TRENDS OF SERVICE QUALITY RESEARCHES IN INDOONESIAN HEALTH JOURNALS OVER THE LAST FIVE YEARS : A LITERATURE REVIEW

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Abstract:
Quality, considered a key element in distinguishing and providing a competitive edge in services, is a potential source for long-term sustainability. Therefore, it is essential to measure and enhance the level of quality. This research aims to examine trends in healthcare service quality research. The method employed is content analysis based on articles from accredited SINTA journals published in the last five years. Aspects investigated include the number of annual article publications, research types, research subjects, types of healthcare institutions, service types, data collection instruments, and data analysis methods. Among the published articles, the most dominant research type is quantitative with correlation analysis. Patients are the most frequently targeted research subjects in studies of healthcare service quality. Hospitals and community health centres are common research locations due to their wide range of services. In the context of the findings of this research, several recommendations have been made for future studies that prioritize the development of service quality and patient satisfaction. These recommendations include efforts to diversify the types of research conducted and select more accurate data analysis techniques.

Keywords: service quality, satisfaction, research trends, healthcare
INTRODUCTION

The importance of healthcare services in improving public health cannot be underestimated. In the pursuit of health development goals, which encompass the ability of every citizen to lead a healthy life to achieve optimal public health, as a vital aspect of the national well-being objective, efforts are required to expand and enhance access to healthcare services for the public (Muslimin & Nurhayati, 2018). Healthcare institutions such as hospitals, community health centres, clinics, and medical practices represent the provision of resources in the healthcare sector. As service providers to the community, these institutions must deliver high-quality services that meet the public’s expectations (Herman et al., 2014). Evaluation of good service quality is not only related to the physical recovery from diseases but also involves factors like the attitude, knowledge, and skills of healthcare providers in delivering services, effective communication, information dissemination, courtesy, adherence to schedules, responsive engagement, and the condition of physical facilities and the environment (Mashita, 2021).

The success of service delivery is assessed based on the satisfaction levels of those receiving the service. Satisfaction among service recipients is achieved when they receive quality services that align with their needs and expectations, thereby leading to contentment (Setyaningsih & Adriani, 2016). Five aspects play a role in determining healthcare service quality: tangible evidence, reliability, responsiveness, assurance, and empathy (Ladytama et al., 2018). Quality, considered a key element in distinguishing and providing a competitive edge in service, is a potential source for long-term sustainability. Therefore, it is essential to measure and enhance the quality level. The quality of healthcare services in community health centres and hospitals is greatly influenced by physical facilities, medical staff availability, drugs and medical equipment, and the service delivery process (Burhanuddin, 2016).

In Indonesia, research on service quality has been conducted from various perspectives and research objects. Most journals researching this topic analyze the correlation between the quality of healthcare services and the level of satisfaction experienced by patients (Wulan, 2013). There are also experimental studies that address the implementation of a method and its impact on patient revisit intent (Munawarah, 2021); (Widyastuti, 2021). Studies also explore the perspectives of patients and employees regarding healthcare service quality (Fachriza et al., 2019). Among all the research articles found, there has been no similar study on the review of information in the published research articles.

This research results from a review of research journals in a similar field published in the last five years (2018-2023) and indexed in SINTA (Science and Technology...
This research focuses on journals that have made healthcare service quality their primary variable, with the hope that this research can serve as a reference for future research development in the field of healthcare service quality.

RESEARCH METHODS

This research employed a content analysis method, focusing on extracting information and data from studies published in scientific health journals in Indonesia. The method used is similar (Susetyarini & Fauzi, 2020). Data was collected from the content analysis of articles in health journals accredited by SINTA and published in the last five years (2018-2023). Keywords used to locate relevant articles included "kualitas pelayanan," "service quality," "mutu pelayanan," "kualitas layanan," and "kepuasan." In total, 37 health journals were indexed in SINTA. Subsequently, articles discussing service quality were collected from each of these journals. Out of the 141 articles gathered, 69 were relevant to this research topic.

The research instrument serves as a guideline for the content analysis used to examine the articles collected based on the aspects to be studied. There are seven aspects to be reviewed in this research, including (1) the number of annual article publications, (2) research types, (3) research subjects, (4) types of healthcare institutions, (5) types of services, (6) data collection instruments, and (7) data analysis methods. The categories presented in Table 1 were established before data collection. They were determined based on previous research that could serve as a reference for defining the categories to be included in each aspect. Specifically, aspects (1) and (5) were not assigned categories as analytical guides due to the need for previous research to serve as a reference for categorizing those aspects.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Category</th>
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</thead>
<tbody>
<tr>
<td>Type of Research</td>
<td>A-1. Qualitative</td>
</tr>
<tr>
<td></td>
<td>A-2. Quantitative</td>
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<tr>
<td>Type Of Quantitative Research</td>
<td>B-1. Observation</td>
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<td></td>
<td>B-2. Correlation</td>
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<tr>
<td>Research Subject</td>
<td>C-1. Patient</td>
</tr>
<tr>
<td></td>
<td>C-2. Employee</td>
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<tr>
<td>Type of Healthcare Institution</td>
<td>D-1. Hospital</td>
</tr>
<tr>
<td></td>
<td>D-2. Community Health Center (Puskesmas)</td>
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<td></td>
<td>D-3. Integrated Health Post (Posyandu)</td>
</tr>
<tr>
<td>Data Collection</td>
<td>E-1. Questionnaire</td>
</tr>
<tr>
<td></td>
<td>E-2. Combinational</td>
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</tbody>
</table>

Table 1
Aspect and Categories Used for Content Analysis
The analyzed articles were then classified according to the categories established in Table 1. The collected data from the articles was visualized using graphs and explained based on previous research.

**RESULTS AND DISCUSSION**

**Number of Publications per Year**

The number of publications per year presents the number of articles published in the last five years in accredited SINTA healthcare journals in Indonesia. Based on the data analysis, publications on service quality were most abundant in 2020, totalling 18 publications. In the last five years, there has been a notable decrease in the publication of articles related to the quality of healthcare services.

![Figure 1. Trend of the number of publications on Healthcare Service Quality in Indonesia in the last 5 years](image)

COVID-19 was initially recognized in Wuhan, China, in late December 2019, and it began to affect Indonesia in early 2020. The COVID-19 outbreak motivated researchers to conduct studies related to healthcare services amid the pandemic. Indonesia was one of the countries that implemented Large-Scale Social Restrictions (PSBB) in response to the spread and transmission of COVID-19 (Sadaningsih et al., 2022). Since the implementation of PSBB, various aspects, including public facilities, have been restricted.

The outbreak of COVID-19 has led to a reduction in the quantity of patient appointments or visits (Wahyuni et al., 2022). According to (Dewi et al., 2021), the number of patients attending hospital visits decreased by almost 50% compared to the year before COVID-19 entered Indonesia. The causes include changes in the healthcare system, limitations on the number of patients to avoid overcrowding, and the
implementation of preventive measures and early detection. The restriction on the daily patient intake is believed to have caused patients to seek medical care at different hospitals, resulting in a decline in the patient count (Rahmadhani et al., 2021). Due to these restrictions, it is suspected that they have influenced patients' perceptions of the quality of the services they receive (Harahap & Utami, 2021). Thus, researchers became interested in addressing the topic of service quality in their research.

**Research Types**

The aspect of research types indicates the methods employed in the research on service quality that has been published. Based on Figure 2, quantitative research is the most dominant method utilized by researchers in investigating healthcare service quality in Indonesia.

![Type of Research](image)

**Figure 2.** Distribution of healthcare service quality research based on research types

Based on the data collected, articles indicate that the dominant variable under investigation is the correlation between the quality of healthcare services, how patients perceive them, revisit intentions, loyalty levels, and satisfaction. Quantitative methods are more frequently used to test hypotheses regarding these relationships in analysing the relationships between variables. Quantitative methods also involve structured and pre-established instruments, thereby minimizing the possibility of data flexibility or interpolation (Mulyadi, 2011).

On the other hand, qualitative research can also be employed to investigate healthcare service quality. Qualitative research uses the researchers themselves as the primary tool since it is challenging to use non-human instruments flexibly to observe various realities and interactions. Researchers describe social phenomena in the field using all their senses. The analysis presented in qualitative research consists of descriptive paragraphs that provide detailed insights into how respondents answer and the conclusions drawn from their responses.

![Type of Quantitative Research](image)

**Figure 3.** Distribution of Quantitative research on healthcare service quality in Indonesia

In addition to the research types used, the selected quantitative research methods are also presented. Based on Figure 3, correlation research is more dominantly employed by researchers in studies on service quality. Articles examining the correlation or relationship between healthcare service quality and one or more
variables aim to determine whether the service quality variable influences other variables, such as patient decisions to revisit or patient satisfaction with the facilities or service quality.

**Research Subject**

Based on Figure 4, patients are the dominant research subjects in studies related to service quality. From the collected articles, service quality is typically associated with patient satisfaction or revisit intentions, making patients the primary subjects of this research. In some articles, the research subjects extend to patients receiving direct services and to the families of patients who indirectly receive healthcare services (Dewi et al., 2021). Patients' families are also considered independent variables influencing patient revisit intentions (Suryani & Arini, 2020).

Employees also serve as subjects chosen by some researchers to study service quality. However, research involving employee subjects is relatively rare compared to the number of patient-subject studies. The quality of service is greatly influenced by the role of individuals as service providers to the community. Factors such as human resources and implemented systems significantly impact the quality of services provided to the community (Dharma et al., 2022). This can be a consideration for researchers interested in assessing healthcare service quality to also focus on employee subjects.

![Figure 4. Distribution of Research subjects on healthcare service quality in Indonesia](image)

**Types of Healthcare Institutions**

This category indicates the healthcare facilities researchers focus on when assessing service quality. Based on Figure 5, hospitals are the most frequently chosen research settings. Hospitals with comprehensive services and the availability of comprehensive healthcare for individuals, including inpatient, outpatient, and emergency services, contribute to the variety of service quality research developed by researchers (Manurung, 2019).

Furthermore, community health centres (puskesmas) are the second most preferred research setting for researchers. Puskesmas are responsible for providing healthcare services to individuals and the community, and within the national healthcare system framework, they are considered primary healthcare providers (Marhenta & Seran, 2019). The accessibility of puskesmas to the community, their presence in every sub-district, and their relatively comprehensive services influence researchers' decisions to choose puskesmas. Table 5 also presents some other institutions selected as research...
settings but have yet to be extensively studied. This can serve as a basis for developing service quality research in other healthcare institutions.

**Figure 5.** Distribution of Healthcare Institution types as research subjects on healthcare service quality in Indonesia

**Types of Services**

Quality in healthcare services is an essential aspect. Healthcare service quality should adhere to established standards and utilize resources rationally, efficiently, and effectively. This service quality is related to the effort to meet the needs and desires of service users (patients) and the ability to provide services that align with their expectations (Handiny et al., 2023).

Based on Figure 6, the most researched type of healthcare service is "other services." The author categorizes this as a general healthcare service, not specific to particular healthcare services. Patients expect quality service in terms of disease recovery and patient satisfaction with the entire treatment process, including the nutritional services provided in hospitals (Rachmawati & Afridah, 2014). This is one of the reasons why researchers conduct more general service-quality research.

Additionally, inpatient and outpatient services are also commonly chosen by researchers for studying service quality. Some factors prompting research on inpatient and outpatient services include a decrease in the number of inpatient and outpatient patients (Fadilah & Yusianto, 2019), the discovery of numerous patient complaints related to the facilities provided in inpatient and outpatient services at some healthcare institutions (Kismanto & Murtopo, 2023), and patient dissatisfaction with the services provided by healthcare staff (Nurcahyani & Kartikaningrum, 2019).

**Data Collection Instruments**

Data collection instruments indicate the tools researchers use to gather data on service quality and patient satisfaction. Based on Figure 7, questionnaires are the most widely used instrument in research, which aligns with the dominant quantitative research type. In quantitative research, the commonly used instrument is the questionnaire, which has been structured and tested beforehand (Mulyadi, 2011). Combination instruments refer to the
simultaneous use of questionnaires and interviews in a study. Researchers collect data using questionnaires and conduct interviews to validate the answers provided in the questionnaires (Sadaningsih et al., 2022).

Figure 7. Distribution of data collection instrument selection in healthcare service quality research in Indonesia

From the data on the instruments used for data collection, the author re-categorized the types of questionnaires created and used by researchers in healthcare service quality research. According to Figure 8, questionnaire types are structured based on the RATER and SERVQUAL dimensions. The RATER method identifies five dimensions: reliability, assurance, tangibles, empathy, and responsiveness (Mawarti & Thamrin, 2016). This method is adopted from the SERVQUAL method (Pramono, 2019), a tool used to evaluate service quality by measuring attributes within each dimension. The result is a gap score reflecting the disparity between respondents' perceptions of the service they received compared to their expectations and actual perceptions of the service they received (Satriani et al., 2013). The dimensions in the SERVQUAL method are more detailed and comprehensive, incorporating the five RATER dimensions, patient expectations before receiving the service, and their perceptions after receiving it (Fithriana & PS, 2020). These two questionnaire types are adapted to the researchers' respective goals in their studies.

As for articles falling into the category of other questionnaires, they do not specify the type of questionnaire used but do mention dimensions or aspects to be examined or measured beyond the RATER and SERVQUAL dimensions. For unidentified articles, researchers do not explain the type of questionnaire used or the aspects guiding their research.

Figure 8. Distribution of questionnaire types used in healthcare service quality research in Indonesia

Data Analysis Method

Referring to Figure 10, the correlation method is the most commonly used, with 30 research articles. Out of these 30 articles, the relationship between service quality variables and patient satisfaction is analyzed using bivariate analyses such as chi-square,
Spearman rank, and Pearson correlation. Additionally, some articles utilize ANOVA and multiple linear regression methods, typically employed in research analyzing more than two dependent variables. Other more varied methods, including Gap Analysis, Index Performance Analysis (IPA), Customer Satisfaction Index (CSI), and Structural Equation Modeling (SEM), are also used in this research topic. However, they have yet to be widely adopted by researchers. This can serve as a basis for recommending the development of service quality research with more appropriate research methods to achieve the research objectives.

![Data Analysis Methods](image)

Figure 9. Distribution of data analysis method selection in healthcare service quality research in Indonesia

**CONCLUSION**

From the articles reviewed in this study over the past five years, the highest number of publications on healthcare service quality was found in 2020. This was primarily due to the COVID-19 pandemic, which led to restrictions in various service sectors, particularly healthcare. Hence, researchers were keen on evaluating patient contentment with the service quality delivered amid the pandemic. Moreover, patients were the primary research subjects compared to healthcare employees from the respective institutions. Hospitals and community health centres (puskesmas) were this research's most commonly chosen institutions.

The types of services analyzed mainly focused on inpatient and outpatient care and general services. Given these discoveries, the author suggests various areas for additional investigation into the quality of services, including the need for qualitative studies to explore healthcare service quality more. Research and development to improve healthcare service quality should also focus on enhancing patient satisfaction and willingness to revisit healthcare facilities. Researchers are advised to choose tests most appropriate for each study's hypotheses and research designs.

**BIBLIOGRAFI**


Dharma, H. P., Wardani, R., Anam, A. K., & Abiddin, A. H. (2022). Service Quality...
Trends of Service Quality Researches in Indonesian Health Journals Over The Last Five Years: A Literature Review


Marhenta, Y. B., & Seran, K. E. (2019). Analisis Pengaruh Tingkat Kualitas


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MULUT DENGAN MINAT KUNJUNGAN ULANG PASIEN. Jurnal Kesehatan, 13.


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Anwar Fadlil Abdullah, Marina Sulastiana, Diana Harding, Zainal Abidin (2023)

First publication right:
Asian Journal of Engineering, Social and Health (AJESH)

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