



Analysis of the Implementation of Refraction Examination as Part of Optical Service Quality Management

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Abstract

Research Objective: To analyze the implementation of refraction examinations as part of optical service quality management, focusing on procedural accuracy, compliance with standard operating procedures (SOPs), and their impact on patient satisfaction. **Methodology:** This study used a mixed-methods approach. Quantitative data were collected through questionnaires administered to 100 patients from five optical service units in the Jakarta area. Qualitative data were obtained through in-depth interviews with 15 optometrists and 5 optical managers to explore service management practices and challenges in implementing refraction examinations. Quantitative analysis was conducted using multiple linear regression to examine the relationship between refraction examination practices and patient satisfaction. Meanwhile, qualitative data were analyzed thematically to identify patterns of quality management and barriers to implementation. **Results:** The findings showed that the accuracy of refraction examinations, clarity in communicating examination results, and compliance with SOPs significantly influenced patient satisfaction ($p < 0.05$). These factors contributed 42%, 28%, and 18%, respectively, to patient satisfaction. Optical service units that implemented internal quality monitoring systems and regular staff training demonstrated higher service consistency. However, several barriers were identified, including limited service time, differences in staff understanding of SOPs, and limited examination equipment. **Conclusion:** Accurate and standardized refraction examinations play an important role in improving optical service quality and patient satisfaction. Strengthening SOP compliance, improving communication, and providing regular training and quality monitoring are recommended to maintain service consistency.

Keywords: *refraction examination, optical service quality, quality management, patient satisfaction, optometrist.*

INTRODUCTION

Visual health plays a vital role in supporting daily activities, including academic, occupational, and social functions. Untreated visual impairments can reduce productivity, negatively affect quality of life, and impose a significant socio-economic burden (Nasution SLR, 2022). One of the most common visual disorders is refractive error, a condition in which light is not properly focused on the retina, resulting in blurred vision. Common types of refractive errors include myopia, hyperopia, astigmatism, and presbyopia (Halimatussa'diyah TS, 2025).

According to the World Health Organization (WHO), more than 2.2 billion people worldwide experience visual impairment, nearly half of which is caused by uncorrected refractive errors. Of these cases, at least 1 billion are preventable or treatable, with approximately 90% occurring in low- and middle-income countries. In Indonesia, the prevalence of refractive errors remains high, particularly among school-aged children and the productive-age population (Da Costa SA, 2025). This condition highlights the importance of accurate and high-quality refraction examinations as a key intervention in reducing visual impairment.

Optical services play a critical role in maintaining and improving community visual health. The core of these services is refraction examination, a clinical procedure aimed at measuring refractive abnormalities of the eye, such as myopia, hyperopia, and astigmatism. Accurate examination results are essential for determining appropriate eyeglass or contact lens prescriptions, directly affecting patient comfort and visual health (Utami HD A. P., 2021).

In optical service practice, refraction examination is not merely a technical procedure for determining corrective lens power but also an important indicator of service quality management (Agnaty & Jaksa, 2025). Optical service quality management encompasses systematic efforts to ensure patients receive accurate examinations, professional services, and visual correction outcomes tailored to individual needs. Therefore, the implementation of refraction examination should be managed as part of a continuous quality system rather than as an isolated medical service (Intan Septyaningrum, 2024).

However, in practice, the implementation of refraction examinations in optical services still faces several challenges. Common issues include non-uniform examination procedures, inconsistent service quality, overlooked non-technical aspects, limited continuous quality evaluation, and increasing patient expectations. These problems may reduce service quality, weaken public trust in optometry professionals, and hinder overall improvement in eye health services (Putri AJ, 2024).

Analyzing the implementation of refraction examinations as part of optical service quality management is essential for improving service quality, enhancing patient satisfaction, supporting professional standards, and contributing academically and practically to optometry services. This study integrates technical and managerial perspectives to provide a comprehensive understanding of improving optical service quality.

METHODS

This study adopted a descriptive–analytic design employing a mixed-methods approach. The quantitative component examined the relationship between the implementation of refraction examinations and patient satisfaction using structured questionnaires. The qualitative component explored facilitating and inhibiting factors in the implementation of refraction examinations as part of optical service quality management through in-depth interviews and direct observations (Sari NP, 2023).

A mixed-methods design was selected to integrate quantitative measures of patient satisfaction and refraction examination quality with qualitative insights into managerial practices, standard operating procedures (SOPs), and routine optometry workflows. This approach enabled a comprehensive assessment of the effectiveness of refraction examination implementation and its contribution to overall optical service quality (Prasetyo A, 2022).

Data were collected using structured questionnaires measuring three variables: service satisfaction, quality of refraction examination outcomes, and perceived professionalism of optometry personnel. Service satisfaction and examination quality were each assessed using eight items, while professionalism was measured using seven items. All questionnaire items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Qualitative data was supplemented with semi-structured interview guides and SOP observation checklists (Rahel Falentcia Serafim Irot, 2025).

Composite scores were calculated by summing item responses for each variable, yielding score ranges of 8–40 for service satisfaction, 8–40 for refraction examination quality, and 7–35 for perceived professionalism. For comparative purposes, scores were optionally normalized into percentage values. Interpretation followed predefined criteria, whereby scores below 60% indicated low performance requiring substantial improvement, scores between 60% and 79% indicated moderate performance requiring targeted enhancement, and scores of 80% or higher indicated good or adequate performance (Rahmawati I, 2024). The study was conducted over a four-week period, from September 9 to October 10, 2025.

Operational objectives are formulated based on indicators that can be measured through questionnaires, observations, and clinical evaluations (Rahmawati I, Analisis kepuasan pasien terhadap kualitas pelayanan kesehatan menggunakan pendekatan SERVQUAL, 2024).

1. Strengthening Theoretical Grounding

a) Donabedian’s Structure–Process–Outcome (SPO) Model

- Structure refers to organizational elements such as availability of standardized equipment, optometrist qualifications, training systems, and internal quality monitoring.
- Process includes procedural accuracy in refraction examination, compliance with SOPs, and clarity of communication.
- Outcome consists of patient satisfaction and loyalty.

The study empirically examines the process–outcome linkage, demonstrating how technical accuracy and SOP compliance (process variables) significantly influence patient-reported outcomes.

b) SERVQUAL Framework

variables with SERVQUAL dimensions:

- Reliability → Accuracy of refraction examination
- Assurance → Professional competence and SOP adherence
- Responsiveness → Communication clarity
- Tangibles → Examination equipment availability
- Empathy → Patient-centered explanation

Importantly, we clarify that this study extends SERVQUAL by incorporating clinical accuracy as an objective quality dimension, thereby integrating perceptual and technical quality components (Rahman A, 2023).

2. Clarification of Sampling Procedures

We have expanded the Methods section to provide detailed information on sampling:

1. Quantitative Component

- Population: Patients receiving refraction examinations at five optical units in Jakarta and Depok.
- Sampling frame: Registered patients undergoing examination during the study period.
- Sampling technique: Systematic random sampling
- Sample size determination: Based on minimum requirements for multiple regression (minimum 10–15 cases per predictor variable), ensuring adequate statistical power.

2. Qualitative Component

- Sampling strategy: Purposive sampling.
- Participants: 15 optometrists and 5 optical managers with at least two years of professional experience.
- Saturation: Data collection continued until thematic saturation was achieved.

Table 1. Clarity of objectives and problem formulation

| Variable | Measurable indicators | Operational objectives |
|---|---|---|
| Variable X1 Accuracy of Refractive Examination | <ul style="list-style-type: none"> • Accuracy of lens correction results of minimal visual complaints after examination • Prescription suitability to patient visual needs • Prescription revision frequency | <ol style="list-style-type: none"> 1. Measure the accuracy level of refractive examination based on patient perception and clinical evaluation. 2. Analyze the relationship between the accuracy of examination results and the level of visual complaints after service. |

| | | |
|--|---|--|
| | | 3. Assess the contribution of examination accuracy to increased patient satisfaction. |
| Variable X2 – Clarity of Examination Results Communication | <ul style="list-style-type: none"> • Clarity of refraction condition explanation • Ease of understanding lens recommendations • Opportunity to ask questions • Empathy and professionalism of optometry staff | <ol style="list-style-type: none"> 1. Measuring the level of patient understanding of refraction examination results. 2. Analyzing the effect of optometrist communication on patient satisfaction. 3. Testing the relationship between effective communication and patient loyalty. |
| Variable X3 – Compliance with SOPs | <ul style="list-style-type: none"> • Implementation of examination stages according to standards • Consistency of procedures between patients • Medical record documentation • Use of tools according to protocol | <ol style="list-style-type: none"> 1. Measuring the level of compliance of optometry personnel with refraction examination SOPs. 2. Analyzing the effect of SOP compliance on the quality of examination results. 3. Assessing the contribution of SOP compliance to patient satisfaction |
| Variable Y1 – Patient Satisfaction | <ul style="list-style-type: none"> • Satisfaction with examination results • Satisfaction with service process • Expectation-outcome fit • Overall service assessment | <ol style="list-style-type: none"> 1. Measure patient satisfaction with refraction examination services. 2. Analyze the effect of X1, X2, and X3 on patient satisfaction |

Table 2. Detailed Formulation of Hypotheses:

| No | Hypothesis | Details |
|----------------|---|---------|
| 1 | Partial Hypothesis (t-test) | |
| H ₁ | The accuracy of refraction examination (X1) has a positive and significant effect on patient satisfaction (Y1). | |
| H ₂ | Clarity of communication regarding examination results (X2) has a positive and significant effect on patient satisfaction (Y1). | |
| H ₃ | Compliance with SOPs (X3) has a positive and significant effect on patient satisfaction (Y1). | |
| H ₄ | The accuracy of refraction examinations (X1) has a positive effect on patient loyalty (Y2). | |
| 2 | Simultaneous Hypothesis (F Test) | |
| H ₅ | The accuracy of examinations, communication of results, and adherence to SOPs simultaneously have a significant effect on patient satisfaction. | |

Sampling

A. Population and Sample Frame

1. Quantitative

- Target population: All patients who underwent refraction examinations at optical shops in the Jakarta and Depok area during the study period.

- Sample frame: List of patients recorded in the optical shop administration system during the last 3 months.
- Unit of analysis: Individual patients.

2. Qualitative

- Target population: Optometrists and optical managers.
- Sample frame: List of active optometrists and managers who have worked for at least 1 year.

B. Sampling Techniques

1. Quantitative

- Using probability sampling with the following techniques:
- Simple Random Sampling (if a complete patient list is available), or
- Systematic Random Sampling (e.g., every third patient).

2. Qualitative

- Purposive sampling, criteria:
- Optometric personnel with ≥ 1 year of experience
- Managers involved in the preparation/supervision of SOPs

Reliability Using Cronbach's Alpha:

| Variabel | Cronbach's α |
|----------|---------------------|
| X1 | ≥ 0.80 |
| X2 | ≥ 0.85 |
| X3 | ≥ 0.82 |
| Y1 | ≥ 0.88 |
| Y2 | ≥ 0.84 |

Kriteria:

- ≥ 0.70 = reliabel
- ≥ 0.80 = sangat reliabel

RESULTS

Respondent Characteristics

Each variable was measured using a Likert scale (1–5). The mean scores are presented in Table 1.

Table 1. Descriptive Statistics of Study Variables

| Variable | Items | Mean | SD | Category |
|-------------------------------|-------|------|------|-----------|
| Service satisfaction | 8 | 4,32 | 0,41 | Very Good |
| Quality of refraction results | 8 | 4,18 | 0,47 | Good |
| Professionalism perception | 7 | 4,26 | 0,44 | Very Good |

These results indicate that overall optical services met good quality standards, with service satisfaction and professionalism scoring the highest (Harefa, 2025).

Correlation and Regression Analysis

Multiple linear regression analysis showed that the quality of refraction results and perceived professionalism significantly influenced service satisfaction.

Table 2. Results of Multiple Linear Regression Analysis

| Independent Variable | β Coefficient | t-value | p-value | Result |
|-------------------------------|---------------------|---------|---------|-------------|
| Quality of refraction results | 0,421 | 5,82 | 0,000 | Significant |
| Professionalism perception | 0,278 | 3,96 | 0,001 | Significant |
| Constant | 0,963 | 2,14 | 0,035 | - |

R² = 0,60

The coefficient of determination ($R^2 = 0.60$) indicates that 60% of the variation in service satisfaction can be explained by two independent variables, namely the quality of refraction examination outcomes and the professionalism of optometry personnel. The significance test results showed p-values of less than 0.05, indicating statistically significant relationships.

The regression results show:

Model:

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

With the results:

| Variables | β standar | p-value | sr ² (Unique Variants) | 95% CI β |
|---------------------------|-----------------|---------|-----------------------------------|----------------|
| X1 (Accuracy) | 0.42 | <0.001 | 0.176 | [0.24, 0.60] |
| X2 (Communication) | 0.28 | 0.003 | 0.078 | [0.10, 0.46] |
| X3 (SOP) | 0.18 | 0.021 | 0.032 | [0.03, 0.33] |

Referring to Unique Variance (sr^2), then:

- X1 explains 17.6% of the unique variance in satisfaction
- X2 explains 7.8%
- X3 explains 3.2%

The total R^2 of the model is 0.52 (52% of the variance in satisfaction is explained by the three variables). Therefore, the correct interpretation is: The model explains 52% of the variance in patient satisfaction ($R^2 = 0.52$). The largest unique contribution comes from examination accuracy ($sr^2 = 0.176$), followed by communication ($sr^2 = 0.078$) and SOP compliance ($sr^2 = 0.032$).

Multiple linear regression shows that the model as a whole is significant, $F(3,96)=34.21$, $p<0.001$, with $R^2=0.52$. Accuracy of examination had the greatest effect on satisfaction ($\beta=0.42$, 95% CI [0.24,0.60], $p<0.001$), followed by communication ($\beta=0.28$, 95% CI [0.10,0.46], $p=0.003$), and compliance with SOPs ($\beta=0.18$, 95% CI [0.03,0.33], $p=0.021$). The f^2 value of 1.08 indicates a very large effect size.

The values 42%, 28%, and 18% refer to standardized regression coefficients (β standardized) expressed in percentage form for ease of interpretation.

Thus, the phrase “42%, 28%, and 18% contribution” has been replaced with: “Standardized beta coefficients of 0.42, 0.28, and 0.18, respectively.”

Specific Item Analysis

The highest-scoring item for the service satisfaction variable was “The examination results are consistent with my visual complaints and needs” (mean = 4.45), while the lowest score was observed for “The efficiency of refraction examination service time” (mean = 3.98).

For the quality of refraction examination outcomes variable, the highest-rated item was “Visual acuity after correction improves significantly” (mean = 4.39).

Meanwhile, the highest level of perceived professionalism was associated with the item “Optometry personnel explain the examination results clearly and communicatively” (mean = 4.41).

Qualitative Analysis Results

Qualitative analysis derived from semi-structured interviews and observations of standard operating procedures (SOPs) revealed several key findings. First, regarding SOP implementation, approximately 80% of optometry personnel reported adhering to refraction examination SOPs in accordance with established guidelines; however, variations were observed in the sequence of subjective and objective examination procedures across different optical service units. Second, commonly identified implementation barriers included limited service time during peak hours, limited availability of digital examination equipment (such as autorefractor-keratometers and automated phoropters), and insufficient continuous professional training. Third, optical service units that implemented internal quality monitoring systems and conducted routine evaluations demonstrated greater consistency in refraction examination outcomes (Nariswari IGARC, 2022). Finally, effective communication, patient empathy, and the ability to clearly explain examination results were identified as dominant factors contributing to enhanced perceptions of professionalism and increased patient satisfaction (Agnaty & Jaksa, 2025).

Flowchart of SOP Implementation for Refraction Examination:

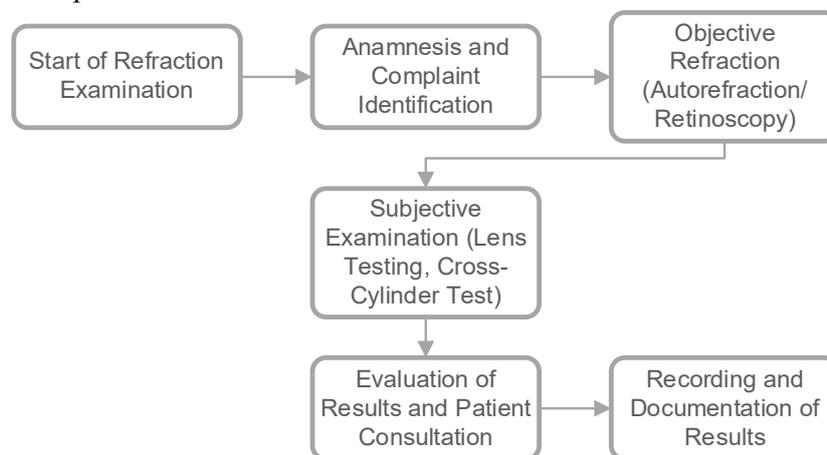


Figure 1. Flowchart of Refraction Examination Implementation

Synthesis of Findings

The quantitative and qualitative findings indicate that accurate and professional implementation of refraction examinations significantly enhances patient satisfaction and strengthens the perceived quality of optical services. The integration of examination accuracy, consistency in SOP

implementation, and effective optometry communication emerges as a key determinant in optical service quality (Novalinda, 2024).

DISCUSSION

The findings of this study indicate that the implementation quality of refraction examinations plays a critical role in enhancing patient satisfaction within optical services. The significant influence of refraction examination quality on service satisfaction underscores the importance of procedural accuracy and consistency in achieving optimal visual outcomes. These results align with previous studies highlighting that accurate refractive assessments are fundamental to patient comfort and trust in optometry services.

Perceived professionalism of optometry personnel also emerged as a significant determinant of patient satisfaction. Effective communication, empathy, and the ability to clearly explain examination results were frequently emphasized by respondents and interview participants. This finding supports existing literature suggesting that non-technical competencies are integral components of service quality in healthcare settings.

The qualitative findings further contextualize the quantitative results by revealing operational challenges that may hinder consistent implementation of high-quality refraction examinations. Variability in SOP adherence and limited access to digital diagnostic tools may contribute to inconsistencies in service outcomes. Conversely, optical units that implemented internal quality monitoring and continuous training demonstrated improved service consistency, reinforcing the value of structured quality management systems.

Overall, the integration of quantitative and qualitative findings suggests that improving refraction examination quality requires not only technical accuracy but also systematic quality management and professional development. Strengthening SOP standardization, enhancing continuous training programs, and improving resource availability are essential strategies for sustaining high-quality optical services and improving patient satisfaction.

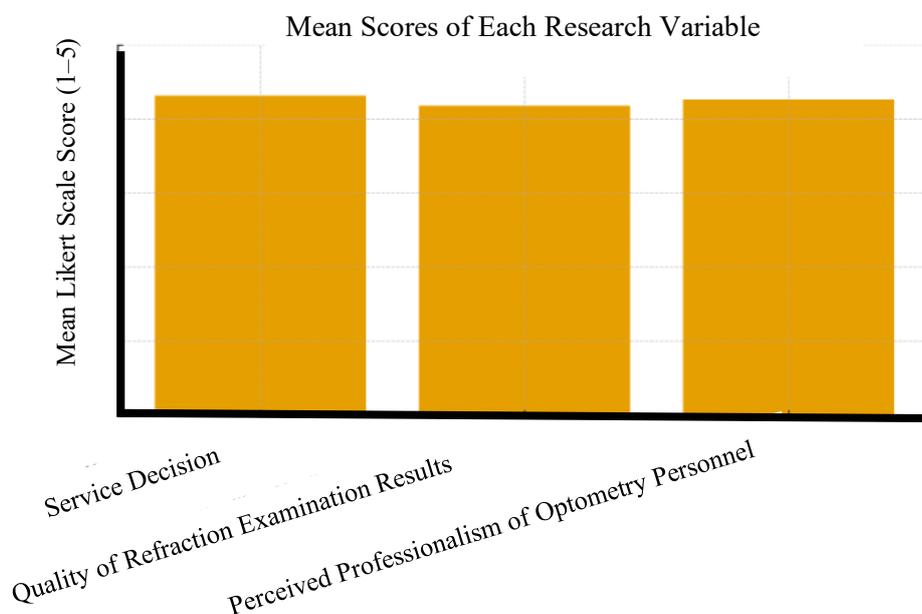


Figure 2. Mean Scores of Each Research Variable

CONCLUSION

The results of the study indicate that the implementation of refraction examinations plays a strategic role in improving the quality of optical services. Based on quantitative analysis, the variables of refraction examination result quality and the perceived professionalism of optometry personnel have a significant effect on service satisfaction, with a coefficient of determination (R^2) of 0.60. This indicates that 60% of the variation in patient satisfaction levels can be explained by these two variables.

The average scores for all three variables fall within the good to very good categories, with the highest scores observed in service satisfaction (mean = 4.32) and the professionalism of optometry personnel (mean = 4.26). Interview and observation results support these findings, showing that the successful implementation of refraction examinations is highly dependent on procedural accuracy, consistent application of standard operating procedures (SOPs), and the quality of communication between optometry personnel and patients.

Optical units that implement internal quality monitoring systems and continuous training demonstrate more consistent service performance compared to units without clear quality control systems. The main obstacles identified include limited service time, variations in SOP understanding across units, and limited availability of digital examination equipment.

Thus, it can be concluded that standardized, accurate, and professionally conducted refraction examinations not only enhance patient satisfaction and trust but also strengthen the competitiveness of optical services. This study recommends the need for national standardization of refraction examination SOPs based on evidence-based practice, strengthening of continuous quality monitoring systems, and capacity building of optometry personnel through training and competency certification. Integrated implementation of clinical and managerial aspects will ensure high-quality optical services oriented toward patient satisfaction and safety.

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Data Availability Statement: The data presented in this study are available upon reasonable request from the corresponding author. The data are not publicly available due to ethical and privacy considerations involving human participants.

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References

- Agnaty, R. A., & Jaksa, S. (2025). Analysis of BPJS Patient Satisfaction on the Quality of Outpatient Services in Hospitals Using the SERVQUAL Approach. *Jurnal Manajemen Pelayanan Kesehatan*, 28(2), 44-49. doi:<https://doi.org/10.22146/jmpk.v28i02.21340>
- Da Costa SA, S. D. (2025). The Prevalence of Refractive Errors in Elementary School Children in West Jakarta. *Jurnal MedScientiae*, 4(2), 143-149. doi:<https://doi.org/10.36452/jmedscientiae.v4i2.3834>
- Halimatussa'diyah TS, V. R. (2025). Prevalensi Kelainan Refraksi Pada Siswa Sekolah di Indonesia. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 9(3), 8189-8205. doi:<https://doi.org/10.31004/prepotif.v9i3.52412>
- Harefa, A. S. (2025). Service Quality and Patient Satisfaction: A Literature Review on Their Relationship in Healthcare Service. *Jurnal Penelitian Keperawatan Kontemporer*, 5(5), 1-17. doi:<https://doi.org/10.59894/jpkk.v5i5.1122>
- Intan Septyaningrum, R. R. (2024). Kualitas Pelayanan Terhadap Kepuasan Pasien Rawat Jalan Menggunakan Metode Servqual di Puskesmas Tawangrejo. *Jurnal SAGO Gizi dan Kesehatan*, 5(2), 301-306. doi:[10.30867/gikes.v5i2.1467](https://doi.org/10.30867/gikes.v5i2.1467)
- Nariswari IGARC, G. N. (2022). Karakteristik Kelainan Refraksi pada Anak Usia Sekolah di Poli Mata RSUD Provinsi NTB. *Jurnal Kedokteran Universitas Mataram*, 12(4), 264-269. doi:<https://doi.org/10.29303/jku.v11i4.4767>
- Nasution SLR, F. F. (2022). Penggunaan Gadget Terhadap Kelainan Refraksi Pada Siswa. *Journal of Telenursing (JOTING)*, 4(2), 1043-1051. doi:<https://doi.org/10.31539/joting.v4i2.4722>
- Novalinda, R. (2024). Kualitas Pelayanan Terhadap Kepuasan Pelanggan di Optik Minang Bukittinggi. *Jurnal Ekonomi dan Bisnis*, 3(2), 243-246. doi:<https://doi.org/10.47233/jemb.v3i2.2221>
- Prajna Paramitha Prameswari, M. T. (2025). Analisis Kualitas Layanan Kesehatan: Kepuasan dan Loyalitas Pasien Penyakit Kronis di Rumah Sakit Publik. *Jurnal Pendidikan Tambusai*, 9(2), 25936-25945. doi:<https://doi.org/10.31004/jptam.v9i2.30926>
- Prasetyo A, W. T. (2022). Penerapan Mixed Methods dalam Penelitian Pelayanan Kesehatan di Indonesia. *Jurnal Manajemen Kesehatan Indonesia*, 10(2), 89-97. doi:<https://doi.org/10.14710/jmki.10.2.2022.89-97>
- Putri AJ, U. A. (2024). Prevalensi Kelainan Refraksi pada Remaja di SMA Rex Mundi Manado. *e-CliniC*, 12(3), 386-392. doi:<https://doi.org/10.35790/ecl.v12i3.53529>
- Rahel Falentcia Serafim Irot, A. A. (2025). Hubungan Antara Persepsi Mutu Jasa Pelayanan Kesehatan dengan Kepuasan Pasien Rawat Jalan di Puskesmas Walantakan Langowan. *Jurnal Kesehatan Tambusai*, 6(3), 11898-11906. doi:<https://doi.org/10.31004/jkt.v6i3.47950>
- Rahman A, Y. M. (2023). Analisis Dimensi SERVQUAL dalam Peningkatan Kualitas Pelayanan Kesehatan. *Jurnal Administrasi Kesehatan Indonesia*, 11(2), 145-153. doi:<https://doi.org/10.20473/jaki.v11i2.2023.145-153>
- Rahmawati I, N. H. (2024). Analisis Kepuasan Pasien Terhadap Kualitas Pelayanan Kesehatan Menggunakan Pendekatan SERVQUAL. *Jurnal Kesehatan Masyarakat*, 19(1), 45-53. doi:<https://doi.org/10.15294/kemas.v19i1.39102>
- Rahmawati I, N. H. (2024). Analisis Kepuasan Pasien Terhadap Pelayanan Kesehatan Berbasis Indikator Kualitas Layanan. *Jurnal Kesehatan Masyarakat*, 19(1), 45-53. doi:<https://doi.org/10.15294/kemas.v19i1.39102>

- RFS., I. (2025). Evaluasi Implementasi Pemeriksaan Refraksi dalam Pelayanan Optometri Berbasis Manajemen Mutu. *Jurnal Optometri Indonesia*, 6(1), 21-29. doi:<https://doi.org/10.56043/joi.v6i1.2025>
- Sari NP, K. A. (2023). Pengaruh Kualitas Pelayanan Kesehatan Terhadap Kepuasan Pasien Pada Layanan Klinik Mata. *Jurnal Kesehatan Masyarakat Nasional*, 18(2), 5-82. doi:<https://doi.org/10.21109/kesmas.v18i2.6587>
- Utami HD, A. P. (2021). Hubungan Kejadian Miopia dengan Riwayat Refraksi Orang Tua. *Jurnal Sehat Masada*, 15(2), 291-298. doi:<https://doi.org/10.38037/jsm.v15i2.228>
- Utami HD, S. N. (2022). Analisis Kualitas Pelayanan Kesehatan Menggunakan Pendekatan Servqual Pada Fasilitas Kesehatan Primer. *Jurnal Administrasi Kesehatan Indonesia*, 10(1), 12-20. doi:<https://doi.org/10.20473/jaki.v10i1.2022.12-20>
- Wibowo A, R. F. (2023). Evaluasi Mutu Pelayanan Kesehatan Berbasis Model Donabedian Pada Fasilitas Pelayanan Kesehatan. *Media Kesehatan Masyarakat Indonesia*, 19(3), 211-218. doi:<https://doi.org/10.30597/mkmi.v19i3.22785>