

# ***ANALYSIS OF HEALTH CENTER SERVICE QUALITY LEVEL USING FUZZY METHOD: A CASE STUDY AT TUNJUNG- RANDUAGUNG HEALTH CENTER***

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## ***ABSTRACT***

*The analysis of service quality at Tunjung-Randuagung Community Health Center was conducted using the Fuzzy Service Quality approach, which is measured through five main dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Various challenges identified include inadequate facilities, a shortage of medical personnel, and discrepancies between patient expectations and perceptions. Data collection was carried out through observation, interviews, and the distribution of questionnaires to 286 respondents. Of the 20 statement items in the questionnaire, 19 were proven valid after passing validity and reliability tests. The GAP values between patients' expectations and perceptions were calculated and analyzed using the fuzzy approach to address elements of uncertainty and subjective bias. The evaluation results showed that the empathy dimension had the highest GAP value (0.135), followed by assurance (0.066) and reliability (0.057). Meanwhile, the tangible (-0.046) and responsiveness (-0.029) dimensions showed negative GAP values, indicating areas needing improvement. Recommendations are directed toward enhancing dimensions with negative GAPs and strengthening those that have already met patient expectations.*

***Keywords :*** *Fuzzy, Servqual, Puskesmas*