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Service Quality of Public Hospitals in Nepal: A Systematic Review and Meta-analysis

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Abstract

Background/objectives: The goal of this study is to evaluate the service quality of hospitals in Nepal by conducting a systematic review of the literature and meta-analysis. The study aims to combine current data, pinpoint knowledge gaps, and offer sage advice to academics, decision-makers, and healthcare professionals. **Design/Methodology/Approach** The research design and methodology used for the study were a systematic review of the literature and meta-analysis. A thorough search across electronic databases, including PubMed, Scopus, and Web of Science, using predefined keywords relevant to hospital service quality in Nepal was carried out. The papers that met the inclusion criteria were published between January 2000 and April 2023. The systematic review included a total of 13 papers that used both quantitative and qualitative research approaches. A sample of these studies was subjected to a meta-analysis in order to quantitatively sum up the overall service quality rating in Nepalese hospitals. The heterogeneity of the chosen publications was evaluated using statistical tests like the Chi-squared based Q-test, I-squared, and Tau-squared statistics. The estimation technique used the Random Effect-Model, and publication bias have been assessed using the Eggers Test **Findings** The systematic research identified a number of critical facets of infrastructure, responsiveness, empathy, reliability, assurance, and tangibles as significant components of service quality in Nepalese hospitals. Based on a selection of research studies, the meta-analysis quantitatively summarised the total service quality score. The results show that service quality in hospitals in Nepal is generally moderate. The outcomes, however, also demonstrate the need for targeted changes. The 13 articles have been reviewed out of 65 articles. The Random Effect have been determined with intercept estimate of 0.645 and p-value of 0.002. The fixed effect have been determined with intercept estimate of 0.645 and value of less than 0.001. **Originality/Value** Through a thorough examination of the literature and meta-analysis, this research study offers a comprehensive overview of the service quality of hospitals in Nepal. The results add to the body of knowledge and provide insightful information for researchers, policymakers, and healthcare

professionals. The study highlights the significance of deliberate upgrades in service quality, especially in underserved regions and public healthcare facilities. The uniqueness and importance of this study lie in its thorough analysis, the discovery of information gaps, and its ability to direct managers and policymakers in the healthcare sector in developing measures to raise the overall standard of healthcare in Nepal.

Keywords: Service quality; Hospitals; Nepal; Systematic literature review; MetaAnalysis; Service quality dimensions

1 Introduction

A key element in determining the general health outcomes and patient satisfaction is the calibre of the healthcare services offered by public hospitals. It is crucial to evaluate and enhance the service quality offered by these institutions in Nepal, where public hospitals play a crucial role in providing healthcare services to a sizeable percentage of the population.

Despite the significance of service quality in public hospitals, thorough studies that systematically assess and synthesise the relevant literature in the context of Nepal are scarce. Although [1–3] have already conducted meta-analyses that have examined the literature on service quality in different health facilities, there is still a sizable research gap in the comprehensive assessment of service quality, particularly in public hospitals in Nepal. The evidence that is currently available regarding the service quality offered by public hospitals, which are essential in providing healthcare to a significant portion of the Nepalese population, has not been carefully evaluated and synthesised in these research. To get a thorough grasp of the distinctive difficulties, advantages, and potential areas for service quality improvement in public hospitals, it is imperative to close this research gap. Researchers can pinpoint specific areas of service quality where public hospitals may fall short and suggest focused interventions to improve infrastructure, responsiveness, empathy, reliability, assurance, and tangibles in this situation by conducting a comprehensive assessment.

This research does a comprehensive review and meta-analysis to overcome these issues. The common themes, trends, and gaps in the existing literature by methodically evaluating a broad range of published studies, including both qualitative and quantitative research [4,5]. The data have been quantitatively analysed in order to provide a more reliable estimate of the overall service quality of public hospitals in Nepal thanks to the meta-analysis. The data have been analysed through Fixed Effect Model and Random Effect Model.The data for meta analysis have been analysed through Forest Plot.The box's size indicates the study's weight; the more information the study offers, the heavier it is, and the larger the box, the more information it contains. The overall pooled effect from the included studies is depicted by the diamond beneath the studies. In addition, using a thorough evaluation framework allows us to evaluate a variety of service quality factors, including accessibility, responsiveness, effectiveness, safety, and patient-centeredness.With the aid of this methodology, policymakers and healthcare administrators would be better able to grasp the service quality landscape in public hospitals and make decisions that will raise the standard of healthcare in Nepal.

2 Conceptual Framework

2.1 Service Quality

In the cutthroat atmosphere of the healthcare market, providing patients with healthcare services that meet their requirements and expectations is crucial for the organization's existence [5]. This indicates that satisfying patients' wants and expectations might serve

as a gauge for gauging the level of services provided by healthcare institutions like hospitals. In other words, the gap in service quality can be expressed as the difference between patients' perceptions and expectations of hospital services: the smaller the difference, the greater the quality [4,5]. Recognising patient expectations and perceptions is essential to closing the quality gap. This will help to identify the strengths and weaknesses of hospital services and enable the implementation of successful solutions to raise the standard of care delivered in hospitals.

The service quality gap (SERVQUAL) model is one of the most widely used multi-dimensional instruments to evaluate the quality of services from the perspective of patients or consumers. In this methodology, the six aspects of tangibles, responsiveness, reliability, empathy, assurance, and access are used to measure the gap in service quality. This model, proposed by Parasuraman et al. in 1988, is a reliable method for assessing the quality of services in a variety of industries, including for-profit and nonprofit corporations as well as government-run institutions like hospitals.

The SERQUAL model was used in numerous studies to assess the level of care provided by hospitals in various parts of Nepal. These studies' findings are inconsistent. Consequently, it would appear necessary to thoroughly analyze the recent research in order to have a better knowledge of service quality across all Nepali hospitals. This study set out to close this gap in the literature and examine the standard of medical care offered by Nepalese hospitals. To establish the caliber of hospital services in Nepal, this study specifically conducts a systematic literature review for the first time. The findings of this study contribute to our understanding of the standard of hospital care in Nepal and may eventually increase awareness of the quality gap in hospital care services among medical professionals and health policy-makers.

3 Methodology

Search strategy to acquire the sources

Search strategies to identify studies regarding service quality of hospitals in Nepal included searching Google, Google Scholar, PubMed, WHO research portal; the Health Inter-Network Access to Research Initiative (HINARI) and web page of Ministry of Health and Population (MoHP) [6]. We applied all of the following key words: 'service quality,' 'dimensions of service quality,' 'reliability, assurance, timeliness, ' empathy, reliability, service quality in health care, 'Nepal' in conjugation with Boolean operators (AND, OR) in PubMed (opportunity[All Fields] AND ("Plan Parent Chall"[Journal] OR "challenges"[All Fields]) AND quality of service[All Fields] AND ("health"[MeSH Terms] OR "health"[All Fields]) AND ("AHIP Cover"[Journal] OR "coverage"[All Fields]) AND ("Nepal"[MeSH Terms] OR "Nepal"[All Fields])). We additionally included equivalent terms from medical subject headings such as 'Patient satisfaction', 'correlation between patient satisfaction and service quality' [4]. As policy documents in general, neither covered in PubMed/Medline nor published electronically elsewhere, we further expanded our search to the web pages of the Ministry of Health and respective departments. For the Scholar Google we used the above terminology and fixed the search by date (almost after 2010) and relevance (proximity to the terms) [7,8]. Global research related to health for specific country was found in Health Inter-Network Access to Research Initiative (HINARI) and we used this portal too and fixed the search with WHO regional sites (South East Asia), content type (publication and guideline) and all available formats. The selected articles reference list were the potential sources for this study as bibliographical search. The remaining source was taken from Google search as grey materials. The search approaches were targeted on Service Quality indicators, index and financial protection indicators like out of pocket expenditure, catastrophic health cost, government health spending, total health expending, etc. In the first stage, we found 65 records from Scholar Google, PubMed/Medline, HINARI, web pages of Ministry of Health and Population and its branches and Google search which met the inclusion criteria.

Since the first study used the SERVQUAL model to examine service quality of hospitals in Nepal was published in the year 2000,the search was limited to original studies published in Nepali and English over the period between January 2000 and April 2023. In first stage screening we removed 30 sources due to record duplication and title twisted. We assessed 35 full text articles and excluded 23 sources (due to imperfectly matching the scope with Service Quality - 12, outdated − 4 and controversial findings − 2). Finally we identified 12 perfectly matched sources for this study (Figure 1: Flow Chart of systematic search and studies selection).

4 SERVQUAL Model

Five factors make up the SERVQUAL model, which was created by [9]. These dimensions include tangibles (4 questions), reliability (5 questions), responsiveness (4 questions), assurance (4 questions), and empathy (5 questions). In certain research, the sixth dimension was replaced with a "access" dimension (two questions). According to this model, the disparity between a patient's perception and their expectation of the healthcare services delivered by a hospital (i.e., service quality [SQ]= score of perceptions [P] - score of expectations [E]) defines the quality of the hospital's services. For each service quality dimension and its sub-items, the quality gap was calculated by deducting the perception (what is) score from the expectation (what should be)
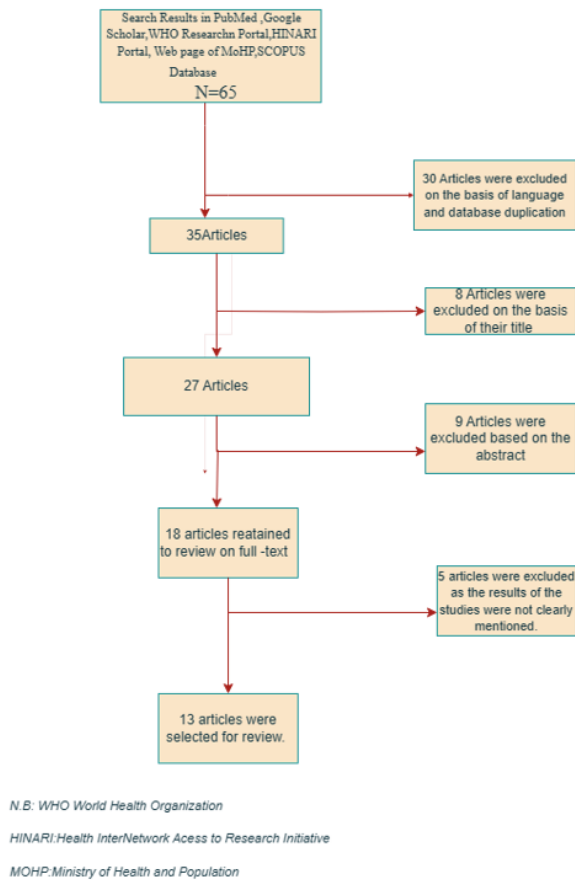
Fig 1. Flow chart of systematic search and studies selection

score. If patient expectations and views of hospital services were to be equal, the quality gap would be zero. If patients' views of hospital services scored lower (higher) than their expectations scored, the quality difference was viewed as unfavourable. In this study ,the studies related to patient satisfaction have been added as it is associated with the service quality of the hospitals. In Table 3,the characteristics of the study have been depicted which include parameters such as Publication Year, Location of the Hospital, Type of the hospital and sample size. The parameter of co-relation coefficient have been added in it which have been used for extraction of Fixed-Effect Model, Random Effect Model ,Forest Plot, Funnel Plot and Publication Bias.

4.1 Inclusion and exclusion criteria

The inclusion criteria for data search were: related to Nepal, with the scope of service quality (wide and operational definitions), usually published since 2010. In wide concept of service quality all dimensions of service quality; reliability, assurance, timeliness, empathy, responsiveness were searched. The final selection of articles at this stage was based on the following criteria, i) content relevance to the theme of the sources (service quality, dimensions of service quality, perception of patients, health service quality, etc.), and ii) detail scope for Nepal. Items irrelevant to Nepal, specific health slogans and campaigns, sources from unpublished data were excluded from study.

4.2 Data Extraction

The necessary data was taken from each article using a self-made checklist. The first author of the paper, the publication year, the study location, the language of the published article, the kind and number of hospitals included in the study, the overall quality ratings and its dimensions were all taken from the publications. To assess the quality of the papers, a checklist (Table 1) that has been applied in earlier studies was employed as a tool. There were 12 questions on the checklist, covering the following topics:

the purpose of the study, research questions, study design, sample size, sampling strategy, data collection tool, status of variables evaluation, target population, and analysis method. For each question, a study received one point if it met the quality criteria; otherwise, it received a score of 0. The quality ratings for each study were determined by adding up all the points. Similar to previous studies, a quality score of at least 8 was required for the studies to be retained in the review.

Table 1. Checklist

Number Questions	Score	
	Yes=1	No=0
1 Are the research questions constructed concisely?		
2 Is the approach suitable for the research question ?		
3 Is the study context sufficiently explained ?		
4 Does the study explain research methodology well?		
5 Is the sampling process well explained?		
6 Is the sampling strategy adequate to answer the research question?		
7 Is the procedure for gathering data sufficiently described?		
8 Can the study topic be answered using the data collection method?		

4.3 Statistical Analysis

The Chi-squared based Q-test, I-squared and Tau-squared statistics have been used to evaluate the heterogeneity among the studies selected for this study. The Random Effect-Model have been applied for the estimation. The Egger's test was used to evaluate publication bias.

The analysis was carried out using the Fisher r-to-z transformed correlation coefficient as the outcome measure. A random-effects model was fitted to the data. The amount of heterogeneity (i.e., tau^2), was estimated using the restricted maximum-likelihood estimator (Viechtbauer 2005). In addition to the estimate of tau^2, the Q-test for heterogeneity (Cochran 1954) and the I^2 statistic are reported. In case any amount of heterogeneity is detected (i.e., $tau^2 > 0$, regardless of the results of the Q-test), a prediction interval for the true outcomes is also provided. Studentized residuals and Cook's distances are used to examine whether studies may be outliers and/or influential in the context of the model. Studies with a studentized residual larger than the $100 \times (1 - 0.05/(2 \times k))$th percentile of a standard normal distribution are considered potential outliers (i.e., using a Bonferroni correction with two-sided alpha = 0.05 for k studies included in the meta-analysis). Studies with a Cook's distance larger than the median plus six times the interquartile range of the Cook's distances are considered to be influential. The rank correlation test and the regression test, using the standard error of the observed outcomes as predictor, are used to check for funnel plot asymmetry.

5 Results & Findings

The results of the systematic review process for this study have been depicted in Figure 1. A total 65 articles were found in the initial search. As reported in Figure 1,30 articles were excluded on the basis of language and database duplication. Eight articles were excluded on the basis of the title. The nine articles were excluded on the basis of the content of abstract. The study was eliminated if the abstract did not specifically specify that the "SERVQUAL model" or "gap model" was used to assess service quality in hospitals. Moreover, the 5 studies were not included in the study as the results of the study is not clearly mentioned. This resulted in 13 articles with full-text accessibility. The results of the study have been depicted.

The characteristics of the 13 articles included in the systematic review of this study have been depicted in the Tables 2 and 3. The 53% of the study have been conducted between the period of 2000 and 2015. Most of the articles were published in English. The study have been conducted among the hospitals of Nepal. The Table 2 have depicted about the challenges and opportunities of the study. The Table 3 have indicated about the location of the study ,ownership of the hospital, sample size and correlation coefficient. Nepal (Five districts from Terai, Five districts from hill, 3 districts from mountain). Moreover, the 5 hospitals from Teri region, Mountain and hill region have been included in the hospital. The ownership of the hospital consists of Private, and Public

A total of k=3 studies were included in the analysis. The observed Fisher r-to-z transformed correlation coefficients ranged from 0.3095 to 0.9287, with the majority of estimates being positive (100%). The estimated average Fisher r-to-z transformed correlation coefficient based on the random-effects model was \hat{\mu} = 0.7088 (95% CI: 0.3068 to 1.1108). Therefore, the

average outcome differed significantly from zero (z = 3.4557, p = 0.0005). According to the Q-test, the true outcomes appear to be heterogeneous (Q(2) = 89.2356, p < 0.0001, tau^2 = 0.1207, I^2 = 97.1801%). A 95% prediction interval for the true outcomes is given by -0.0818 to 1.4995. Hence, although the average outcome is estimated to be positive, in some studies the true outcome may in fact be negative. An examination of the studentized residuals revealed that one study[10,11] had value larger than $\pm$ 2.3940 and may be a potential outlier in the context of this model. According to the Cook's distances, none of the studies could be considered to be overly influential. Neither the rank correlation nor the regression test indicated any funnel plot asymmetry (p = 1.0000 and p = 0.5672, respectively).

Table 2. List of studies indicating service quality of hospitals in Nepal (2000-2023), a systematic review, 2023

Serial Number	Title of the Study	Challenges	Opportunities
1	Satisfaction with Quality of Health Care among Teaching Hospitals in Kathmandu, Nepal[12]	Patient satisfaction is an important factor of healthcare quality and effectiveness of healthcare delivery and quality of medical care. The study have indicated that the patient's from both hospitals were satisfied on average	There is need of quality enhancements to raise service satisfaction. Healthcare service providers should continually record, measure and evaluate patient satisfaction.
2	Quality of Health Service: Issues and Measures to Improve[2]	Public and government concern is health service quality. Poor public health services fail to provide. It makes Nepalese pick exploitative or expensive private services.	The government's top priority is improving people's health, hence it should priorities public health service quality. Today's services are bad. Government must priorities some fundamental measures.
3	Evaluation of service quality and patient satisfaction in eastern Nepalese hospitals[13]	Service quality, customer satisfaction, and repurchase intentions are also studied. The study shows that patient needs and service expectations differ. This approach gauges service quality and client happiness.	The study suggests ways hospitals might improve patient care and consumer happiness.
4	Dimensions of hospital service quality: a critical review: Perspective of patients from global studies[14]	Health care organizations lack incentives to innovate or improve quality.Health care quality conceptualization and measurement are more important and complex. Reluctance may lower service quality perceptions, which greatly influence patients' health care provider and facility choices. Attracting new clients costs five times more than keeping current customers happy (and referrals from friends and family are more valuable). Hospital service quality matters, yet there are no standards.	We found many dimensions and methods for measuring it. We conclude that researchers should look for dimensions in the healthcare setting rather than adopting any available instrument, as SERVQUAL is the only instrument used in various countries and medical settings, requiring research in service quality measurement and instrument development.
5	Patients' satisfaction with hospital services in Kathmandu[15]	Patient satisfaction measures hospital health service quality. This study examined hospital patient satisfaction. The survey found good patient satisfaction with health care quality. Patients were most happy with nurses and doctors' technical skills.	Dissatisfied patients indicate room for improvement.Although hospital services are satisfactory, room services, including patient cleanliness and comfort, must be improved.
6	Clients satisfaction on health care service quality: A comparison of public and private hospitals in Province No. 1 in Nepal[5]	The study concluded that private hospitals provided better hospital management services than state hospitals in all areas except treatment cost. Private hospitals offer superior treatment for profit. Their innovative and rapid services may raise the price. Despite the high cost of services, a good manager must prioritise client pleasure by offering exceptional service in a timely manner.	Private hospitals should have greater treatment costs and better customer service. National health insurance may close the private-public hospital satisfaction divide. The health insurance policy should be prioritised by Nepal's Ministry of Health and Department of Health Service, both in writing and in practise in impoverished communities. Like other industrialised nations, the government should prioritise and implement health insurance for all patients at a low cost.

Table 2 continued

7	Client Satisfaction in Health Service Management in Hospitals of Province One Eastern Nepal[5]	The low doctor-patient ratio and extended wait times for doctors dissatisfied clients.	The government should prioritise quality human resource production. In Nepal, where doctor-patient ratios are low, doctors may not have enough time to explain treatment details, including drug side effects, so hospitals should inform patients through information desks or nursing staff.
8	An Assessment of Service Quality In Western Regional Hospital Pokhara[16]	The analysis found sections of the hospital's everyday operations where patients anticipated high-quality care and others where they were less critical. Patients' poor hospital service perception scores showed service quality problems in the study.	To close SERVQUAL Model gaps, hospital administration must update inpatient services including rooms, ward nurses' call response times, theatre, and more. Patient contact staff and managers do not work well together to solve problems or serve consumers. Stores, janitors, and accounting must cooperate to serve customers.
9	Productivity of public hospitals in Nepal: a data envelopment analysis[17]	Over the study period, hospital productivity decreased. For this analysis, reliable, detailed, and consistent hospital inputs and outputs are difficult to get.	Despite substantial disparities in performance, this study implies that Nepalese hospitals could enhance productivity. Financial, human resource, and unit cost data for inpatient, outpatient, and emergency services would enable deeper research into hospital productivity.
10	Access to free health-care services for the poor in tertiary hospitals of western Nepal: a descriptive study[3]	Qualitative investigation showed clients and hospital staff were unaware of free health care and target groups. The target population rarely used free health care in the two tertiary-care hospitals. The hospitals failed to tell the target population about the free health-care initiative, and hospital staff were unaware of free services and target groups.	According to this study, hospital staff should be educated about free health-care services and how to identify target groups and provide them with free services. Hospitals should educate impoverished and marginalised castes about free health care. Free health care, notably at LZH, is recorded and reported. LZH's SSU helps impoverished and marginalised patients access services.

Table 3. Characteristics of the Study included in the Systematic Review

First Author, Publication Date	Langauage	Location of the study	Sample Size	Type of Hospital	Co-relation Coefficient
Evaluation of the Impacts of Service Quality Dimensions on Patient/Customer Satisfaction: A Study of Private Hospitals in Nepal[1]	English	Kathmandu	490	Private	0.719
Patient Satisfaction in Out-patient Services at a Tertiary Care Center: A Descriptive Cross-sectional Study[10]	English	Kathmandu	80	Public	0.3
Women's Satisfaction of Maternity Care in Nepal and Its Correlation with Intended Future Utilization[10]	English	Nepal (Five districts from Terai ,Five districts from hill,3 districts from mountain)	447	Public	0.73

Table 4. Random-Effects Model (k = 3)

	Estimate	se	Z	p	CI Lower Bound	CI Upper Bound
Intercept	0.710	0.230	3.09	0.002	0.260	1.160
	.	.	.	.	.	.

Note. Tau^2 **Estimator: DerSimonian-Laird**

Table 5. Fixed-Effects Model (k = 3)

	Estimate	se	Z	p	CI Lower Bound	CI Upper Bound
Intercept	0.645	0.0315	20.5	< .001	0.583	0.707
	.	.	.	.	.	.

Table 6. Heterogeneity Statistics

Tau	Tau^2	I^2	H^2	R^2	df	Q	p
0.347	0.1207 (SE= 0.1263)	97.18%	35.463	.	2.000	89.236	< .001

Table 7. Publication Bias Assessment

Test Name	value	p
Fail-Safe N	441.000	< .001
Begg and Mazumdar Rank Correlation	-0.333	1.000
Egger's Regression	2.069	0.039
Trim and Fill Number of Studies	0.000	.
Note. Fail-safe N Calculation Using the Rosenthal Approach		
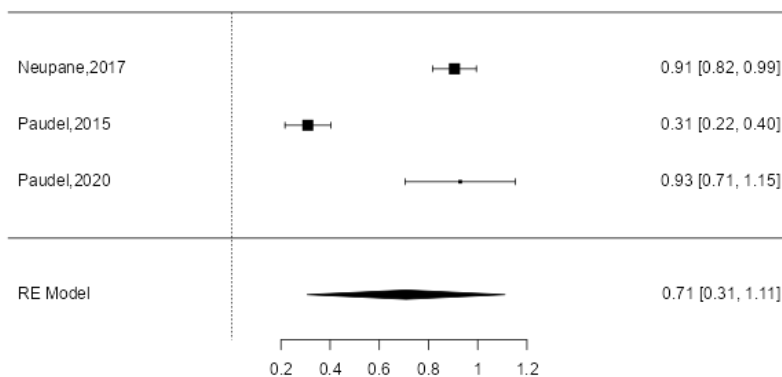
Fig 2. Forest Plot
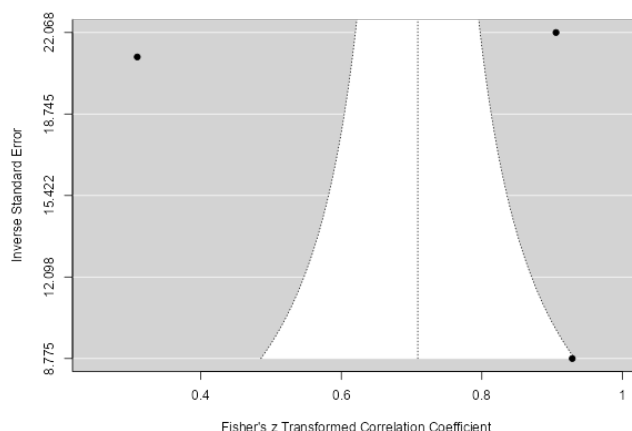
Fig 3. Funnel Plot

6 Implications

6.1 Theoretical Implications

This systematic review and meta-analysis on the service quality of public hospitals in Nepal have several theoretical implications. Firstly, it contributes to the existing body of knowledge by synthesizing and consolidating the scattered literature on service quality in public hospitals in Nepal. By identifying common themes, trends, and gaps in the literature, this paper provides a comprehensive understanding of the current state of service quality in public hospitals, thereby enhancing the theoretical foundation in this area. The findings of this study can also help in the development of theoretical frameworks specific to the Nepalese context, which can guide future research and exploration of service quality in public healthcare settings.

6.2 Methodological Implications

This paper also has important methodological implications. Conducting a systematic review and meta-analysis enables the integration of a large number of studies, which increases the statistical power and generalizability of the findings. The rigorous selection criteria, data extraction process, and quality assessment employed in this study enhance the reliability and validity of the results. The meta-analysis, in particular, allows for a quantitative synthesis of data from multiple studies, providing a more precise estimate of the overall service quality in public hospitals. This methodological approach can serve as a blueprint for future researchers interested in evaluating service quality in healthcare settings, not only in Nepal but also in other contexts.

6.3 Managerial Implications

The findings of this study have significant managerial implications for public hospitals in Nepal. By identifying the strengths and weaknesses in service quality, healthcare administrators and policymakers can prioritize areas for improvement and allocate resources accordingly. The comprehensive evaluation framework utilized in this paper can guide hospital management in assessing and addressing multiple dimensions of service quality, such as accessibility, responsiveness, effectiveness, safety, and patient-centeredness. The insights gained from this study can inform the development and implementation of targeted interventions, training programs, and quality improvement initiatives to enhance the overall service quality of public hospitals in Nepal. Ultimately, these managerial implications can lead to improved patient satisfaction, better health outcomes, and a more efficient healthcare system in the country.

7 Conclusions

Improving service quality in healthcare is an important issue for patients, health professionals, and healthcare policy-makers both in developed and developing countries. This study, for the first time, aimed to systematically review the current literature on the quality of hospital service to provide a better understanding of service quality in hospitals in Nepal. Based on the inclusion and exclusion criteria, 13 studies were selected to estimate the overall quality of services provided by hospitals in Nepal. This study aimed to fill this gap in the literature and investigate the quality of healthcare services provided by Nepali hospitals. Specifically, for the first time, this study systematically reviews the existing data in the literature to determine the quality of hospital services in Nepal. The results of this study help us to understand the quality of hospital care in Nepal, and it may ultimately leads to a greater awareness among health professionals and health policy-makers of the quality gap in hospital care services in Nepal.

This systematic review and meta-analysis have provided a comprehensive evaluation of the service quality of public hospitals in Nepal. The findings highlight both strengths and weaknesses in the delivery of healthcare services. The novelty of this study lies in its combination of a systematic review and meta-analysis, which allows for a more robust estimation of service quality. Additionally, this study contributes to the existing literature by emphasizing the need for a standardized evaluation framework and addressing the limitations of the study.

7.1 Limitations and Roadmap for Future Studies

This study has a few limitations that should be addressed in future research. Firstly, the analysis relies on the available literature, which may be subject to publication bias. Future studies should strive to include unpublished or gray literature to minimize this bias. Secondly, the heterogeneity and quality of the included studies may have influenced the meta-analysis results. Future research should consider conducting subgroup analyses or sensitivity analyses to address these concerns.

Moreover, this study focused specifically on public hospitals in Nepal, limiting the generalizability of the findings to other healthcare settings or countries. Future studies should aim to include a more diverse range of healthcare institutions and settings to provide a broader understanding of service quality. Additionally, longitudinal studies or qualitative research can be conducted to further explore the underlying factors influencing service quality in public hospitals.

In summary, while this study provides valuable insights into the service quality of public hospitals in Nepal, there is room for future research to address the limitations mentioned. By incorporating unpublished literature, conducting subgroup analyses, and expanding the scope of the study, future research can build upon this foundation and provide a more comprehensive understanding of service quality in public hospitals, both within Nepal and in other healthcare contexts previous research.

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