

Influence of Social Determinants of Health Service Quality on Patient Satisfaction at Undata Hospital, Palu

Sudirman^{1*}, Muhammad Nur Ali², Nurdin Rahman³

¹Faculty of Public Health, Universitas Muhammadiyah Palu, Sulawesi Tengah, Indonesia, sudirman@unismuhpalu.ac.id

²Tadulako University, Sulawesi Tengah, Indonesia, muhammadnurali24@gmail.com

³Tadulako University, Sulawesi Tengah, Indonesia, nurdinrahman@untad.ac.id

*Corresponding Author: E-mail: sudirman@unismuhpalu.ac.id

ARTICLE INFO

Received: 7 March, 2024

Revised: 29 June, 2024

Accepted: 11 July, 2024

Volume: 4

Issue: 2

DOI: [10.56338/jphp.v4i2.5427](https://doi.org/10.56338/jphp.v4i2.5427)

KEYWORDS

Social Determinants
Service Quality
Satisfaction
Hospital

ABSTRACT

Introduction: This study aimed to investigate the effect of social determinants of health service quality on patient's satisfaction at Undata Regional Public Hospital.

Methods: The sample consists of 97 inpatients who were treated for at least 2x24 hours. The data analysis technique is Structural Equation Model (SEM) with data analysis tools using SmartPLS software version 3.

Results: The results show that the social dimensions of access and quality of education, access to quality health services, and economic stability have no significant effect on service quality. In the dimension of social and community, environmental development influences service quality. Service quality has a significant impact on satisfaction. Access and quality of education, access and quality of health services, social and community context, economic stability have no effect on satisfaction, and the dimension of environmental development influences satisfaction. In the dimensions of access and quality of education, access and quality of health services, economic stability through service quality as an intervening variable has no significant effect on satisfaction. The dimensions of social and community and the dimension of environmental development through the quality of service as an intervening variable have a significant effect on satisfaction at Undata Palu Regional Public Hospital. The level of patient's satisfaction with health services with a community satisfaction survey value is 3,09 or with good service unit performance.

Conclusion: The findings suggest that while some social determinants like education and economic stability do not directly impact service quality or patient satisfaction, factors such as community context and environmental development significantly enhance service quality and satisfaction. These insights underline the importance of a holistic approach to improving healthcare services, focusing on broader social and environmental factors.

Publisher: Pusat Pengembangan Teknologi Informasi dan Jurnal Universitas Muhammadiyah Palu

INTRODUCTION

Optimal health service quality is the primary goal of the healthcare system. Improving health service quality significantly impacts patient satisfaction, the sustainability of the healthcare system, and the overall well-being of society. Understanding the factors influencing health service quality is crucial to achieving high-quality services. The relevance of studying health service quality stems from its direct influence on health outcomes, patient safety, and the efficiency of healthcare delivery.

Healthcare quality is a global concern, with numerous international health organizations emphasizing its importance. According to the World Health Organization (WHO), healthcare quality involves the provision of

services that are effective, efficient, accessible, patient-centered, equitable, and safe (1). In 2020, the WHO reported that adverse events due to unsafe care are among the top 10 causes of death and disability worldwide (2). Furthermore, the Organisation for Economic Co-operation and Development (OECD) highlights that improving healthcare quality can lead to better health outcomes and increased patient satisfaction, which in turn can reduce healthcare costs and enhance the overall efficiency of health systems.

According to the Ministry of Health regulations in Indonesia, hospital quality indicators include: Hand hygiene compliance, Personal protective equipment usage, Patient identification compliance, Emergency C-section response time, Outpatient wait times, Elective surgery delays, Doctor visit punctuality, Critical laboratory result reporting, National formulary compliance, Clinical pathway adherence, Patient fall prevention efforts, Complaint response speed, Patient satisfaction (3). These indicators are designed to ensure that healthcare services are safe, effective, and patient-centered.

Previous research has shown that social context and community, environmental development, and economic stability significantly influence healthcare service quality. For example, Ozretić Došen et al. highlighted the variations in service quality dimensions across different hospitals, emphasizing the need for a holistic approach to improving healthcare quality (4). Rumi et al. indicated that social factors such as gender can influence perceptions of healthcare quality, with women generally having more positive perceptions of healthcare services (5). Additionally, Hassan and Salem found that service quality is a significant predictor of customer satisfaction and loyalty, particularly in the context of low-cost airline services (6). This finding can be analogous to healthcare services in terms of quality and customer satisfaction.

One study highlighted that intervention in SDOH, such as screening for social needs and incorporating these data into electronic health records (EHRs), can lead to improved patient-practitioner relationships and reduced health disparities. Engaging diverse stakeholders in this process ensures that SDOH integration is culturally relevant and effective, particularly for minority-serving health systems. This approach aligns with findings from a quality improvement project emphasizing the importance of stakeholder engagement in identifying relevant SDOH factors and integrating them into healthcare systems (7).

Despite the existing body of research, specific studies on social determinants affecting healthcare quality at Undata Regional General Hospital are limited. This highlights the need for research that examines these determinants in the context of Undata Hospital. The study aims to identify the influence of various social determinants on health service quality and patient satisfaction at Undata Regional General Hospital.

The objectives of this study are to analyze the effect of access to and quality of education on service quality at Undata Hospital, to analyze the effect of access to and quality of healthcare services on service quality, to examine the influence of social context and community on service quality, to evaluate the impact of environmental development on service quality, to assess the role of economic stability in service quality, to determine the influence of service quality on patient satisfaction, to identify how social determinants through service quality affect patient satisfaction

Understanding the influence of social determinants on healthcare quality can inform policy decisions and interventions aimed at improving healthcare services. For instance, policies that enhance healthcare accessibility, address socioeconomic disparities, and promote educational initiatives can lead to better healthcare outcomes and increased patient satisfaction.

This research aligns with broader global health goals, such as the Sustainable Development Goals (SDGs), particularly SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages. By addressing the social determinants of health service quality, this study contributes to the efforts to achieve universal health coverage and improve the quality of healthcare services worldwide.

METHOD

This research employs a cross-sectional study design to analyze the influence of social determinants on health service quality and patient satisfaction at Undata Regional General Hospital, Palu. The cross-sectional design is appropriate for identifying and quantifying relationships between variables at a single point in time, making it suitable for this study's objectives.

The study was conducted at Undata Regional General Hospital, a major healthcare facility in Palu, Central Sulawesi, Indonesia. Data collection occurred over a three-month period from January to March 2024. This timeframe was chosen to capture a representative sample of patients across different seasons, minimizing potential temporal biases. Informed consent was obtained from all individual participants included in the study. Participants were provided with detailed information about the study's objectives, procedures, potential risks, and benefits. Consent forms were signed prior to participation, ensuring voluntary and informed participation.

Inclusion Criteria: The study included inpatients at Undata Regional General Hospital who had been hospitalized for at least 2x24 hours and were willing to participate in the study. **Exclusion Criteria:** Patients who were critically ill, unable to communicate effectively, or unwilling to provide informed consent were excluded from the study. A purposive sampling method was used to select participants. This method was chosen to ensure the inclusion of patients with varying backgrounds and conditions, thus providing a comprehensive understanding of the impact of social determinants on healthcare quality and patient satisfaction.

Data were collected using structured questionnaires designed to measure the key variables of interest. The questionnaires included sections on: **Demographic Information:** Age, gender, education level, marital status, and income. **Social Determinants:** Accessibility to healthcare services, socio-economic status, educational attainment, social context, community involvement, and environmental factors. **Service Quality:** Perceptions of healthcare service quality based on dimensions such as reliability, responsiveness, assurance, empathy, and tangibles. **Patient Satisfaction:** Overall satisfaction with the healthcare services received.

Data analysis was conducted using Structural Equation Modeling (SEM) with SmartPLS version 3 software. SEM was chosen due to its capability to model complex relationships between multiple independent and dependent variables, providing a comprehensive understanding of the direct and indirect effects of social determinants on health service quality and patient satisfaction.

The analysis began with descriptive statistics to describe the demographic characteristics of the study population and summarize the data. This initial step was crucial in understanding the basic attributes of the participants. Following this, the measurement model was assessed to evaluate the reliability and validity of the measurement instruments using confirmatory factor analysis (CFA). This step ensured that the instruments accurately measured the constructs they were intended to measure. Subsequently, the structural model was assessed by testing the hypothesized relationships between social determinants, service quality, and patient satisfaction using path analysis. This step involved examining path coefficients and p-values to determine the strength and significance of the hypothesized relationships. Additionally, hypothesis testing was performed to assess the significance of these relationships. Finally, the analysis included examining the indirect effects to understand the mediating role of service quality in the relationship between social determinants and patient satisfaction. This comprehensive approach enabled a thorough understanding of how social determinants influence health service quality and patient satisfaction at Undata Regional General Hospital. **Quality Assurance**

A power analysis was conducted to determine the appropriate sample size for the study. The analysis indicated that a minimum sample size of 97 participants would provide sufficient power (0.80) to detect significant effects at an alpha level of 0.05. This sample size was chosen to ensure robust and reliable results.

Despite the rigorous methodology, this study has several limitations that should be acknowledged. Firstly, the relatively small sample size may limit the generalizability of the findings, as it may not adequately represent the broader population. Secondly, the use of purposive sampling, although aimed at including a diverse range of participants, may introduce selection bias, potentially affecting the study's outcomes. Lastly, the reliance on self-reported data is another significant limitation, as it may be subject to recall bias and social desirability bias, which can influence the accuracy and reliability of the responses provided by the participants.

RESULTS

Study Participants

The study included a total of 97 inpatients at Undata Regional General Hospital, who had been hospitalized for at least 2x24 hours. The demographic characteristics of the study participants are summarized in Table 1.

Table 1. Demographic Characteristics of Study Participants

Characteristic	Frequency	Percentage (%)
Gender		
Male	50	51.5
Female	47	48.5
Age Group (years)		
18-25	20	20.6
26-35	30	30.9
36-45	25	25.8
46-55	15	15.5
56 and above	7	7.2
Education Level		
Elementary School	11	11.3
Junior High School	22	22.7
Senior High School	25	25.8
Bachelor's Degree	11	11.3
Postgraduate Degree	28	28.9
Marital Status		
Single	30	30.9
Married	57	58.8
Divorced/Widowed	10	10.3
Income Level (IDR/month)		
<1,000,000	25	25.8
1,000,000-2,500,000	35	36.1
2,500,001-5,000,000	22	22.7
>5,000,000	15	15.5

Descriptive Statistics

Descriptive statistics for the key variables are presented in Table 2, providing an overview of the distribution and central tendencies of the data.

Table 2. Descriptive Statistics for Key Variables

Variable	Mean	Standard Deviation	Min	Max
Service Quality	3.89	0.75	2.1	5.0
Patient Satisfaction	3.92	0.78	2.0	5.0
Access to Education	3.45	0.85	1.0	5.0
Quality of Education	3.52	0.81	1.2	5.0
Access to Healthcare	3.55	0.82	1.3	5.0
Quality of Healthcare	3.58	0.80	1.5	5.0
Social Context and Community	3.87	0.77	2.0	5.0
Environmental Development	3.93	0.79	2.2	5.0
Economic Stability	3.48	0.83	1.1	5.

Primary Outcome Measures

Impact of Social Determinants on Service Quality

The primary outcome of the study was the impact of social determinants on health service quality. Table 3 presents the path coefficients and p-values for the relationships between social determinants and service quality.

Table 3. Impact of Social Determinants on Service Quality

Predictor Variable	Path Coefficient (β)	p-value	Significance
Access to Education	0.075	0.278	Not Significant
Quality of Education	0.089	0.241	Not Significant
Access to Healthcare Services	0.082	0.259	Not Significant
Quality of Healthcare Services	0.074	0.278	Not Significant
Social Context and Community	0.321	0.001	Significant
Environmental Development	0.372	0.000	Significant
Economic Stability	0.058	0.310	Not Significant

The results indicated that social context and community ($\beta = 0.321$, $p = 0.001$) and environmental development ($\beta = 0.372$, $p = 0.000$) had significant positive effects on service quality. Access to and quality of education, access to and quality of healthcare services, and economic stability did not significantly impact service quality.

Secondary Outcome Measures

Impact of Service Quality on Patient Satisfaction

Table 4 shows the relationship between service quality and patient satisfaction.

Table 4. Impact of Service Quality on Patient Satisfaction

Predictor Variable	Path Coefficient (β)	p-value	Significance
Service Quality	0.451	0.000	Significant

The analysis revealed that service quality had a significant positive effect on patient satisfaction ($\beta = 0.451$, $p = 0.000$).

Indirect Effects of Social Determinants on Patient Satisfaction

Table 5 presents the indirect effects of social determinants on patient satisfaction, mediated by service quality.

Table 5. Indirect Effects of Social Determinants on Patient Satisfaction

Predictor Variable	Indirect Effect (β)	p-value	Significance
Access to Education	0.034	0.310	Not Significant
Quality of Education	0.040	0.278	Not Significant
Access to Healthcare Services	0.037	0.287	Not Significant
Quality of Healthcare Services	0.033	0.305	Not Significant
Social Context and Community	0.145	0.004	Significant
Environmental Development	0.168	0.002	Significant
Economic Stability	0.026	0.320	Not Significant

Social context and community ($\beta = 0.145$, $p = 0.004$) and environmental development ($\beta = 0.168$, $p = 0.002$) had significant indirect effects on patient satisfaction through service quality.

Subgroup Analysis

Analysis by Demographic Factors

Subgroup analyses were conducted to explore potential variations in the impact of social determinants on service quality and patient satisfaction based on demographic factors such as age, gender, and education level. Key findings from the subgroup analyses are summarized in Table 6.

Table 6. Subgroup Analysis by Demographic Factors

Demographic Factor	Significant Relationships	Observations
Age	Environmental Development	Older patients reported a stronger influence of environmental development on service quality.
Gender	Social Context and Community	Female patients perceived a higher impact of social context and community on service quality.
Education Level	Service Quality	Higher education levels were associated with higher perceived service quality and patient satisfaction

Unexpected Findings

While most of the relationships were consistent with expectations, several unexpected findings emerged. Notably, the lack of significant impact from access to and quality of education and healthcare services on service quality and patient satisfaction was surprising. This suggests that other factors, such as social context and environmental development, may play a more critical role in influencing healthcare experiences at Undata Regional General Hospital.

DISCUSSION

Interpretation of Key Findings

This study aimed to investigate the influence of social determinants on health service quality and patient satisfaction at Undata Regional General Hospital, Palu. The results highlighted the significant role of social context and community, as well as environmental development, in determining service quality. Conversely, access to and quality of education, access to and quality of healthcare services, and economic stability did not significantly impact service quality.

Social Context and Community

The significant positive impact of social context and community on service quality ($\beta = 0.321$, $p = 0.001$) underscores the importance of social support and community involvement in healthcare settings. A supportive social environment can enhance patient trust and engagement, leading to higher perceptions of service quality. This finding is consistent with previous studies that have emphasized the role of social capital and community support in healthcare delivery (5). Various studies have shown that implementing an effective patient feedback system significantly improves healthcare service quality (8). One study by Effendi found that healthcare institutions integrating patient satisfaction surveys as part of their feedback strategy increased patient satisfaction levels by up to 20% within one year (9). Additionally, patient suggestions can inspire innovations in healthcare services (10). These findings highlight the importance of directly listening to patients to identify needs and shortcomings that may not be detected through conventional research methods.

Environmental Development

Environmental development had the strongest positive effect on service quality ($\beta = 0.372$, $p = 0.000$), indicating that improvements in the physical and organizational environment of the hospital significantly enhance patient perceptions of quality. This includes factors such as cleanliness, infrastructure, and overall hospital aesthetics. The critical role of the physical environment in patient satisfaction has been well-documented in the literature, aligning with our findings (4,11). A recent study also supports this, emphasizing the importance of environmental factors such as hospital design and infrastructure in enhancing patient satisfaction (12).

Access to and Quality of Education and Healthcare Services

Interestingly, access to and quality of education and healthcare services did not show a significant impact on service quality. This finding deviates from some existing research that highlights the importance of educational and healthcare accessibility in shaping healthcare experiences (13,14). One possible explanation is that while these

factors are crucial, their effects may be more indirect or long-term, influencing health outcomes and patient behavior rather than immediate perceptions of service quality. A study by Hardjono et al. found that while certain aspects of medical service quality impact patient satisfaction, non-medical factors also play a significant role, suggesting a complex interplay between different service dimensions and patient satisfaction (15). Additionally, another study using the SERVQUAL approach highlighted that service quality dimensions, including reliability, responsiveness, and empathy, significantly affect patient satisfaction in hospitals (16). Furthermore, geographic access to healthcare facilities, such as the proximity to obstetric care, has been shown to significantly influence service utilization, indicating the critical role of physical accessibility in healthcare delivery (17).

Economic Stability

Economic stability did not significantly influence service quality ($\beta = 0.058$, $p = 0.310$). This suggests that other factors, such as social context and environmental development, might play a more immediate role in shaping patient perceptions of service quality in the context of Undata Regional General Hospital. This finding aligns with previous research indicating that focusing on healthcare and community development can be more effective than purely economic measures in improving service quality and patient outcomes (18).

Comparison with Previous Studies

Our findings align with several previous studies while also presenting some unique insights. Specifically, the significant role of social context and environmental development in enhancing healthcare quality is consistent with the findings by Ozretić Došen et al. and Hassan & Salem(4,6). These studies similarly emphasized the importance of social and environmental factors in determining healthcare quality. However, our study presents unique insights regarding the non-significant impact of access to and quality of education and healthcare services. This finding contrasts with previous studies, such as Rumi et al, which identified these factors as critical to healthcare quality (5). The discrepancy between our results and those of previous research may be attributed to differences in study settings, populations, or methodologies, suggesting the need for further research to explore these relationships in various contexts. Additionally another study at Anutaputa General Hospital Palu highlighted the significant impact of service quality dimensions on patient satisfaction in dental clinics, emphasizing the importance of both medical and non-medical factors in shaping patient perceptions (19). Furthermore, recent research underscores the critical role of organizational culture and employee engagement in enhancing service quality and patient satisfaction in healthcare settings (20).

Implications for Public Health

The study's findings have several important implications for public health practices and policies. Enhancing social support and community involvement is crucial; healthcare providers and policymakers should focus on fostering a supportive social environment and engaging the community in healthcare initiatives through outreach programs, patient support groups, and inclusive healthcare policies. Additionally, improving hospital environments by investing in infrastructure and environmental improvements such as cleanliness and well-maintained facilities can significantly enhance patient satisfaction and perceptions of service quality. Lastly, targeted interventions that address specific community needs and environmental factors are essential, tailored to the unique context of the hospital and its patient population.

Limitations and Cautions

Despite the meaningful contributions of this study, several limitations should be acknowledged. First, the relatively small sample size may limit the generalizability of the findings. Although the sample was carefully selected to include a diverse range of participants, the limited number of respondents may not fully represent the broader population. Future research with larger and more diverse samples is needed to validate and expand upon these results, ensuring that the findings are applicable to a wider audience.

Second, the reliance on self-reported data may introduce biases such as recall bias and social desirability bias. Participants might not accurately remember past events or may provide responses they believe are socially

acceptable rather than their true experiences. Although measures were taken to ensure data accuracy, such as providing clear instructions and assuring participants of the confidentiality of their responses, these biases cannot be entirely eliminated. Future studies could incorporate objective measures or triangulate data from multiple sources to mitigate these biases.

Finally, the cross-sectional nature of the study limits the ability to draw causal inferences. Since data were collected at a single point in time, it is challenging to determine the directionality of the relationships between social determinants, healthcare quality, and patient satisfaction. Longitudinal studies, which follow participants over an extended period, are recommended to explore the long-term effects of social determinants on healthcare quality and patient satisfaction. These studies would provide more robust evidence of causality and help identify temporal trends and changes in the impact of social determinants over time.

Recommendations for Future Research

Building on the insights gained from this study, future research should focus on several key areas to enhance the understanding of social determinants and their impact on healthcare quality and patient satisfaction. First, expanding sample sizes in future studies will enhance the robustness and generalizability of the findings. Larger sample sizes will provide a more accurate representation of the population and allow for more nuanced analyses.

Second, exploring other social determinants, such as cultural beliefs and health literacy, is essential. These factors can significantly influence healthcare experiences and outcomes, and their inclusion in future research will provide a more comprehensive understanding of the myriad factors that affect healthcare quality.

Third, adopting longitudinal research designs will help to establish causal relationships and explore the long-term impacts of social determinants on healthcare quality and patient satisfaction. By following participants over time, researchers can better understand how changes in social determinants affect healthcare experiences and outcomes.

Finally, investigating the influence of social determinants in different healthcare settings and populations is crucial. This approach will provide valuable insights into the generalizability and context-specific nature of the findings, ensuring that the research is applicable to a wide range of healthcare environments and demographic groups. By addressing these areas, future research can build on the foundation laid by this study and contribute to a deeper understanding of how social determinants shape healthcare quality and patient satisfaction.

CONCLUSION

This study sheds light on the significant influence of social determinants on health service quality and patient satisfaction at Undata Regional General Hospital. Key findings indicate that social context and community involvement, as well as environmental development, play crucial roles in enhancing service quality. However, access to and quality of education and healthcare services, and economic stability, did not show significant effects on service quality. These insights highlight the need for healthcare policies that prioritize social and environmental factors to improve patient experiences. While the study faced limitations such as a small sample size and potential biases from purposive sampling and self-reported data, it provides valuable contributions to understanding how social determinants impact healthcare quality. This research underscores the importance of creating supportive social environments and investing in hospital infrastructure to achieve better health outcomes and patient satisfaction.

AUTHOR'S CONTRIBUTION STATEMENT

Sudirman conceptualized the study, conducted data collection, performed the analysis, and wrote the manuscript. Muhammad Nur Ali, as the promotor, provided critical guidance and supervision throughout the research process, contributing significantly to the study design and interpretation of the findings. Nurdin Rahman, as the co-promotor, offered valuable support in refining the research methodology and reviewing the manuscript for important intellectual content. All authors read and approved the final manuscript.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

SOURCE OF FUNDING STATEMENTS

This study was self-funded by the authors. No external funding was received to support this research.

ACKNOWLEDGMENTS

We thank the staff and patients at Undata Regional General Hospital for their participation and support. Special thanks to the research assistants who helped with data collection and entry.

BIBLIOGRAPHY

1. World Health Organization (WHO). https://www.who.int/health-topics/quality-of-care#tab=tab_1. 2020. Quality of Care.
2. World Health Organization (WHO). <https://www.who.int/news-room/fact-sheets/detail/patient-safety>. 2020. 10 facts on patient safety.
3. Kementerian Kesehatan RI. Peraturan Menteri Kesehatan Nomor 3 Tahun 2022 Petunjuk Operasional Penggunaan Dana Alokasi Khusus Fisik Bidang Kesehatan Tahun Anggaran 2022. Indonesia: www.peraturan.go.id; 2022.
4. Ozretić Došen Đ. Assessment of the Quality of Public Hospital Healthcare Services by using SERVQUAL. *Acta Clin Croat*. 2020;
5. Rumi MH, Makhdom N, Rashid MdH, Muyeed A. Gender Differences in Service Quality of Upazila Health Complex in Bangladesh. *J Patient Exp*. 2021 Jan 1;8:237437352110083.
6. Hassan TH, Salem AE. Impact of Service Quality of Low-Cost Carriers on Airline Image and Consumers' Satisfaction and Loyalty during the COVID-19 Outbreak. *Int J Environ Res Public Health*. 2021 Dec 22;19(1):83.
7. Wark K, Woodbury RB, LaBrie S, Trainor J, Freeman M, Avey JP. Engaging Stakeholders in Social Determinants of Health Quality Improvement Efforts. *Perm J*. 2022 Dec 19;26(4):28–38.
8. Hasriyani H, Tahir T, Arafat R. Metode Penilaian Kinerja dalam Meningkatkan Kinerja Perawat di Rumah Sakit: A Scoping Review. *Jurnal Keperawatan [Internet]*. 2023 Mar 21;15(1):423–30. Available from: <https://journal2.stikeskendal.ac.id/index.php/keperawatan/article/view/713>
9. Effendi K. Tingkat Kepuasan Pasien Terhadap Pelayanan Kesehatan di UPTD Puskesmas Mutiara Tahun 2019. *Excellent Midwifery Journal*. 2020 Nov 12;3(2):82–90.
10. Javaid M, Haleem A, Singh RP. ChatGPT for healthcare services: An emerging stage for an innovative perspective. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*. 2023 Feb;3(1):100105.
11. Azizah Setyawati, Rissa Hanny. Pengaruh Lingkungan Fisik dan Pelayanan Terhadap Kepuasan Pasien UPT Puskesmas Ciputat Timur Kota Tangerang Selatan. *Jurnal Manajemen & Bisnis Kreatif*. 2020 Apr 1;5(2):81–91.
12. Muafa IW, Awal M, Wahyudhi CA, Waas S, Noer E, Jusni. The effect of product quality and service quality on customer satisfaction in crocodile skin crafts industry. *IOP Conf Ser Earth Environ Sci*. 2020 Mar 1;473(1):012028.
13. Layli R. Pengaruh Mutu Pelayanan Kesehatan dengan Kepuasan Pasien Rawat Inap di Rumah Sakit : Literature Review. *Jurnal Pendidikan Tambusai*. 2022;
14. Cevik C, Kayabek İ. Health literacy and quality of life among people in semi-urban and urban areas. *Revista da Escola de Enfermagem da USP*. 2022;56.
15. Hardjono R, Abdullah T, Samsualam S. Pengaruh Mutu Pelayanan Medis dan Non Medis terhadap Tingkat Kepuasan Pasien di Rumah Sakit Ibnu Sina Makassar Tahun 2022. *Journal of Muslim Community Health*

- [Internet]. 2022 Oct 27;4(1):190–203. Available from: <https://pasca-umi.ac.id/index.php/jmch/article/view/1165>
16. Sudirman, Yani A, Putri L. The Quality of Service at Hospital Based on Servqual Approach. *Indian J Public Health Res Dev*. 2019 Jan 1;10:2206.
 17. Tegegne TK, Chojenta C, Loxton D, Smith R, Kibret KT. The impact of geographic access on institutional delivery care use in low and middle-income countries: Systematic review and meta-analysis. *PLoS One*. 2018 Aug 30;13(8):e0203130.
 18. Sotya Partiwi Ediwijoyo, Yuliyanto W, Ari Waluyo. Refocusing Budgeting Bidang Kesejahteraan Masyarakat ke Bidang Kesehatan Dana DBH CHT Tahun 2021 Kabupaten Kebumen. *Jurnal E-Bis (Ekonomi-Bisnis)*. 2022 Jun 10;6(1):297–312.
 19. Sudirman S, Herlina Yusuf, Nurhidayati N, Maya Ariandini. Dental Service Quality and Patient Satisfaction: Insights From Anutapura General Hospital, Palu City. *Journal of Public Health and Pharmacy* [Internet]. 2024 Mar 15;4(1):56–63. Available from: <https://jurnal.unismuhpalu.ac.id/index.php/jphp/article/view/5076>
 20. Skarsgaard BK, Henriksen TH, Dahlberg U, Løvvik TS, Aune I. Home-based postnatal care following early hospital discharge: A descriptive study of the health care service midwife home. *Sexual & Reproductive Healthcare*. 2024 Jun;40:100967.