

Understanding Patient Needs for Quality Health Services at Primary Healthcare After the Covid-19 Pandemic

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ABSTRACT

Introduction: The demands of patient need for the quality of health services at the Bulili primary Healthcare have continued to increase since the onset of the Covid-19 pandemic where the number of patient visits has decreased significantly. Return visits by patients at primary Healthcare are an indication of low public confidence in the quality of health services provided. This study aims to evaluate the quality of health services at the primary level using the Donabedian quality approach.

Methods: This study using a quantitative descriptive design influenced by Donabedian's quality framework, the study examined variables such as effectiveness, efficiency, patient-centeredness, timeliness, safety, and equity. Data were collected from 44 patients through structured interviews and analyzed using Anova to explore the variability and significance of service quality dimensions.

Results: The results showed a significant difference (P-Value: 0.008) in patient needs in the aspect of health service quality at the Primary Healthcare. Service effectiveness and efficiency, timeliness of service, patient-centered care, fairness or equity in care vary widely and have the greatest influence on quality needs in patients. Punctuality, and postulate or equity in service delivery, require urgent improvements to meet the need for quality of care in patients. This study also identifies the strategic issues that can be carried out to improve the quality of services that follow the needs of patients are efforts to develop and improve on aspects of timeliness and fairness or equality in service to patients.

Conclusion: The conclusion is the need for a responsive and patient-centered approach in the setting of equity or equity, timeliness, effectiveness and efficiency, and patient-centered care.

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INTRODUCTION

Globally, there were 8,061,550 COVID-19 cases with 287,399 deaths (1). In Indonesia, confirmed cases continued to increase from 10,551 cases with 800 deaths in May 2020 to 40,400 cases with 2231 deaths by June 16, 2020. COVID-19 is an infectious disease caused by a new virus discovered in 2019, called SARS-CoV-2. The virus

was originally transmitted from animals to humans, but is now spreading rapidly between people through droplets when coughing and sneezing (1,2). Based on daily reports per district/city, Central Sulawesi Province recorded 60922 positive cases of COVID-19, with 59143 people recovered and 1731 people died. While in Palu City, 13450 positive cases of COVID-19 were recorded, with 13193 people recovered (3).

Preliminary studies show that the demands of patients' need for the quality of primary healthcare at the Bulili Primary Healthcare have increased since the co-19 pandemic where the number of patient visits has decreased significantly, in 2019 before there were 9,321 visits, to 1,736 in 2020, and to 1,939 in 2021. The decrease in the number of return visits by patients at the primary healthcare is an indication of low public confidence in the quality of health services provided. The demand for quality primary healthcare requires service adjustments that focus more on consumer needs. With the rapid development of PHC services and increasing demands from the community, PHCs must be able to meet the changing and increasing needs of the community (4,5).

The pandemic has changed the dynamics of health services at primary healthcare, with a decline in the number of visits reflecting reduced public confidence in the quality of services provided. Observation data shows a drastic decline in the number of visits from 9,321 in 2019 to 1,736 in 2020 and a slight increase to 1,939 in 2021 at primary healthcare Bulili. This phenomenon confirms the need for service adjustments that focus more on consumer needs to restore and increase public trust in health services at the primary healthcare (6). With the rapid development of PHC services and increasing demands from the community, PHCs must be able to meet the changing and increasing needs of the community (4,5).

Research on the quality of health services at Primary Healthcare post-Covid-19 pandemic is important because the pandemic has had a major impact on the health system and patient satisfaction. Studies show factors such as personnel availability, responsiveness, assurance, empathy, and the physical condition of services greatly affect patient satisfaction (7–11). In addition, the pandemic has decreased investor interest, potentially harming the healthcare sector (12). Primary healthcare should provide quality, affordable, and standardized health services. However, the fear of virus transmission during the pandemic has affected services and created negative perceptions in the community. The quality of health services is influenced by providers, patient care, and the service environment including organization, resources, and facilities (13). Patients' perceptions of the quality of services at the Primary Healthcare determine their loyalty, encouraging them to continue using and recommending the service (14,15).

The drastic decline in the number of patient visits suggests a serious problem in the perceived quality of services at Puskesmas, especially post-pandemic. This raises critical questions about what can be done to restore and improve these perceptions to make health services more accessible and satisfying for the community. The main aspects desired by patients in receiving services from primary healthcare include physical evidence, reliability, responsiveness, assurance, and empathy (16). The high demand for patient satisfaction is reflected in the majority of patient visits to Primary Healthcare with expectations and needs that must be met (17). The Donabedian quality framework developed by the Institute of Medicine in the United States and World Health Organization (WHO) that quality improvement can focus on effectiveness and efficiency, fairness or equity, patient-centeredness, safety, and timeliness(18,19).

Previous studies have shown the dynamics of Patient Needs and Expectations in health services due to the covid19 pandemic so that it is known that gaps in specific aspects such as effectiveness, efficiency, patient-centeredness, timeliness, safety, and equality in health services have been affected and how practical improvements can be implemented.

This study aims to evaluate the quality of health services at the primary level using the Donabedian quality approach. The novelty of this study lies in the integration of the evaluation of health service quality needs by patients, while the proposed hypothesis is that by understanding patient needs through evaluation in these aspects of service quality, it will significantly increase patient satisfaction.

METHOD

This study used an approach referenced and adapted from the Donabedian quality framework developed by the WHO and the Institute of Medicine (20,21), The quality-of-service variables that are used as benchmarks for

quality needs by patients are Effectiveness and Efficiency, Patient-Centered, Timeliness, Safety and, Justice or Equality. The research design used was descriptive quantitative with a cross-sectional observational approach. Carried out at the Bulili Primari healthcare, June-July 2022. The population in this study were all visiting patients, namely 44 people who had been selected based on the inclusion criteria; 1) Willing to be a respondent, 2) Able to read and write, 3) not blind or deaf, and 4) not an emergency, and Exclusion criteria; 1) New patients, 2) Patients who did not make a visit for treatment and examination, 3). Patients who do not make visits. The sample was determined based on the principle of total sampling, so that 44 people were obtained, using the Accidental method during the June-July 2022 period. Data collection using the interview method by researchers to each respondent who meets the criteria.

The instrument used for data collection in this study was a questionnaire. The questionnaire consists of 25 statements related to the variables being assessed. The questionnaire assessment uses a Likert scale with the provisions of Very Good (4), Good (3), Not Good (2) and Very Not Good (1), then the answer score is classified into "Good" if it exceeds or is equal to the mean value and "Less good" if it is less than the mean value. While the data analysis used is Oneway Anova, where the results of the analysis are interpreted in a tabular model accompanied by descriptive explanations. This research is limited by the sample collected depending on the time the researcher conducts the research. Compilation of strategic issues using the dimensional diagram differencing plane approach.

RESULTS

Patient needs for the quality of health services at Bulili Primary healthcare, can be seen in the following Diagrams.

Descriptive Statistics

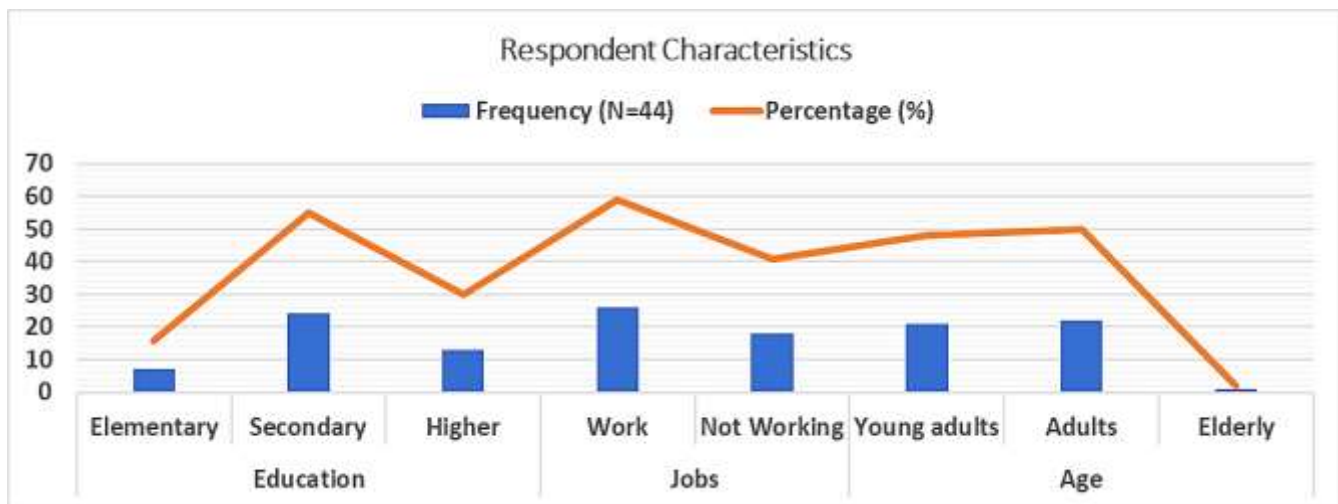


Figure 1. Respondent Characteristics

The findings from Figure 1. indicate that respondents with secondary education dominate (55%), and the majority of respondents are employed (59%). In terms of age, the distribution between young adults and adults is fairly balanced, with the exception of the elderly.

Table 1. Quality of service at the Primary Healthcare

| No | Variables | Category | Frequency (N=44/%) | Mean | SD | 95% CI | F | P-Value |
|----|--------------------------------------|----------|--------------------|--------|-------|-----------------|-------|---------|
| 1. | Service effectiveness and efficiency | Not good | 20/45.5 | 142.20 | 2.387 | 139.24 - 145.16 | 4.652 | 0.008 |
| | | Good | 24/54.5 | | | | | |
| 2. | Timeliness of Service | Not good | 33/75.0 | 132.00 | 6.819 | 123.53 - 140.47 | | |

| | | | | | |
|------------------------------------|----------|---------|--------|-------|-----------------|
| | Good | 11/25.0 | | | |
| 3. Patient-Centered Care | Not good | 19/43.2 | 142.40 | 3.362 | 138.23 - 146.57 |
| | Good | 25/56.8 | | | |
| 4. Safety in Service | Not good | 16/36.4 | 146.60 | 7.797 | 136.92 - 156.28 |
| | Good | 28/63.6 | | | |
| 5. Fairness or Equality in Service | Not good | 30/68.2 | 135.20 | 8.044 | 125.21 - 145.19 |
| | Good | 14/31.8 | | | |

Noted: Normality test value > 0.05
 Homogeneity test value < 0.05

Table 1. presents an evaluation of patient needs for quality of service at the Primary healthcare, where each variable has a good and unfavorable category, and the average value of service effectiveness and efficiency is 142.20, service timeliness has an average value of 132.00, patient-centered service has an average value of 142.40, security in service has an average value of 146.60 and justice or equality in service has an average value of 135.20. this shows that the needs of patients in each service aspect are different.

This study revealed significant differences in the dimensions of service quality required by the public. On the Effectiveness and efficiency of services variable, as evidenced by the 95% CI range from 139.24 to 145.16, shows marked variance in service delivery outcomes. Similarly, timeliness of service varied significantly, with a 95% CI range of 123.53 to 140.47. Patient-centered care also showed significant differences, as reflected by the 95% CI range between 138.23 and 146.57. In addition, the Security dimension in the service parameters showed a substantial spread from 136.92 to 156.28 within the 95% CI interval. Lastly, Fairness or Equality in service has a noticeable gap between unfavorable and favorable perceptions, as characterized by a 95% CI range from 125.21 to 145.19.

The oneway anova analysis yielded an F-value of 4.652 with a corresponding P-value of 0.008 (<0.05), indicating the statistical significance of the observed quality variables in the quality of service to the community. This evidence suggests that patients' requirements for service quality are not uniform and that certain dimensions exhibit greater variance, thus affecting overall patient satisfaction. The significant P-value confirms the argument that such variation is indicative of differences in underlying service quality delivery performance.

Strategic Issues

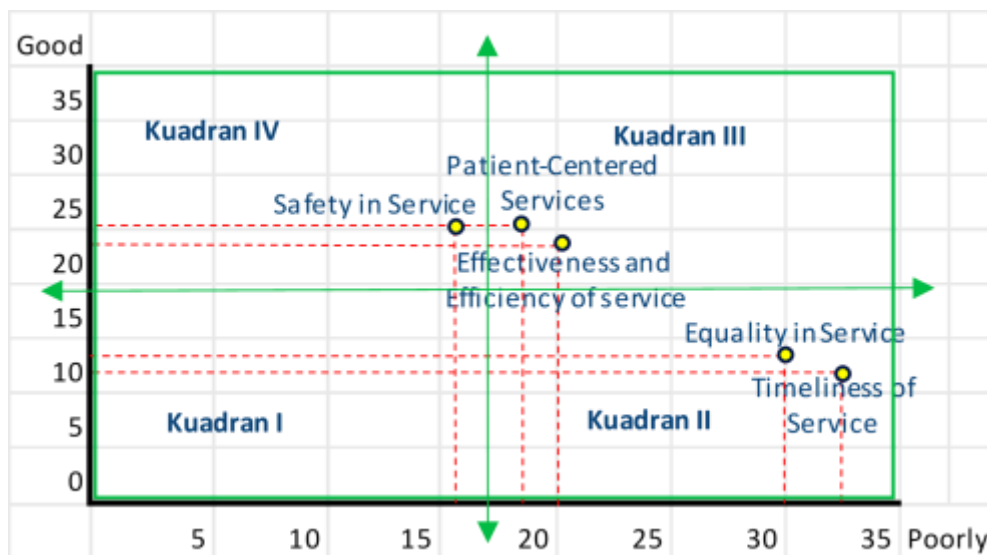


Figure 2. Diagram of dimensional differencing plane of Health Service Quality at Primary Healthcare

Based on the principle of the 2-dimensional differentiating field, quadrants 1 and 2 are priority groups that need attention or improvement and quadrant 3 is a part that can be maintained but still needs improvement, then quadrant 4 is a priority part to maintain. Based on Figure 2. It can be seen that the frequency of effectiveness and efficiency of services, and patient-centered services are in quadrant III which means that in improving quality according to patient expectations, it can be maintained but needs improvement. Timeliness of service and Justice or Equality in service, are in quadrant II which means that in improving quality according to patient expectations, it needs to be prioritized and fully considered to be improved. While safety in service is in quadrant IV which means that in improving quality according to patient expectations these aspects must be maintained and continuously developed.

DISCUSSION

Interpretation of Key Findings

The results of this study have presented an evaluation of patients' needs for the quality of services at the Primary Healthcare by highlighting comparisons between categories on each variable. These variations mark significant differences in patients' perceptions of each aspect of the services offered by the Primary Healthcare. The statistical analysis produced values indicating significant differences in the quality of service required by patients, as seen from the range of CIs (95%) for each variable. The wide CI ranges in this study indicate higher variability in service quality, reinforcing the importance of individualized assessment of aspects of service quality. Previous researchers have highlighted the marked improvement in delays in healthcare during the pandemic, which has been a problem in the past (22,23). Conspicuous delays in service delivery when compared to lower satisfaction levels during the pandemic (24).

The safety aspect of care emphasizes the importance of enhancing safety protocols that have been put in place during and after the pandemic (25). This is in accordance with previous studies that showed significant concerns about safety aspects in Primary Healthcare during the peak of the pandemic (26). The findings from this study have significant implications, as improvements in the dimensions of safety, timeliness, and patient-centered care indicate that during the pandemic there has been a demand for better quality of care at puskesmas. Responsiveness, Tangible, Assurance, and Reliability aspects need to be improved to meet the needs of patients in outpatient Primary Healthcare. Appropriate interventions that are more rigorous, can significantly improve efficiency and patient satisfaction (27–29).

The impact of the pandemic on primary health care in low socioeconomic status communities, these findings underscore the importance of maintaining and even increasing resource allocation to Primary Healthcare, Despite significant efforts, there are still shortcomings in the availability and equitable accessibility of services (27). The pandemic has changed perceptions of risk, identified barriers to access, and formulated post-pandemic recovery strategies needed to maintain high-quality health services (30). Significant declines in patient satisfaction correlate with service disruptions, initiatives that improve service quality can mitigate such negative impacts (23).

Fear of disease transmission, disruption of transportation services, and limited affordability have hindered access to health services (31). Primary Healthcare play a key role in delivering affordable and high-quality healthcare services (32). Innovations in health technology can facilitate continuity of care in public health emergencies (33,34). This study confirms the need to continue to maintain and improve the quality of care that has been enhanced during the pandemic, especially to face future health challenges that may arise. This includes a patient-centered approach to optimize aspects of management, as well as ensuring patient satisfaction remains high across all aspects of healthcare services (35,36).

Based on the results of the dimensional differencing plane diagram mapping, it is known that the strategic issues that can be carried out to improve the quality of services that follow the needs of patients are efforts to develop and improve on aspects of timeliness and fairness or equality in service to patients, while effectiveness and efficiency and patient-centered services need more attention to development. The study also identifies potential areas for further research in the development and implementation of strategies to improve the quality of care at primary healthcare that can be widely adapted.

Implications for Public Health

The findings highlight significant variability in patient perceptions of service quality, emphasizing the need for a personalized and responsive approach to healthcare. This variability indicates that patient satisfaction can greatly depend on individual service dimensions, such as safety, timeliness, and patient-centered care. Effective public health strategies should focus on these areas to improve the overall quality of care, particularly in the aftermath of the pandemic.

Limitations and Cautions

The study is limited by its descriptive and cross-sectional nature, which may affect the generalizability of the findings. Additionally, the small sample size and the focus on single primary healthcare may not reflect the broader range of experiences and perceptions that exist in different regions or types of healthcare facilities. So the results should be interpreted with caution as they do not represent all patient experiences and only reflect conditions at the time of data collection and may not reflect dynamic changes in patient needs over time.

Recommendations for Future Research

Future research should be able to include larger and more diverse sample sizes conduct longitudinal studies to track changes in patient satisfaction over time and be able to explore more deeply specific factors that contribute to variability in patient perception, such as demographic differences or certain health conditions.

CONCLUSION

This study identified and analyzed significant variations in patients' perceptions of the quality of health services at Puskesmas, reflected through a comprehensive evaluation of effectiveness and efficiency, safety, patient-centeredness, timeliness, and fairness or equity of services. Analysis of the data revealed a wide variation in patients' perceptions, signaling differences in the quality of care required. The results of this study emphasize the importance of adopting a more personalized and responsive approach to patients' specific needs to improve overall patient satisfaction. The study also identifies potential areas for further research in the development and implementation of strategies to improve the quality of care at primary healthcare that can be widely adapted.

AUTHOR'S CONTRIBUTION STATEMENT

The authors were involved in the research process, contributing to the drafting and revision of the manuscript. Sudirman has conducted the conceptualization of the methods design, and data analysis and interpretation.

CONFLICTS OF INTEREST

There is no conflict of interest regarding the publication of this article.

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