-based recommendations for improvement.

By integrating these objectives, the study aims to generate actionable insights for policymakers, healthcare administrators, and local stakeholders to enhance CC performance. The findings will contribute to strengthening primary healthcare delivery, aligning with Bangladesh's broader goals of equitable and patient-centered rural healthcare.

1.5 Significance of the Study

The significance of this study lies in its focus on evaluating patient satisfaction with community clinic services in rural Bangladesh, particularly in Meherpur district. By applying the SERVQUAL model, the research identifies the key factors that influence patients' perceptions of service quality, such as reliability, empathy, responsiveness, and affordability. These insights are essential for improving healthcare outcomes, especially among low-income rural populations who rely heavily on public health services. The integration of quantitative analysis with service quality assessment allows for a data-driven understanding of how well clinics meet community needs. This approach will help policymakers and healthcare administrators identify specific gaps in service delivery and prioritize areas for intervention. Additionally, the study highlights systemic challenges such as medicine shortages, staff inefficiency, and accessibility issues that affect patient satisfaction. Understanding these problems will aid in the formulation of targeted strategies to enhance the effectiveness of the community clinic program. The findings can also contribute to ongoing national healthcare reforms and align with broader public health goals, including Universal Health Coverage and Sustainable Development Goals. Ultimately, the study seeks to promote a more equitable, efficient, and patient-centered primary healthcare system in rural Bangladesh.

2.0 LITERATURE REVIEW

Community clinics (CCs) in Bangladesh represent a cornerstone of primary healthcare reform, aiming to improve access for rural and underserved populations. Numerous studies have explored their impact, operational dynamics, and associated challenges.

Joarder et al. (2019) conducted a nationally representative study that highlighted how CCs reduce disparities in healthcare access by increasing service utilization among low-income and rural populations. The study emphasized the clinics' role in bridging urban-rural and socioeconomic gaps. Similarly, Hossain et al. (2022) found high usage rates of CCs in Gaibandha, though noted service gaps in maternal and child healthcare.

Mahmood et al. (2020) provided qualitative insights into the operational barriers faced by CCs, including inadequate logistics, human resource shortages, and weak supervision. These findings were echoed by Nur Ullah (2021), who reported service interruptions and lack of essential medicines and personnel in rural clinics. Sultan and Tania (2015) found similar limitations in urban CCs, particularly in maternal care and facility accessibility.

Several researchers have assessed patient satisfaction using the **SERVQUAL** model. Khandakar (2014) identified factors such as reliability, assurance, and communication as key influencers of satisfaction, while Andaleeb et al. (2007) emphasized doctors' service orientation and interpersonal behavior. International comparisons by Zineldin (2006) also highlighted that staff responsiveness and patient demographics significantly shape satisfaction outcomes.

Yaya et al. (2017) showed limited awareness of CCs among rural women, with only 36.7% reporting knowledge of available services. Awareness levels were linked to education, media exposure, and geographic location, pointing to the need for targeted outreach. Public-private partnerships and community participation have been found essential for sustainability. Riaz et al. (2020) reported that effective community involvement in governance and service delivery boosted clinic performance. Barman et al. (2018) supported this, finding high service usage but highlighting corruption and medicine shortages as persistent issues.

Al Atar and Hamid (2023) conducted an in-depth empirical investigation into patient satisfaction in Omani public hospitals during the COVID-19 pandemic using the SERVQUAL model. The study findings indicated that tangibility and resource availability had no significant impact on perceived healthcare quality, while qualitative insights identified key influencers like communication, professionalism, waiting time, and cleanliness.

Olsson et al. (2022) conducted a multiple case study to explore customer expectations surrounding unattended grocery delivery services. The study emphasizes that understanding consumer expectations is essential for designing effective last-mile delivery systems in the e-grocery sector.

Ozam, Garnan, and Alqahtani (2022) conducted a comparative study to assess patient satisfaction with healthcare services in public and private hospitals in the Aseer Region of Saudi Arabia. The study found that across all measured components, the quality of care received fell below patient expectations, with public hospitals rated lower than private ones.

The literature underscores CCs' importance in expanding access and improving health equity. However, systemic weaknesses in infrastructure, staffing, and community awareness hinder their full potential. Addressing these gaps is vital to optimizing CC performance and patient satisfaction in Bangladesh's healthcare system.

2.1 Research Gap

Despite the growing body of literature on community clinics (CCs) in Bangladesh, several gaps remain unaddressed. While studies such as Joarder et al. (2019) and Mahmood et al. (2020) highlight the positive role of CCs in expanding access to primary healthcare and community-level engagement, most focus primarily on service availability and structural challenges. Few have explored the

determinants of patient satisfaction using comprehensive frameworks like SERVQUAL in rural settings, limiting our understanding of service quality from the users' perspective (Andaleeb et al., 2007; Khandakar, 2014). Moreover, research such as that by Hossain et al. (2022) and Nur Ullah (2021) has identified operational inefficiencies—such as shortages of medicines and irregular staffing—but these studies often lack quantitative assessments linking such issues to satisfaction outcomes. Additionally, although Riaz et al. (2020) emphasized community involvement and public-private partnerships, the long-term sustainability and impact of these models on healthcare quality and user trust remain insufficiently examined. Another key gap is the gendered dimension of service use, as noted by Yaya et al. (2017), who found low awareness among rural women despite the availability of maternal services. However, this line of inquiry needs further exploration to understand how service design and communication strategies affect usage across different demographic groups.

Thus, while the effectiveness and challenges of community clinics have been documented, there is limited empirical research that integrates patient perceptions, service quality dimensions, and socio-demographic factors in a unified analytical framework, especially in the rural context of Bangladesh. This study seeks to address this gap by using the SERVQUAL model to assess patient satisfaction, linking perceived service quality to structural and demographic variables.

3.0 METHODOLOGY OF THE STUDY

This chapter outlines the research methods and procedures employed to evaluate patient satisfaction with community clinic services in Meherpur District, Bangladesh. It describes the study area, sampling methods, data collection techniques, and analytical approaches used in the study.

3.1 Study Area

The study conducted in Meherpur District, specifically including three purposively selected Upazilas: Meherpur Sadar, Mujibnagar, and Gangni. Meherpur District was selected due to its representation of typical rural healthcare settings in Bangladesh, allowing for relevant insights into patient satisfaction and community clinic effectiveness.

3.2 Sample Size

The study utilized a sample size of 300 respondents drawn from Meherpur District. The participants were distributed across three purposively selected Upazilas: Meherpur Sadar, Mujibnagar, and Gangni. Specifically, respondents were selected from nine unions within these Upazilas, with 98 respondents from Meherpur Sadar (Kutubpur, Amdah, and Pirojpur unions), 96 respondents from Mujibnagar (Dariapur, Monkhali, and Baguan unions), and 106 respondents from Gangni (Kathuli, Tetulbaria, and Kazipur unions).

3.3 Sampling Technique and Methods

A combination of purposive and random sampling techniques was employed in this study. Firstly, purposive sampling was applied to select three Upazilas—Meherpur Sadar, Mujibnagar, and Gangni—due to their representativeness of typical rural healthcare settings in Bangladesh. Secondly, within these selected Upazilas, a simple random sampling method was utilized to select 300 respondents from patients actively receiving healthcare services from community clinics. Respondents were chosen randomly from each union based on their willingness to participate, primarily targeting middle-aged groups to ensure balanced representation and reduce bias.

3.4 Data Collection Method

Primary data collection was conducted using a structured questionnaire consisting of both quantitative and qualitative questions. Data collection took place from April 1 to September 1, 2024. Respondents were interviewed directly, and those who had not received services from community clinics during the study period were excluded. To strengthen the study's validity, secondary data were gathered from relevant journals, government websites, and existing literature.

3.5 Data Collection Techniques

This study utilized both primary and secondary data collection techniques. Primary data were gathered through structured questionnaires, incorporating quantitative and qualitative questions administered via face-to-face interviews. Secondary data complemented and validated the primary findings, obtained through comprehensive literature reviews, journal articles, government health reports, and relevant websites.

3.6 Data Analysis

After data collection, Microsoft Excel and SPSS was utilized to systematically organize and analyze the data, employing both descriptive statistics and regression analysis for comprehensive evaluation.

3.7 Analytical Framework

Two analytical approaches were applied in this study—descriptive analysis and regression analysis.

3.8 Descriptive Analysis

Descriptive statistics provided insights into respondents' socio-demographic characteristics, including age, sex, educational background, and occupation. The analysis summarized and classified data using frequencies, percentages, ranks, and central tendencies to illustrate relationships among variables clearly.

3.9 Theoretical Framework of SERVQUAL in Healthcare

To comprehensively assess patient satisfaction in healthcare, this study adopts the SERVQUAL model, a widely recognized framework developed by Parasuraman et al. (1988). Originally designed to measure service quality gaps between customer expectations and perceptions, SERVQUAL has been successfully adapted for healthcare by Babakus and Mangold (1992). Its five core dimensions—tangibility, reliability, responsiveness, assurance, and empathy—offer a structured approach for evaluating the quality of care from the patient's perspective. In the context of Bangladesh, Andaleeb (2001) and later Andaleeb et al. (2007) validated the SERVQUAL model, demonstrating its relevance in capturing patient expectations versus actual service delivery in both urban and rural healthcare settings. Their findings underscored significant service gaps, particularly in areas of responsiveness and assurance in public health facilities. Akter et al. (2018) further refined the model for rural Bangladesh, highlighting its adaptability to low-resource settings and its ability to capture localized service delivery issues. Recent literature from other developing countries (Rao et al., 2006; Zineldin, 2006) has also established a strong link between patient satisfaction and service quality dimensions, reinforcing the utility of SERVQUAL in similar socio-economic contexts. These studies confirm that improved service quality correlates with higher satisfaction levels, a relationship that holds particular significance for the Bangladesh healthcare system.

3.10 Factors Involved in SERVQUAL Model

To measure patient satisfaction effectively in healthcare, the SERVQUAL model offers a structured framework by assessing five core service quality dimensions—Reliability, Assurance, Tangibles, Empathy, and Responsiveness—along with two context-specific factors: Access/Availability and Treatment Cost. Each of these plays a significant role in shaping patients' perceptions and satisfaction levels in healthcare settings, particularly in Bangladesh.

- **Reliability:** Reliability reflects the ability of healthcare providers to deliver promised services accurately and dependably. In Bangladesh, perceived reliability is often undermined by delayed treatments, inconsistent care, lack of specialist availability, and unnecessary diagnostic tests. Higher reliability builds trust and directly enhances patient satisfaction.
- **Assurance:** Assurance encompasses the competence, courtesy, and trustworthiness of healthcare staff. Accurate diagnoses, clear communication, and professionalism by doctors and nurses instill confidence in patients. This dimension greatly affects patients' perceptions of safety and quality.
- **Tangibles:** Tangibles refer to the physical aspects of the healthcare environment, such as cleanliness, equipment, facility conditions and number of health care staffs. Well-maintained infrastructure and modern medical tools contribute positively to patient satisfaction by signaling quality health care.
- **Empathy:** Empathy is demonstrated through personalized care, attentive listening, and emotional support. Patients are more satisfied when they feel heard, respected, and understood by their healthcare providers.
- **Responsiveness:** Responsiveness relates to the promptness and willingness of healthcare staff to help patients. Quick service, availability of diagnostic tools, and timely access to medication are key elements that boost satisfaction.
- **Access:** Easy access to doctors, nurses, and hospital facilities also shapes satisfaction. When healthcare services are geographically and physically accessible, with adequate beds and staff, patient contentment rises.
- **Treatment Cost:** Perceived affordability significantly influences satisfaction. Although public hospitals offer basic services free of charge, hidden costs (like medicine and lab tests) burden patients. Lowering out-of-pocket expenses increases satisfaction, especially among low-income populations.

This study uses regression analysis to quantify the impact of these factors on overall patient satisfaction, providing actionable insights for healthcare policy and management in Bangladesh.

3.11 Regression Model (SERVQUAL Model) Formation

A multiple regression model was employed to quantitatively assess the influence of various independent variables on patient satisfaction. The regression model used in this research is represented by the following equation:

$$Y_i = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + U_i \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

The impact of various factors on patient satisfaction has been analyzed using a linear multiple regression model, which assesses how multiple independent variables collectively affect patient satisfaction in a linear relationship. Transforming this model into logarithmic form yields:

$$\mathrm{LnY_i} = \beta_o + \beta_1 \mathrm{LnX_1} + \beta_2 \mathrm{LnX_2} + \beta_3 \mathrm{LnX_3} + \beta_4 \mathrm{LnX_4} + \beta_5 \mathrm{LnX_5} + \beta_6 \mathrm{LnX_6} + \beta_7 \mathrm{LnX_7} + \in_i \ldots\ldots (2)$$

Where,

Yi = Patients Satisfaction

$\mathrm{X_1}$= Reliability

$\mathrm{X_2}$= Assurance

$\mathrm{X_3}$= Tangible

$\mathrm{X_4}$= Empathy

$\mathrm{X_5}$= Access

$\mathrm{X_6}$= Responsiveness

$\mathrm{X_7}$= Treatment Cost

β_0= Intercept

$\beta_i = \beta_1$ to β_7 are coefficients,

This model was used to identify the statistically significant factors influencing patient satisfaction, helping provide actionable insights for healthcare service improvements.

4.0 RESULTS AND DISCUSSION

The results and discussion section presents key findings of the study, organized under three main themes. These include an analysis of patients' socio-demographic characteristics, the SERVQUAL model regression results, and the major problems identified in community clinic services.

4.1 Identification of Socio-demographic Characteristics of the Patients/Respondents

The socio-demographic characteristics of the respondents influence the total satisfaction level of patients, which means that if the socio-economic characteristics are good, then the patient's satisfaction increases or otherwise not. The table displays the socio-demographic characteristics of the respondents in the study area, including sex, age, education and occupation.

Table 4.1: Socio-demographic Characteristics of the Respondents (n=300)

Socio-Demographic Characteristics	Frequency	Percentage (%)
Sex		
Male	84	28
Female	216	72
Age (Years)		
15-30	138	46
31-50	114	38
51-above	48	16
Education		
0	66	22
1-5	126	42
6-10	90	30
11-Above	18	6
Occupation		
Housewife	168	56
Farmer	54	18
Day Labor	36	12
Others	42	14

Table 4.1 shows that the majority of respondents, about 72%, are female, whereas only 28% belong to the male group. The table also represents that almost 46% of the sample group was between the ages of 15 and 30, 38% were between the ages of 31 and 50, and 16% were above 50. Among the respondents, around 22% of all respondents were illiterate, 42% of respondents were in the education group up to 5, 30% were in the education group 6 to 10, and only 6% were in the education group 11 and above. The sample respondents from the study area are engaged in various occupations, including housewives, farming, day labor, and others. The majority of respondents (56%) are housewives and only a smaller proportion of respondents are involved in agriculture, service, or other occupations. As shown in the table above, 18% of respondents are farmers, 12% are day laborers, and 14% are engaged in other forms of employment.

4.2 Estimation of SERVQUAL Model

In this section, patient satisfaction is evaluated through a multiple regression model based on the SERVQUAL framework. Multiple explanatory variables representing service quality dimensions are incorporated to systematically investigate their impact on patient satisfaction. The outcomes of this regression analysis, along with a detailed explanation of how each factor influences patient satisfaction, are presented in the table below.

Table 4.2: Result of SERVQUAL Model

Explanatory Variables	Coefficients	Std. Error	t-Statistic	p-value
Constant	0.850	0.507	1.676	0.119
Reliability	0.483*	0.099	3.178	0.007
Assurance	0.315*	0.102	3.088	0.002
Tangibles	0.219*	0.098	2.235	0.000
Empathy	0.268*	0.095	2.821	0.005
Access	0.192*	0.071	2.704	0.008
Responsiveness	0.211*	0.086	2.453	0.015
Treatment cost	-0.245*	0.064	-3.828	0.000
F Value	37.89			
R-Squared	0.81			
Dependent variable: Patients' Satisfaction Number of observations (N)=300 *Significant at 1%				

Table 4.2 presents the results of the SERVQUAL model estimation, offering valuable insights into the key factors that influence patient satisfaction with community clinic services in rural Bangladesh. The model explains a substantial portion of the variation in satisfaction, as indicated by the high R-squared value of **0.81**, suggesting that 81% of the variability in patient satisfaction is explained by the included service quality dimensions and cost factors. The **F-statistic of 37.89** confirms the overall statistical significance of the model at the 1% level. Among the explanatory variables, **reliability** ($\beta = 0.483$, $p < 0.01$) emerges as the most influential factor. This indicates that when patients perceive healthcare providers as dependable and consistent in delivering promised services, their satisfaction significantly increases. **Assurance** ($\beta = 0.315$, $p < 0.01$) also has a strong positive impact, highlighting the importance of staff competence, professionalism, and the ability to instill trust in patients. **Tangibles**, such as cleanliness and availability of equipment, also significantly influence satisfaction ($\beta = 0.219$, $p < 0.01$), suggesting that physical infrastructure continues to shape patient perceptions of quality care. **Empathy** ($\beta = 0.268$, $p < 0.01$) is another key determinant, reflecting that personalized attention and compassionate care positively influence how patients evaluate their clinic experience. Interestingly, **access** ($\beta = 0.192$, $p < 0.01$) and **responsiveness** ($\beta = 0.211$, $p < 0.05$) were found to be statistically significant, underscoring the importance of timely services and physical accessibility to healthcare facilities in improving satisfaction levels. These findings emphasize that service availability and quick response from staff are essential in rural settings, where delays and inaccessibility can be more detrimental. On the other hand, **treatment cost** negatively affects satisfaction ($\beta = -0.245$, $p < 0.01$), suggesting that out-of-pocket expenses—despite the provision of free basic services—remain a concern for rural patients. This finding highlights the need for better financial protection and transparency in service delivery. Overall, the model supports the applicability of the SERVQUAL framework in evaluating healthcare quality in rural Bangladesh and offers actionable insights for policymakers to enhance service delivery through targeted improvements in reliability, empathy, access, and cost-efficiency.

4.3 Problems in Community Clinic services

Community clinics are a globally recognized healthcare initiative providing vital services to rural and marginalized populations in Bangladesh. Despite their success, challenges such as shortages of trained medical staff and inadequate medicine supply significantly affect patient satisfaction. This section identifies and analyzes the key factors contributing to these issues, based on responses from residents of rural areas in Meherpur district, presented in the table below.

Table 4.3: Problems of Community Clinic services

No.	Problems of Community Clinic	Frequency	Percentage	Rank
1	Lack of trained doctor	270	90	1
2	Inefficient Nurses	246	82	2
3	Insufficient medicine	240	80	3
4	Sanitation Problems	216	72	4

5	Outdated Equipment	180	60	5
6	Electricity Shortages	162	54	6
7	Problems of transportation	120	40	7

According to the table 4.3, approximately 90% of respondents identified the shortage of skilled doctors as the most critical problem facing community clinics in the study region, as patients are dissatisfied with the lack of quality healthcare provided by professional physicians. Secondly, 82% cited inefficiency among nurses as a key issue, noting that current clinic nurses lack proper training, which impacts patient care negatively. Additionally, around 80% of respondents reported insufficient medicine supply as a significant concern, stating that the medications provided do not adequately meet patient needs. Sanitation is another pressing issue, with 72% of respondents highlighting inadequate sanitary facilities in community clinics. Furthermore, nearly 60% noted that outdated medical equipment contributes to difficulties, as these machines often cannot be used effectively for patient care. Electricity shortages were mentioned by 54% as a notable challenge, while 24% pointed to inadequate rural transportation systems as a further obstacle to accessing healthcare.

5.0 RECOMMENDATIONS

Based on the findings presented in the results section, the following recommendations are proposed to improve patient satisfaction and enhance the effectiveness of community clinics (CCs) in rural Bangladesh:

- **Recruit and Train Skilled Medical Staff:** Address the shortage of trained doctors and ensure regular in-service training for nurses to improve the reliability and assurance of healthcare services.
- **Ensure Consistent Medicine Supply:** Strengthen the medicine procurement and distribution system to eliminate frequent shortages and ensure availability of essential drugs in all community clinics.
- **Upgrade Physical Infrastructure:** Improve the tangibles of CCs by maintaining cleanliness, upgrading outdated medical equipment, and ensuring the presence of basic diagnostic tools.
- **Enhance Staff Responsiveness:** Train healthcare staff on patient interaction and responsiveness to ensure prompt service delivery and timely attention to patient needs.
- **Improve Accessibility:** Expand transportation facilities and ensure CCs are physically accessible, particularly for elderly, disabled, and remote rural patients.
- **Control Hidden Costs:** Increase transparency in service costs and reduce out-of-pocket expenses by expanding free service coverage and monitoring unofficial charges.
- **Promote Empathetic Care:** Encourage healthcare providers to offer personalized, respectful, and compassionate care to build trust and increase satisfaction.
- **Address Sanitation and Utility Issues:** Provide proper sanitation facilities and reliable electricity in all clinics to create a hygienic and functional healthcare environment.
- **Strengthen Monitoring and Supervision:** Establish a regular monitoring system to evaluate service quality and staff performance, addressing issues proactively.
- **Foster Community Engagement:** Increase community participation in clinic management to improve accountability, awareness, and alignment with local healthcare needs.

These recommendations aim to make community clinics more efficient, patient-centered, and accessible, aligning with Bangladesh's goals of achieving universal primary healthcare.

6.0 CONCLUSION

This study assessed patient satisfaction with community clinic (CC) services in rural Meherpur, Bangladesh, using the SERVQUAL model. Findings reveal that service quality dimensions such as reliability, assurance, tangibles, empathy, responsiveness, and access significantly influence patient satisfaction. Among these, reliability and assurance emerged as the most critical factors, underscoring the need for consistent and competent healthcare delivery. Tangible factors like cleanliness and equipment availability also strongly shaped perceptions of care quality. Moreover, the study found that high out-of-pocket costs negatively impact satisfaction, despite clinics offering "free" services. Regression analysis confirmed the robustness of the SERVQUAL framework in explaining satisfaction variations, with an R-squared value of 0.81. Additionally, major service delivery problems were identified, including a lack of trained doctors, insufficient medicine, and poor sanitation, all of which hinder patient trust and clinic utilization. These challenges highlight the pressing need for investment in infrastructure, staff training, and medical supply chains. To improve rural healthcare, policies must focus on enhancing service quality, reducing hidden costs, and addressing

systemic operational gaps. Overall, strengthening the community clinic model through targeted interventions will be crucial in advancing equitable, patient-centered healthcare in Bangladesh.

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