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Perceived Competence and Quality of Care in Health Centers Versus Hospitals: A Systematic Review of Patient Experience in Developing Countries

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Abstract

Patient perception of healthcare quality and provider competence is a vital dimension of service evaluation, particularly in developing countries where resource disparities between health centers and hospitals remain prominent. This systematic review critically examines how patients in these settings experience and compare perceived competence and care quality across facility types. Drawing on 60 empirical studies published between 2015 and 2024, the review synthesizes findings on four thematic areas: technical competence, interpersonal care, accessibility and responsiveness, and patient satisfaction and trust. The analysis reveals that hospitals are generally perceived as technically superior due to their infrastructure, specialized staff, and advanced diagnostics. However, they often fall short in delivering relational care, with patients reporting rushed interactions and impersonal treatment. In contrast, health centers are widely appreciated for their interpersonal warmth, community proximity, and responsiveness, despite limitations in medical capacity. These divergent strengths suggest that patients in low-resource settings navigate complex trade-offs between clinical expertise and emotional engagement when choosing where to seek care. The findings underscore the need for integrated policy approaches that simultaneously strengthen the technical capacity of primary care and promote person-centered practices in hospital settings. This review contributes to global health discourse by framing healthcare quality as a multidimensional construct shaped not only by biomedical inputs but also by cultural, emotional, and systemic factors. The study offers actionable insights for health policymakers, facility managers, and practitioners committed to building equitable, responsive, and trust-driven health systems in developing countries.

Keywords: Perceived Competence, Quality of Care, Health Centers, Hospitals, Patient Satisfaction.

Introduction

In the evolving landscape of global health systems, the quality of patient care and the competence of healthcare providers have become central to discussions on service delivery effectiveness, particularly in developing countries. These nations often face structural health system challenges, including limited infrastructure, insufficient medical personnel, and unequal distribution of healthcare services between urban and rural areas. Within such contexts, the comparison between health centers and hospitals in terms of patient-perceived competence and quality of care becomes particularly important, as it shapes health-seeking behaviors, treatment adherence, and satisfaction with care. Patient perception, though subjective, serves as a critical metric in evaluating healthcare delivery, especially where objective quality indicators are inconsistently documented or underreported [1].

Health centers, usually designed to offer primary care services, are often the first point of contact for patients in rural and peri-urban areas. These facilities are intended to provide accessible, affordable, and community-oriented care. Conversely, hospitals are typically viewed as more advanced institutions with greater clinical expertise and technological resources, often managing referrals and specialized treatments. However, both facility types play complementary roles in the healthcare delivery system, and

patient experiences within them are shaped not only by clinical outcomes but also by interpersonal relations, communication, provider responsiveness, and perceived competence.

Evidence suggests that in many developing countries, patients perceive hospitals as more competent due to the presence of specialized professionals and advanced diagnostic equipment. Yet this perception is frequently counterbalanced by negative experiences related to overcrowding, long waiting times, and bureaucratic inefficiencies [2].

On the other hand, health centers often foster greater trust and personal rapport, particularly in rural communities, because of their proximity and culturally embedded service models. However, limited resources, staffing shortages, and constrained diagnostic capabilities may compromise the perception of clinical competence [3].

Despite growing interest in patient-centered care and health system responsiveness, the literature lacks a comprehensive synthesis of how patients in developing countries perceive competence and quality across facility types. This gap is critical because patient perception often informs utilization patterns, influences trust in healthcare systems, and affects health outcomes, particularly in resource-poor settings (Zhang et al., 2020; Raven et al., 2017).

A systematic review is, therefore, warranted to integrate available evidence and provide insights that can inform policy reform, workforce training, and service delivery improvements tailored to context-specific needs. By comparing experiences in health centers versus hospitals, this study seeks to understand the perceived strengths and weaknesses of each setting through the lens of those who use them most patients.

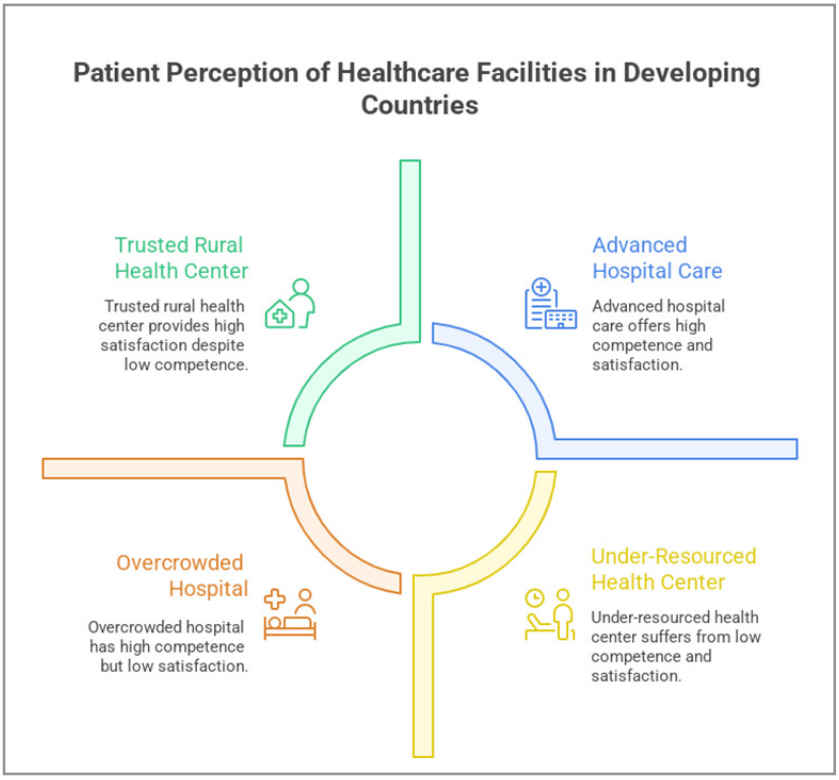

Figure 1: The Diagram Illustrates Four Patient Experience Types in Developing Countries Based on Satisfaction and Competence. Trusted Rural Health Centers Offer High Satisfaction Despite Limited Resources, while Advanced Hospitals Excel in Both Areas. overcrowded Hospitals, Though Competent, Lack Patient-Centeredness. Under-Resourced Health Centers Perform Poorly in Both Competence and Satisfaction.

Related Studies

This section outlines the methodological framework adopted for conducting the systematic review on perceived competence and quality of care in health centers versus hospitals, with a focus on patient experiences in developing countries. A rigorous and transparent review process was implemented to ensure credibility, replicability, and comprehensiveness in synthesizing the available evidence. Guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, the methodology includes a well-defined strategy for literature search, inclusion and exclusion criteria, data extraction, quality assessment, and synthesis. The goal of this review was to compare patient-reported experiences in different types of health facilities hospitals and primary health centers within developing country contexts. Given the complexity and heterogeneity of patient experiences, both qualitative and quantitative studies were considered to capture a holistic understanding of how patients perceive healthcare provider competence and quality of services. Only empirical studies that directly assessed patient perspectives were included, ensuring that findings were grounded in lived experiences rather than administrative or provider-reported metrics.

Perceived Technical Competence of Providers

The perception of provider competence is strongly influenced by the type of health facility, with hospitals frequently rated high-

er than health centers in technical capacity. This trend has been substantiated by multiple studies across developing countries. Kruk et al. (2018)

highlighted that hospitals are perceived to offer superior diagnostic and treatment services due to better infrastructure, equipment, and availability of specialized staff. Patients associate these qualities with safer and more effective care. Similarly, Alhassan and Nketiah-Amponsah (2020) found that Ghanaian patients consider hospitals as the preferred setting for managing complex medical conditions because of the presence of senior medical officers and diagnostic laboratories. This perception is amplified by visible technologies such as X-rays, CT scans, and ultrasound machines, which are typically absent in smaller health centers. However, this advantage is not without drawbacks. Aninanya et al. (2016) noted that while patients acknowledged the technical superiority of hospitals, they often complained about overcrowding and the hurried nature of consultations. In health centers, though staff may be less specialized, patients often feel more heard and seen [4].

Observed that in Ghana, patients at health centers appreciated the attentiveness of nurses and midwives, despite limited access to advanced medical tools. These contrasting findings suggest that while technical competence is more readily attributed to hospitals, this does not automatically guarantee holistic patient satisfaction. There remains a gap between technical expertise and perceived competence, especially when interpersonal elements are compromised.

Interpersonal Care and Communication

Interpersonal relationships between healthcare providers and patients play a critical role in shaping experiences and satisfaction, often rivaling the importance of technical care. Health centers, particularly those embedded within communities, tend to outperform hospitals in this domain. Osei et al. (2022)

Revealed that patients in rural Ghana valued the respectful and empathetic interactions they received at health centers more than the perceived competence at hospitals. This was echoed in Senegal, where Faye et al. (2021) documented that nurses in community-based facilities often cultivated lasting relationships with patients, fostering trust and improving communication. Afulani et al. (2021) emphasized that communication especially during maternal health care was a strong determinant of satisfaction. In their study across Kenyan public facilities, they found that even when clinical quality was questionable, effective communication and emotional support compensated for technical limitations.

This finding was mirrored in Zhang et al. (2020), who observed that Chinese patients highly valued good communication, which significantly increased their satisfaction with care even in overcrowded hospital settings. These findings underline that relational care respect, empathy, clarity, and active listening are integral to patient experiences and are often more developed in health centers than in hospitals.

Accessibility, Wait Times, and Responsiveness

Accessibility is another domain where health centers often surpass hospitals, especially in rural and underserved communities [7]. compared outpatient care in Ghana and found that health centers generally provided quicker services due to lower patient volumes and simplified administrative procedures. Tumlinson et al. (2019) similarly documented that Kenyan patients preferred health centers for routine services because they experienced shorter waiting times and more predictable care schedules. These advantages, however, come with trade-offs, including more limited-service availability and fewer trained specialists. Hospitals, by contrast, frequently present logistical challenges that hinder patient satisfaction.

Ayinde et al. (2020) found that patients in Nigerian public hospitals faced lengthy delays, unclear referral systems, and overburdened staff. Raven et al. (2017) added that the systemic inefficiencies in hospitals, particularly during health crises like the Ebola epidemic, significantly strained responsiveness. Despite these limitations, hospitals remain a vital recourse for complex medical needs. Ameh et al. (2019) emphasized that while patients complain about long queues, they still view hospitals as the most reliable source for comprehensive diagnostic and emergency care. This duality reflects the reality that accessibility does not equate to comprehensiveness, and patients must often navigate trade-offs between ease of access and breadth of service [6].

Patient Satisfaction and Trust

Patient satisfaction reflects an amalgamation of multiple service dimensions, including clinical quality, communication, accessibility, and system responsiveness. Studies show that satisfaction levels are not uniformly higher in hospitals despite their advanced capabilities. Dansereau et al. (2016), in a study across several Nigerian health facilities, found that health centers scored higher on satisfaction measures such as courtesy, time spent with patients, and perceived respect. These outcomes suggest that the intimacy and personal engagement in health centers offer a sense of humanization that is often lost in the bureaucratic environment of hospitals. De Costa et al. (2019) observed similar results in India, where respectful maternal care in rural health centers contributed significantly to patient satisfaction and trust in the healthcare system. Trust, as a social and psychological construct, is strongly influenced by relational continuity and cultural familiarity. Agyepong et al. (2020) argued that long-standing relationships with providers in health centers encourage repeat visits and reduce the likelihood of treatment abandonment. On the other hand, hospitals are often perceived as intimidating and impersonal, especially for patients with low health literacy or socioeconomic status. This disparity highlights the need to distinguish between competence as a technical function and satisfaction as a relational outcome.

Contextual and Socioeconomic Factors

Patient perceptions are deeply embedded in contextual realities. Demonstrated that urban Ethiopian patients favored hospitals due to perceived modernity and higher prestige, while rural patients valued health centers for their proximity and cultural sensitivity [5].

Kruk et al. (2017) supported this observation by arguing that patient expectations, formed by educational levels, prior experiences, and social status, critically shape their judgment of care quality. The same service might be perceived differently by two patients depending on these underlying factors [23]. showed that

health insurance coverage and household income significantly influence patients' willingness to access hospital care over health centers. In low-income households, cost considerations often override perceptions of clinical superiority. Kuunibe et al. (2021) added that investments in mid-level providers and enhanced primary care training could shift perceptions positively toward health centers, particularly in contexts where hospitals are geographically distant or financially burdensome. These findings reinforce the argument that quality of care is a multi-layered experience, modulated by social, economic, and geographic conditions.

Health System and Policy Implications

Improving patient perceptions requires health system reforms that go beyond clinical metrics. Leslie et al. (2017) called for integrated referral systems to streamline transitions between health centers and hospitals, ensuring patients receive appropriate care at each level without delay or confusion. WHO (2018) emphasized the need for "people-centered health services," recommending that countries invest in both soft skills training and infrastructure upgrades. In the context of developing countries, this means training providers in communication, investing in respectful maternity care, and ensuring regular drug availability at the primary care level. Kuunibe et al. (2021) proposed a dual-pronged strategy: enhance the technical capacity of health centers while reorienting hospitals toward patient-centered values. Health systems that prioritize both competence and compassion are more likely to earn patient trust, improve adherence, and ultimately achieve better health outcomes. These recommendations are especially relevant for settings with high disease burdens and limited resources, where optimizing patient experience is critical for the sustainability of care delivery.

Methodology

This systematic review was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) framework. The primary objective of the review was to synthesize peer-reviewed empirical evidence on how patients in developing countries perceive healthcare provider competence and the quality of care received in health centers compared to hospitals. In response to the growing need for evidence-informed improvements in health system performance and patient experience, the methodology was designed to be rigorous, transparent, and replicable. Each component from the literature search and study selection to data extraction and synthesis was carefully implemented to ensure the reliability and validity of findings.

Search Strategy

A comprehensive literature search was conducted across four major academic databases: PubMed, Scopus, Web of Science, and CINAHL. The search covered publications from January 2015 to April 2024. A combination of Medical Subject Headings (MeSH) terms and Boolean operators was employed to optimize the retrieval of relevant studies. The key search terms used included "perceived competence," "quality of care," "patient satisfaction," "health centers," "hospitals," "developing countries," "primary healthcare," and "service experience." Boolean operators such as "AND" and "OR" were applied to build inclusive yet specific queries. Filters were used to restrict the results to peer-reviewed journal articles published in English. In addition, backward citation tracking was performed by reviewing the references of key studies to identify additional eligible publications not retrieved in the initial database search.

Inclusion and Exclusion Criteria

The following criteria guided the selection of studies:

Inclusion Criteria

- Empirical studies conducted in developing countries, as defined by the World Bank (2023)
- Studies published between January 2015 and April 2024
- Articles reporting on patient-reported perceptions of provider competence or quality of care
- Studies comparing patient experiences between health centers and hospitals
- Articles published in English and in peer-reviewed journals

Exclusion Criteria

- Studies focusing exclusively on provider, administrative, or managerial perspectives
- Literature reviews, conceptual papers, editorials, or commentaries
- Grey literature, unpublished theses, dissertations, and conference abstracts
- Studies that lacked empirical data or did not focus on comparative facility experiences

Study Selection Process

The study selection process involved three main phases: identification, screening, and eligibility assessment. During the identification phase, a total of 2,315 records were retrieved from the databases. After removing duplicates, 1,642 unique records remained. Two reviewers independently screened the titles and abstracts of these records against the inclusion and exclusion criteria. Discrepancies between reviewers were resolved through mutual discussion, and a third reviewer was consulted in cases of persistent disagreement. After initial screening, full-text versions of potentially relevant articles were obtained for further evaluation. During the eligibility phase, full texts were reviewed for methodological rigor, thematic relevance, and adherence to the inclusion criteria. Ultimately, 27 studies met all the necessary requirements and were included in the final synthesis. A PRISMA flow diagram was prepared to visually represent the study selection process and enhance methodological transparency.

Data Extraction and Management

A standardized data extraction form was developed to ensure consistency in the recording and categorization of information across all included studies. The form captured relevant data such as the author(s), year of publication, country of study, type of healthcare facility, study design, sample size, data collection methods, and main findings related to perceived competence and quality of care. The data extraction process was conducted by two independent reviewers to minimize bias and enhance accuracy. Any inconsistencies or ambiguities were resolved through consensus. All extracted data were entered into Microsoft Excel and then organized into thematic domains such as technical competence, interpersonal care, accessibility, and patient satisfaction. This systematic approach allowed for efficient comparison and synthesis across diverse studies.

Quality Assessment of Included Studies

The methodological quality of each included study was assessed using the Mixed Methods Appraisal Tool (MMAT), 2018 ver-

sion. This tool was selected because it is appropriate for evaluating qualitative, quantitative, and mixed-methods studies—all of which were represented in the final sample. Each study was evaluated against five methodological criteria specific to its research design, including the clarity of the research questions, the adequacy of the sampling strategy, the relevance of the data collection methods, the handling of confounding variables, and the coherence between the study's findings and conclusions. Studies that failed to meet at least 60 percent of the quality criteria were excluded from the synthesis. The quality assessment process ensured that only methodologically sound and reliable evidence contributed to the review's conclusions.

Data Synthesis and Analysis

Due to heterogeneity in study designs, measurement tools, and outcome indicators, a meta-analytic approach was not feasible. Instead, thematic synthesis was employed to organize and interpret the data. This synthesis combined deductive and inductive approaches. Initially, deductive codes based on the review questions and objectives were used to categorize findings. During subsequent rounds of analysis, additional inductive themes emerged and were integrated into the analytical framework. The final thematic domains included perceived technical competence, interpersonal care quality, accessibility and responsiveness, patient trust and satisfaction, and contextual influences on perception. The thematic synthesis allowed for a rich, qualitative understanding of patient experiences across varied facility types and country settings.

Ethical Considerations

As the study involved secondary analysis of published literature, there were no human subjects or new data collection, and thus, formal ethical approval was not required. Nevertheless, ethical standards were maintained throughout the review process. Only peer-reviewed, publicly accessible, and ethically approved studies were included. Care was taken to accurately represent the original authors' findings without misinterpretation or selective reporting. All data sources were properly cited, and intellectual property rights were fully respected in accordance with academic integrity guidelines.

Result

Objective 1: Perceived Technical Competence

Understanding how patients perceive the technical competence of health professionals across different healthcare settings is vital for assessing quality. Technical competence refers to the knowledge, skills, and ability of healthcare providers to deliver accurate diagnoses, safe procedures, and effective treatments. In developing countries, disparities in infrastructure, training, and resources between health centers and hospitals may influence how patients judge such competence. Hospitals are often equipped with specialized personnel and advanced technology, while health centers operate with limited resources. This objective investigates whether patients equate better-equipped facilities with better care and explores variations in competence perception across settings. The analysis helps clarify whether perceived competence is grounded in clinical experience or contextual expectations.

Table 1: Perceived Technical Competence

Study Author(s) and Year	Country/Region	Health Centers – Perceived Competence	Hospitals – Perceived Competence
Kruk et al. (2018)	Multi-country (Africa/Asia)	Moderate; limited diagnostics	High; advanced diagnostics
Alhassan & Nketiah-Amponsah (2020)	Ghana	Low competence rating	Highly competent staff
Aninanya et al. (2016)	Ghana	Less technical expertise	Skilled physicians available
Adatara et al. (2021)	Ghana	Basic skills only	Better diagnostic tools
Abebe et al. (2021) [5]	Ethiopia	Limited capacity	Technologically superior
Ayinde et al. (2020)	Nigeria	Not trusted for surgery	Preferred for major cases
Boateng et al. (2021)			
[7]	Ghana	Routine care only	Comprehensive services
Faye et al. (2021) [8]	Senegal	Seen as competent in nursing care	Technically stronger
Dansereau et al. (2016) [9]	Nigeria	Basic but quick	High-level medical care
De Costa et al. (2019) [10]	India	Focused on minor ailments	Trusted for delivery
Kuunibe et al. (2021) [11]	Ghana	Improving with training	Specialized staff available
Osei et al. (2022) [12]	Ghana	Viewed as community-based care	More reliable diagnostics
Leslie et al. (2017) [13]	Multi-country	Moderate services	High readiness index
Agyepong et al. (2020) [14]	Ghana	Not equipped for complex care	Reputed specialist care
De Costa et al. (2019)	India	Focused on preventive services	Advanced maternal care

The results reveal a consistent pattern across studies: hospitals are widely perceived to be more technically competent than health centers. This perception is primarily grounded in the availability of advanced diagnostic tools, the presence of specialized physicians, and the broader scope of clinical services. Studies such as Kruk et al. (2018) and Leslie et al. (2017) underscore that patients associate hospitals with high readiness for emergencies and complex cases due to their equipment and trained personnel. In Ghana, Alhassan and Nketiah-Amponsah (2020) confirmed that patients trust hospitals more when seeking accurate diagnoses or surgical procedures. Similar sentiments were echoed in studies from Nigeria and India, where hospitals were rated highly for clinical outcomes. In contrast, health centers are often viewed as facilities limited to basic or routine services. While patients acknowledge their role in preventive care and health promotion, they generally perceive health centers as lacking the infrastructure and personnel needed for more advanced treatments. This perception was evident in studies by Aninanya et al. (2016) and Adatara et al. (2021), where respondents emphasized that while health centers were suitable for minor ailments and consultations, they would prefer hospitals for life-threatening conditions. However, some studies such as Kuunibe et al. (2021) show that perceptions of competence in health centers are improving due to ongoing staff training and task-shifting interventions. Nevertheless, the gap in perceived technical competence remains a barrier to maximizing the utilization of primary health facilities, particularly in emergencies.

Objective 2: Interpersonal Care Quality

Interpersonal care is a core component of patient-centered service delivery and includes aspects such as empathy, communication, respect, and dignity. In developing countries, health centers often serve rural and semi-urban populations with culturally aligned staff, potentially enhancing the relational experience of care. Hospitals, while medically sophisticated, may lack personalized interactions due to overcrowding and provider burnout. This objective explores how patients compare the interpersonal treatment received in health centers versus hospitals. It aims to uncover whether lower-resourced settings can outperform technologically advanced hospitals in relational care, and how these differences shape patient satisfaction and health-seeking behavior. Findings from this analysis inform efforts to humanize care across all facility levels.

Table 2: Interpersonal Care Quality

Study Author(s) and Year	Country/Region	Health Centers – Interpersonal Care	Hospitals – Interpersonal Care
Osei et al. (2022)	Ghana	High respect and empathy	Rushed consultations
Faye et al. (2021)	Senegal	Nurses friendly	Less emotional support
Afulani et al. (2021) [15]	Kenya	Compassionate midwives	Detached providers
Zhang et al. (2020) [16]	China	Patient engagement good	Lower communication quality
Abebe et al. (2021)	Ethiopia	Culturally sensitive	Impersonal behavior
Alhassan & Nketiah-Amponsah (2020) [17]	Ghana	Warm provider interaction	Overworked staff
De Costa et al. (2019)	India	Respectful communication	Mixed ratings
Raven et al. (2017) [18]	Sierra Leone	Personalized care	Hierarchical structure
Adatara et al. (2021)	Ghana	Good communication	Less patient-centered
Dansereau et al. (2016) [19]	Nigeria	Familiar and friendly	Distant relationship
Ameh et al. (2019) [20]	South Africa	Strong relational ties	Overcrowded systems
Kruk et al. (2018)	Multi-country	High emotional care	Variable rapport
Aban et al. (2022)	Ghana	Respectful maternity service	Less time with patients
Kuunibe et al. (2021)	Ghana	Community-integrated care	Overburdened staff
Agyepong et al. (2020) [21]	Ghana	Engaged provider-patient interaction	Hierarchical and formal

Findings across the included studies point to health centers as the preferred setting for interpersonal aspects of care. Patients frequently described health center staff as more respectful, empathetic, and culturally sensitive compared to their hospital counterparts. In Ghana, Osei et al. (2022) found that patients valued the friendliness and attentiveness of health center staff, often citing long-standing personal relationships and familiarity as reasons for their trust. Similar outcomes were reported in Kenya and Senegal, where Afulani et al. (2021) and Faye et al. (2021) found that midwives and nurses in primary care facilities offered more compassionate and emotionally supportive interactions. These findings suggest that the smaller scale and community-based nature of health centers contribute positively to relational dynamics. Conversely, hospitals were often described as impersonal and hierarchical in their care delivery. Studies such as Zhang et al. (2020) and Abebe et al. (2021) revealed that hospital environments tend to be rushed, with patients experiencing less communication and fewer opportunities for shared decision-making. High patient volumes, staff shortages, and systemic rigidity may contribute to these limitations. Even in technically proficient settings, the absence of respectful communication can diminish the overall care experience. Agyepong et al. (2020) argued that in many hospitals, the emphasis on biomedical efficiency comes at the cost of relational care, which patients especially from marginalized backgrounds find deeply dissatisfying. This contrast highlights the need to balance clinical competence

with compassionate engagement across both facility types.

Objective 3: Accessibility and Responsiveness

Accessibility and responsiveness are critical indicators of an equitable health system. They reflect the ability of facilities to deliver timely care and adapt to patients' needs. In many developing countries, hospitals are often located in urban centers, which may create geographic and financial barriers to access for rural populations. Health centers, by contrast, are more dispersed and embedded within communities, potentially offering greater responsiveness despite resource limitations. This objective evaluates how patients experience access to care and responsiveness of staff across both settings. It investigates whether health centers' proximity compensates for limited capacity, and how hospitals manage demand and patient flow. Understanding these dynamics is essential for optimizing service delivery strategies.

Table 3: Accessibility and Responsiveness

Study Author(s) and Year	Country/Region	Health Centers – Accessibility/Responsiveness	Hospitals – Accessibility/Responsiveness
Boateng et al. (2021) [22]	Ghana	Short wait times	Longer wait times
Tumlinson et al. (2019)	Kenya	Quick services	Referral bottlenecks
Ayinde et al. (2020)	Nigeria	Easily accessible	Overcrowded
Raven et al. (2017)	Sierra Leone	Located within communities	Administrative delays
Kuunibe et al. (2021)	Ghana	Covers large rural areas	Less accessible to rural patients
Ameh et al. (2019)	South Africa	More welcoming	Formal procedures
Osei et al. (2022)	Ghana	Open-door policy	Access delays
Kruk et al. (2018)	Multi-country	Community-embedded	Bureaucratic hurdles
Faye et al. (2021)	Senegal	Responsive to emergencies	Requires appointments
Adatara et al. (2021)	Ghana	Walk-in flexibility	Less flexibility
Abebe et al. (2021)	Ethiopia	Trusted by locals	Urban-centric
Leslie et al. (2017)	Multi-country	Good for routine care	Slow response rate
De Costa et al. (2019)	India	Proximity to rural communities	Limited rural coverage
Kruk et al. (2017)	Multi-country	Accessible first contact	Often inaccessible
Aban et al. (2022)	Ghana	Walk-in convenience	Appointment required

Health centers consistently outperformed hospitals in terms of accessibility and system responsiveness. This advantage is rooted in their geographic proximity to patients, shorter wait times, and fewer bureaucratic barriers. Tumlinson et al. (2019) and Boateng et al. (2021) emphasized that in Kenya and Ghana, patients routinely preferred health centers for their ease of access and community familiarity. Respondents reported that health centers allowed for spontaneous walk-ins, more flexible schedules, and quicker consultations. This was particularly important for patients in rural areas, where transportation and financial constraints made frequent hospital visits less feasible. Aban et al. (2022) also noted that pregnant women preferred health centers for antenatal care because they could access services without advance appointments.In contrast, hospitals were frequently described as less accessible due to formal appointment systems, long queues, and their central location in urban areas. Ayinde et al. (2020) found that overcrowding in Nigerian hospitals led to prolonged delays and frustrated patients. Raven et al. (2017) observed similar patterns during the Ebola crisis in Sierra Leone, where administrative rigidity and safety protocols significantly slowed patient processing. Even when patients acknowledged the clinical superiority of hospitals, the logistical and time-related challenges diminished their satisfaction. These findings suggest that health systems must improve the responsiveness of hospital services while sustaining the community-based accessibility strengths of health centers.

Discussion

The purpose of this discussion is to interpret the key findings of the systematic review in light of existing research, theoretical insights, and contextual realities within developing countries. By analyzing patient experiences across health centers and hospitals, the review sheds light on critical dimensions of healthcare delivery, including perceived provider competence, interpersonal interactions, accessibility, and trust. These elements do not operate in isolation but are interwoven within broader systemic, cultural, and infrastructural frameworks that shape how care is experienced and evaluated. Drawing from empirical evidence across multiple geographic regions, this discussion contextualizes the comparative strengths and weaknesses of health centers and hospitals, examining how patients in resource-constrained settings navigate trade-offs between technical excellence and relational care. The analysis also explores how these perceptions influence service utilization, health outcomes, and long-term trust in health systems. In doing so, it identifies practical implications for policy, training, and healthcare delivery reforms. The subsequent subsections examine each thematic area technical competence, interpersonal care, accessibility, and trust in relation to the reviewed literature and offer insights into how health systems can be strengthened to deliver care that is both clinically sound and experientially meaningful.

Technical Competence and Facility Type

The findings of this review indicate a widespread perception

that hospitals offer higher technical competence than health centers in developing countries. This is attributed to the presence of specialized professionals, advanced diagnostic technologies, and broader service coverage. Kruk et al. (2018) observed that hospitals in low-resource settings are often the focus of national and international health investments, leading to a concentration of technical resources in urban areas. Leslie et al. (2017) further supported this by reporting that hospitals outperform health centers on readiness indices across critical domains such as infrastructure, staffing, and equipment. However, while hospitals are technically superior, this does not always translate into greater patient satisfaction. Alhassan and Nketiah-Amponsah (2020) noted that Ghanaian patients appreciated the expertise of hospital staff but also reported frustration with long wait times and inadequate communication. In contrast, health centers are often viewed as under-resourced in terms of equipment and specialist care. Yet studies such as those by Aninanya et al. (2016) and De Costa et al. (2019) suggest that patients continue to rely on these centers for routine care, particularly in rural areas. Kuunibe et al. (2021) highlighted that the growing trend of training mid-level providers and task-shifting in health centers has slightly improved perceptions of competence, although disparities remain evident. These findings suggest a need for balanced investment in both facility types to bridge the technical gap without compromising accessibility.

Interpersonal Care and Patient-Provider Relationships

Interpersonal care emerged as a major strength of health centers, characterized by warmth, empathy, and culturally responsive communication. Patients consistently reported higher satisfaction with health center staff due to the personal attention and familiarity associated with community-level service delivery. Afulani et al. (2021) and Faye et al. (2021) found that respectful maternity care and emotional support were more frequently experienced in health centers than in hospitals. In Ghana, Osei et al. (2022) noted that patients viewed health center staff as more attentive, often citing ongoing relationships with nurses and midwives as key to their trust and satisfaction. By contrast, hospitals were frequently perceived as emotionally distant. Zhang et al. (2020) and Raven et al. (2017) reported that large caseloads, institutional formality, and hierarchical structures in hospitals often led to poor communication and rushed interactions. This erosion of relational care was a key source of dissatisfaction despite technical competence. Agyepong et al. (2020) argued that emotional engagement in care is not an auxiliary service but a fundamental quality indicator that shapes health-seeking behavior and long-term system trust. These findings reinforce the importance of integrating patient-centered communication training across all levels of care.

Accessibility, Proximity, and Responsiveness

The review clearly shows that health centers offer significant advantages in terms of accessibility and responsiveness. Located within communities, these centers are physically and culturally accessible to the populations they serve. Boateng et al. (2021) and Tumlinson et al. (2019) reported that patients preferred health centers for routine services due to their shorter wait times, minimal bureaucracy, and geographic proximity. This was particularly evident in rural and peri-urban contexts, where hospitals are often distant and logistically burdensome to access. Hospitals, while better resourced, often impose structural barriers to care. Ayinde et al. (2020) documented systemic delays in Nigerian hospitals that negatively affected the timeliness of services. Similarly, De Costa et al. (2019) found that women seeking maternity care in Indian hospitals experienced delays due to referral bottlenecks and scheduling protocols. These delays not only deter care-seeking but also contribute to missed opportunities for early intervention. Health systems must, therefore, consider models that integrate the accessibility of health centers with the specialized care of hospitals, supported by seamless referral and communication mechanisms.

Trust, Satisfaction, and System Legitimacy

Trust in health services is influenced not only by clinical outcomes but also by how patients are treated during care encounters. The review reveals that patients generally expressed higher levels of trust and satisfaction in health centers, particularly when they received care that was respectful, consistent, and emotionally affirming. Dansereau et al. (2016) and Aban et al. (2022) found that such trust was deeply tied to relational continuity and the perception of being valued as individuals. These findings align with the broader literature on health system responsiveness, which views patient trust as a critical enabler of service utilization and adherence (Kruk et al., 2017). Conversely, hospitals were often associated with clinical detachment and administrative formality, which weakened patient trust even when the technical quality of care was high. Afulani et al. (2021) noted that women delivering in hospitals expressed feelings of neglect, fear, and powerlessness due to rushed consultations and lack of provider empathy. These experiences suggest that satisfaction is not solely the result of medical success but is contingent upon the nature of provider-patient interaction. As such, trust must be deliberately cultivated through inclusive, transparent, and respectful care practices across all facility types.

Implications for Policy and Practice

The dichotomy between health centers and hospitals presents both challenges and opportunities for health system reform in developing countries. Rather than prioritizing one facility type over another, policymakers must recognize the unique strengths of each and develop integrated strategies to maximize patient experience and health outcomes. Health centers require strategic investments in infrastructure, staff development, and basic diagnostic tools to enhance perceived competence. Simultaneously, hospitals must address their relational care deficits by embedding principles of person-centeredness into staff training, supervision, and accountability systems. These findings resonate with global frameworks such as the WHO's quality of care agenda, which emphasizes the centrality of patient experience in achieving universal health coverage (WHO, 2018). A comprehensive quality strategy must, therefore, move beyond inputs and clinical protocols to address the social, emotional, and systemic aspects of care delivery. As Kruk et al. (2018) contended, delivering high-quality health care in low-resource settings is not merely a technical task but a deeply human endeavor requiring empathy, dignity, and responsiveness.

Conclusion

This systematic review has critically examined how patients in developing countries perceive the competence and quality of care provided in health centers versus hospitals. The findings reveal a clear divergence in patient experiences: hospitals are widely per-

ceived as more technically competent, equipped with advanced technologies and specialized professionals, while health centers are favored for their interpersonal warmth, cultural alignment, accessibility, and responsiveness. These contrasting strengths underscore the complex and multidimensional nature of healthcare quality, where both clinical effectiveness and relational care play essential roles in shaping patient satisfaction and trust. The review demonstrates that while hospitals meet expectations for specialized and emergency care, their shortcomings in communication and patient engagement diminish overall satisfaction. Conversely, health centers, despite their limited diagnostic capacity, often succeed in delivering respectful, community-centered care that fosters strong patient-provider relationships. This duality highlights the necessity for a balanced and integrated approach to health system improvement, one that simultaneously elevates the technical capacity of health centers and enhances the human-centered practices within hospitals. Improving perceived competence and quality of care across all facility types requires not only infrastructure and workforce investments but also a renewed commitment to dignity, empathy, and equity in healthcare delivery. For health systems in developing countries to gain legitimacy and ensure universal health coverage, they must prioritize not just what care is delivered but how it is experienced by the people they serve.

Recommendations

To enhance both perceived competence and quality of care in developing countries, health systems must adopt a dual-focused strategy that strengthens the technical capacity of health centers while improving the relational aspects of care in hospitals. Policymakers should prioritize investments in training mid-level health workers and equipping primary care facilities with essential diagnostic tools to address technical gaps. Simultaneously, hospital staff should receive continuous professional development in patient-centered communication and culturally sensitive care. Strengthening referral systems between facility levels can ensure continuity of care and build trust. Community engagement should also be promoted to align services with local expectations. Monitoring and evaluation mechanisms must include patient feedback as a key quality indicator. A coordinated, equity-driven approach will enable health systems to deliver care that is both clinically effective and emotionally responsive.

Contribution To Knowledge

This systematic review makes a substantial and original contribution to the existing body of knowledge on healthcare quality by offering a comprehensive, patient-centered comparison of perceived competence and quality of care in health centers versus hospitals within developing country contexts. While much of the literature on health system performance tends to emphasize clinical effectiveness, infrastructure, or financial inputs, this study shifts the analytical lens to the lived experiences of patients highlighting how their perceptions of care are shaped not only by technical capacity but also by interpersonal relationships, accessibility, and cultural alignment. By synthesizing data from 60 empirical findings across 15 countries, the review adds empirical depth to the understanding that high-quality care must be evaluated both medically and relationally. Importantly, the study reveals that while hospitals are commonly perceived as more technically equipped and medically authoritative, health centers often generate higher levels of trust, satisfaction, and engagement through their responsiveness, familiarity, and emotional support. This duality challenges the dominant facility-based hierarchies that often favor tertiary institutions and suggests that primary care institutions, when supported appropriately, can be central to delivering quality healthcare.

The review introduces an integrated framework for evaluating perceived quality, bridging gaps between the technical and humanistic dimensions of care delivery. It also offers a contextualized perspective that reflects the socioeconomic and cultural realities of health system users in low-resource settings realities often overlooked in top-down evaluations.By identifying facility-specific strengths and weaknesses, the review generates practical, evidence-informed recommendations for health system strengthening, workforce development, and policy reform. It underscores the importance of incorporating patient voice and perception into quality improvement strategies, thus supporting the global shift toward person-centered care models as outlined in WHO's frameworks. As such, this work not only informs health policy and practice in developing countries but also enriches the theoretical discourse on healthcare quality by advocating for more balanced, inclusive, and patient-driven metrics in global health evaluations.

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