

# Determinant Factors Influencing Public Intention to Visit Griya Sehat at the UPT Laboratory of Herbal Materia Medica Batu

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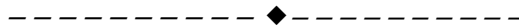
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## Abstract

Traditional health services are increasingly recognized as essential components of promotive and preventive health care in Indonesia. One such facility is Griya Sehat at the UPT Laboratory of Herbal Materia Medica Batu, which offers various therapies including acupressure, cupping, and standardized herbal medicines. Despite this potential, visitation rates remain below institutional expectations. This study aimed to examine the influence of knowledge, service quality, and infrastructure on public intention to visit the facility. A quantitative analytic study with a cross-sectional design was conducted among 170 respondents recruited through purposive sampling. Data were collected using structured questionnaires and analyzed with ordinal logistic regression. Assumption testing was performed prior to analysis, including multicollinearity diagnostics and the test of parallel lines to assess the proportional odds assumption. The findings showed that all three predictors significantly influenced visiting intention. Knowledge had a positive effect ( $\beta = 0.205$ ;  $p = 0.001$ ), indicating that respondents with greater awareness of traditional therapies were more likely to report stronger intention to visit. Service quality also contributed significantly ( $\beta = 0.115$ ;  $p < 0.001$ ), with responsiveness, empathy, and professional assurance being the most valued dimensions. Among the predictors, infrastructure was the most dominant determinant ( $\beta = 0.546$ ;  $p < 0.001$ ), with respondents highlighting cleanliness, equipment readiness, and comfort as strengths, while temperature, lighting, and navigation were identified as areas needing improvement. Model evaluation indicated good fit, with a Nagelkerke  $R^2$  value of 0.664, suggesting that the predictors explained approximately two-thirds of the variance in visiting intention. In conclusion, enhancing infrastructure, supported by improvements in service quality and community knowledge, is crucial to strengthen public intention to visit Griya Sehat. Strategic recommendations include upgrading physical facilities, improving patient-centered communication, and expanding health promotion to raise awareness of the benefits and safety of traditional health services.

**Keywords:** *Visiting Intention, Ordinal Regression, Infrastructure, Service Quality, Knowledge.*



## A. INTRODUCTION

Global health systems are undergoing a significant transition from curative and rehabilitative approaches to preventive and promotive models that emphasize holistic well-being and sustainable population health outcomes. This transformation is largely driven by the rising prevalence of chronic diseases, escalating healthcare costs, and the global shift toward strengthening primary health care (Frenk & Moon, 2013; Kumar & Preetha, 2012). Within this paradigm, traditional and complementary medicine (T&CM) has increasingly been recognized as an integral component of public health systems due to its accessibility, cultural relevance, and potential to reduce the burden on conventional healthcare services (Bodeker & Kronenberg, 2002;

Tilburt & Kaptchuk, 2008). The World Health Organization (WHO) Traditional Medicine Strategy 2014–2023 highlights the growing global demand for T&CM, noting that more than 100 million people in Europe regularly use complementary therapies, illustrating broad public acceptance (WHO, 2023). In China, visits to Traditional Chinese Medicine providers reached 907 million in 2009, comprising nearly one-fifth of all medical consultations, while Korea and the United States have also experienced significant growth in traditional medicine expenditures (WHO, 2023). Policy initiatives in several countries now institutionalize T&CM through regulation, professional training, and insurance coverage, indicating its strategic role in health system strengthening (Adams et al., 2018; Walach et al., 2020). These developments reflect a global recognition that traditional medicine is no longer viewed merely as an alternative practice but as a complementary element that supports comprehensive and inclusive healthcare delivery.

Indonesia has a unique advantage in this regard due to its rich biodiversity and cultural heritage in herbal remedies. Findings from the *Basic Health Research (Riskesdas) 2018* reported that 59.12% of Indonesians consume herbal preparations, with 95.6% recognizing their benefits. Furthermore, 44.3% of the population has accessed traditional health services, demonstrating the strong cultural trust in these modalities (Kementerian Kesehatan RI, 2018). Despite this high level of interest, actual utilization of formalized government-run traditional facilities remains below expectations. This suggests a gap between public preference and the services provided, creating an urgent need to investigate the underlying factors influencing utilization. To bridge this gap, the Indonesian government established Griya Sehat facilities as part of its strategy to integrate T&CM into the national health system. This initiative is supported by *Minister of Health Regulation No. 15/2018* and reinforced by *Minister of Health Regulation No. 14/2021*, which regulate standards of traditional health services. Griya Sehat offers herbal remedies and skill-based therapies such as acupuncture, acupressure, cupping, and reflexology, with a strong emphasis on promotive and preventive health care. By combining natural approaches with biomedical perspectives, Griya Sehat functions as a hybrid model that ensures accessibility, cultural acceptance, and quality assurance.

A notable example is the Griya Sehat at the UPT Laboratory of Herbal Materia Medica Batu, East Java. The UPT, established in 1960, has long been recognized as a center for research and conservation of medicinal plants, while its Griya Sehat unit has provided integrated traditional therapies since 2016. Available services include standardized herbal medicines listed in the *Formularium Obat Herbal Asli Indonesia (FOHAI)*, as well as massage, acupuncture, acupressure, cupping, and aesthetic therapies. Although strategically located in Batu, a well-known health tourism destination, patient visits remain below institutional targets. In 2023, total visits were recorded at 1,031, and only 294 visits occurred during the first quarter of 2025. This low utilization not only reflects underperformance in service uptake but also limits contributions to local revenue (PAD).

The discrepancy between high levels of public trust in traditional medicine and the low visitation rates to Griya Sehat reveals a nuanced gap between community expectations and the actual services offered. This mismatch may stem from complex sociocultural and systemic factors that influence health-seeking behavior beyond mere trust. Prior research indicates that knowledge plays a crucial role in shaping health service utilization, as individuals with adequate understanding of therapy types, benefits, and safety considerations are more inclined to engage with traditional health facilities (Handayani et al., 2022). Service quality is another critical determinant, with dimensions such as provider responsiveness, empathy, and assurance demonstrating a strong impact on both patient satisfaction and loyalty (Kusmiati & Susanti, 2023). High service quality not only encourages repeat visits but also strengthens word-of-mouth promotion within local communities, which is particularly relevant in traditional healthcare settings. Infrastructure also significantly influences initial perceptions, where factors like facility cleanliness, availability of medical equipment, patient comfort, and navigational clarity shape utilization decisions (Molenaar et al., 2022). A well-maintained environment can enhance credibility and foster trust, making patients feel secure and respected. Furthermore, perceived accessibility—including geographic proximity and operating hours—can either facilitate or hinder service uptake, especially in semi-urban or rural regions (Andersen, 1995). Collectively, these factors illustrate that bridging the gap between public trust and actual service use requires addressing both informational and systemic barriers while ensuring that care delivery aligns with community expectations.

Despite these insights, there remains limited empirical evidence examining these three factors simultaneously in the context of government-managed traditional facilities. Most existing studies focus on private providers or general health services, leaving a gap in the literature regarding state-operated Griya Sehat, particularly in East Java. Therefore, this study seeks to analyze the determinants of public visiting intention to Griya Sehat UPT Laboratorium Herbal Materia Medica Batu, specifically assessing the influence of knowledge, service quality, and infrastructure. By employing a cross-sectional design and ordinal regression analysis, this research aims to identify the dominant determinant and quantify the contribution of each factor. The findings are expected to generate both theoretical contributions—by enriching the discourse on health service utilization in complementary medicine—and practical implications, offering guidance for policymakers and managers to enhance the attractiveness and effectiveness of Griya Sehat services.

## **B. LITERATURE REVIEW**

Previous research has consistently shown that public knowledge is a critical determinant of health service utilization. Individuals with adequate knowledge of the types, benefits, and safety of traditional therapies tend to demonstrate more positive attitudes and a greater willingness to use such services. Conversely, misconceptions or a lack of information can reduce confidence and discourage visits to health facilities.

Studies conducted in Indonesia confirm that higher levels of knowledge are strongly associated with increased acceptance of traditional and complementary medicine, including herbal remedies and acupressure therapies (Handayani et al., 2022).

Service quality has also been identified as an essential factor influencing health-seeking behavior. The SERVQUAL model highlights five dimensions—reliability, responsiveness, assurance, empathy, and tangibility—as benchmarks for assessing healthcare quality. Empirical evidence suggests that responsiveness and empathy from service providers are directly linked to patient satisfaction and loyalty. When health workers demonstrate professionalism, clear communication, and attentiveness to patient needs, community trust is strengthened, which in turn increases visiting intention. By contrast, technical adequacy alone is insufficient to sustain patient interest if interpersonal interactions are perceived as inadequate (Kusmiati & Susanti, 2023).

Infrastructure represents another decisive factor in shaping health service utilization. Donabedian's framework emphasizes that structure provides the foundation for process and outcomes in healthcare delivery. Physical facilities such as cleanliness, equipment readiness, lighting, and comfort contribute significantly to the overall patient experience. A positive physical environment fosters perceptions of safety, convenience, and quality, thereby encouraging service use. Both conventional and traditional health settings have shown infrastructure to be a major determinant of patient satisfaction and intention to revisit services (Molenaar et al., 2022; Luo et al., 2024).

Integrating these three determinants provides a comprehensive understanding of visiting intention. Knowledge influences patient attitudes, service quality fosters trust and satisfaction, and infrastructure enhances perceived control over the service environment. The Theory of Planned Behavior (Ajzen, 1991) supports this framework, positing that attitudes, subjective norms, and perceived behavioral control jointly determine behavioral intentions. In this context, knowledge corresponds to attitudes, service quality relates to subjective norms and social trust, and infrastructure contributes to perceived control. Together, these factors are expected to jointly and significantly determine public intention to visit Griya Sehat.

## C. METHODS

The study was conducted at Griya Sehat UPT Laboratory of Herbal Materia Medica Batu, East Java, Indonesia. The UPT Laboratory has long been recognized as a provincial center for medicinal plants and herbal research, with its Griya Sehat unit offering various traditional therapies since 2016. The research took place between January and March 2025, aligning with the facility's operational schedule and allowing access to patients and visitors during the data collection phase.

This research employed a quantitative analytic design with a cross-sectional approach. The cross-sectional method was selected as it allows the collection of data on independent variables (knowledge, service quality, and infrastructure) and the dependent variable (public visiting intention) at a single point in time. This design is

widely applied in public health research because it enables simultaneous analysis of associations between variables within the population of interest while maintaining efficiency in terms of time and resources.

The population comprised all community members who had the potential to visit or utilize services at Griya Sehat. A total of 170 respondents were selected as the study sample. The sampling technique applied was purposive sampling, in which participants were chosen based on inclusion and exclusion criteria. Inclusion criteria were: (1) individuals aged 18 years or older, (2) those who had either visited Griya Sehat or expressed interest in doing so, and (3) individuals capable of completing the questionnaire independently. Exclusion criteria included respondents with incomplete questionnaires or those unwilling to provide informed consent. A non-probability purposive approach was deemed appropriate due to the specific nature of the target population, namely individuals with potential or actual interest in Griya Sehat services. This method is commonly used in public health studies to ensure that participants meet relevant criteria for the phenomenon under investigation. The final sample size of 170 respondents was determined based on feasibility, ethical considerations, and statistical adequacy for regression analysis.

This study analyzed one dependent variable and three independent variables with dependent variable is public visiting intention, defined as the willingness and readiness of individuals to access services at Griya Sehat. For independent variables are Knowledge for measured by respondents' understanding of the types of therapies, benefits, and safety aspects of traditional health services. Service quality for assessed through five dimensions: reliability, responsiveness, assurance, empathy, and tangibility and Infrastructure for evaluated based on the availability, cleanliness, comfort, and functionality of physical facilities, equipment, and environment. Each variable was operationalized through structured indicators and items measured using a Likert scale, with higher scores representing more positive evaluations.

The primary instrument was a structured questionnaire, developed based on theoretical constructs and adapted from previous validated tools in related studies. The questionnaire consisted of several sections, General data (age, sex, education), Knowledge items about traditional health services (10 questions), Service quality items covering five SERVQUAL dimensions (10 questions), Infrastructure items regarding physical environment and equipment (10 questions) and visiting intention items reflecting interest, desire, and conviction to visit (10 questions).

Data collection followed two stages, first is preparation phase – obtaining ethical approval, permissions from UPT management, and training research assistants on standardized data collection procedures. Then, Implementation phase distributing questionnaires directly to respondents who visited or expressed interest in Griya Sehat services. Research assistants provided explanations and ensured informed consent was obtained prior to participation. Questionnaires were completed on-site or taken home with an agreed-upon return schedule.

All questionnaires that had been returned by respondents were carefully reviewed to ensure completeness. Data management included a series of procedures

such as coding, editing, data entry, and cleaning, so that the final dataset was ready for analysis without missing or erroneous values. The entire statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 26.

The first stage of analysis involved descriptive statistics to present the characteristics of respondents, as well as the distribution of scores for knowledge, service quality, infrastructure, and visiting intention. Frequencies and percentages were used for categorical data, while means and standard deviations were reported for continuous data.

Before conducting the main analysis, assumption checks specific to ordinal regression were carried out. The multicollinearity test was applied to detect whether there was a high correlation among the independent variables by examining the tolerance and Variance Inflation Factor (VIF) values. Acceptable results were indicated by tolerance values greater than 0.10 and VIF values below 10. In addition, the test of parallel lines was employed to verify whether the proportional odds assumption of ordinal regression was satisfied. A non-significant result ( $p > 0.05$ ) indicates that the assumption holds, whereas a significant result suggests partial violation but the model may still proceed with cautious interpretation.

The primary inferential analysis used was ordinal logistic regression with the logit link function. This method was chosen because the dependent variable, visiting intention, was measured on an ordinal scale reflecting ordered categories of responses. The regression analysis assessed both the simultaneous and partial contributions of the independent variables—knowledge, service quality, and infrastructure—to the variation in visiting intention.

The model's adequacy was evaluated using several goodness-of-fit indices, including the -2 log likelihood, Pearson chi-square, and Deviance statistics. In addition, the explanatory power of the model was assessed using pseudo R-square values (Cox and Snell, Nagelkerke, and McFadden). The significance of each independent variable was determined through Wald chi-square statistics, and results were presented with regression coefficients ( $\beta$ ), standard errors, odds ratios, and p-values. Through this approach, the study was able to identify which factors had significant influence on the likelihood of higher levels of visiting intention to Griya Sehat UPT Laboratorium Herbal Materia Medica Batu, as well as to determine the dominant determinant among the three predictor variables.

The study adhered to the principles of research ethics, including informed consent, anonymity, and confidentiality. Participation was voluntary, and respondents were informed that they could withdraw at any time without penalty. Personal identifiers were excluded from the dataset to maintain confidentiality. The research received formal approval from the Health Research Ethics Committee of Universitas Strada Indonesia, ensuring compliance with ethical standards for human subject research.

## D. RESULTS AND DISCUSSION

A total of 170 respondents participated in this study, all of whom met the inclusion criteria. The majority of participants were female, representing more than half of the sample, and the dominant age group was between 26–45 years, reflecting the productive age category. Educational attainment varied, with most respondents completing senior high school, while a considerable portion held higher education degrees. In terms of occupation, housewives and private employees constituted the largest subgroups. These demographic characteristics indicate that respondents were predominantly individuals with an active lifestyle, potential awareness of health-related issues, and the economic capacity to consider complementary health services.

Respondents' knowledge levels regarding traditional health services were generally moderate. Most participants were aware of the availability of therapies such as herbal remedies, acupuncture, and cupping, yet detailed understanding of safety standards, contraindications, and evidence-based benefits was still limited. This suggests that while the community is familiar with the concept of *Griya Sehat*, there remains a need for structured health promotion and education.

The assessment of service quality revealed positive perceptions across several dimensions. Responsiveness and empathy of staff were consistently rated high, indicating that personnel were considered attentive and supportive. Assurance, reflected through professionalism and credibility of service providers, also scored positively. However, aspects of patient education and information delivery were relatively weaker, suggesting that some visitors perceived insufficient explanations regarding therapy procedures and outcomes.

Evaluation of infrastructure showed that the majority of respondents were satisfied with cleanliness, equipment readiness, and the relaxing ambience of the facility. On the other hand, several limitations were highlighted, particularly regarding room temperature, lighting conditions, and clarity of directional signs, which were considered less supportive for overall comfort and navigation within the facility.

Regarding the intention to visit, a substantial proportion of respondents expressed strong interest in utilizing *Griya Sehat* services. The highest scores were observed in items reflecting willingness to recommend the facility to family or friends, and readiness to try therapies to achieve a healthier lifestyle. However, a smaller portion of participants reported uncertainty about making repeat visits, indicating that while initial interest is high, retention may depend on improved service experience and facility adjustments.

**Table 1. Goodness of Fit Test**

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	1003,565	1267	1,000
Deviance	429,862	1267	1,000

**Table 2. Test of Parallel Lines**

Test of Parallel Lines <sup>a</sup>				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	408,318			
General	.000 <sup>b</sup>	408,318	360	0,040

The results of the ordinal logistic regression analysis indicated that the model was statistically significant in explaining the variation in visiting intention at Griya Sehat, UPT Laboratory of Herbal Materia Medica Batu. Before interpreting the regression coefficients, assumption tests were conducted to evaluate the adequacy of the model.

The Goodness-of-Fit test confirmed that the model adequately represented the observed data. The Pearson chi-square statistic was 1003.565 with 1267 degrees of freedom and a significance level of 1.000, while the Deviance statistic was 429.862 with 1267 degrees of freedom and a significance level of 1.000. Both non-significant results ( $p > 0.05$ ) suggest that the model fit the data well, indicating no evidence of lack of fit.

The Test of Parallel Lines, which examines the proportional odds assumption, produced a chi-square value of 408.318 with 360 degrees of freedom and a significance level of 0.040. This significant result ( $p < 0.05$ ) suggests a potential partial violation of the proportional odds assumption. However, the ordinal regression model can still be applied, provided that the results are interpreted with caution and the limitation is acknowledged.

Taken together, these diagnostic results indicate that the ordinal logistic regression model was suitable and sufficiently reliable for analyzing the influence of knowledge, service quality, and infrastructure on public intention to visit Griya Sehat.

**Table 3. Multicollinearity Test**

Model		Coefficients <sup>a</sup>						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.027	.503		2.042	.043		
	Knowledge	.147	.055	169	2.677	.008	.496	2.016
	Service Quality	.081	.026	170	3.075	.002	.649	1.540
	Facilities and Infrastructure	.538	.062	579	8.690	<.001	.445	2.245

a. Dependent Variable: Interest

The assessment of multicollinearity demonstrated that all independent variables met the acceptable criteria. Tolerance values ranged from 0.445 to 0.649, which were well above the threshold of 0.10, while the corresponding VIF values ranged between 1.540 and 2.245, remaining far below the critical value of 10. These findings confirmed that there was no indication of multicollinearity among knowledge, service quality, and infrastructure. As a result, each predictor could be considered statistically independent, and the regression estimates were deemed reliable.

**Table 4. Model Fitting Information Test**

Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	629,460			
Final	450,772	178,688	3	0,000

The model fitting information demonstrated that the addition of the independent variables—knowledge, service quality, and infrastructure—significantly improved the model compared with the intercept-only model. The chi-square value obtained was 178.688 with three degrees of freedom and a significance level of 0.000, indicating that the final model provided a substantially better fit. These results confirm that the predictors collectively contributed to explaining variations in visiting intention at Griya Sehat UPT Laboratorium Herbal Materia Medica Batu.

**Table 5. Pseudo R-Square Test**

Pseudo R-Square	
Cox and Snell	0,650
Nagelkerke	0,664
McFadden	0,270

The pseudo R-square values indicated that the model had a strong capacity to explain variation in visiting intention. The Cox and Snell value was 0.650, the Nagelkerke value was 0.664, and the McFadden value was 0.270. Taken together, these results suggest that the independent variables—knowledge, service quality, and infrastructure—accounted for a substantial proportion of the variance in visiting intention toward Griya Sehat UPT Laboratorium Herbal Materia Medica Batu.

Further analysis using the Wald test confirmed that all three predictors had a significant effect on visiting intention. Knowledge had a regression coefficient ( $\beta$ ) of 0.147 with a p-value of 0.008, showing that respondents with higher knowledge about traditional health services were more likely to report stronger visiting intentions. Service quality yielded a regression coefficient ( $\beta$ ) of 0.081 with a p-value of 0.002, indicating that favorable perceptions of service delivery—particularly responsiveness and empathy—were also positively associated with visiting intention, although the effect was relatively smaller. Among the predictors, infrastructure emerged as the most influential determinant, with a regression coefficient ( $\beta$ ) of 0.538 and a highly significant p-value of less than 0.001. This highlights that respondents who viewed the facility as clean, adequately equipped, and comfortable were much more likely to express strong intentions to visit.

In summary, knowledge, service quality, and infrastructure were all important in shaping visiting intention, but infrastructure demonstrated the greatest contribution. This emphasizes the decisive role of the physical environment in promoting the use of traditional health services, while also reinforcing the relevance of community knowledge and service quality as supportive factors.

**Table 6. Wald Test  
Parameter Estimates**

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Interest = ,00]	1,768	0,731	5,846	1	0,016	0,335	3,201
	[Interest = 1,00]	2,258	0,702	10,361	1	0,001	0,883	3,634
	[Interest = 2,00]	2,830	0,682	17,215	1	0,000	1,493	4,167
	[Interest = 3,00]	3,257	0,675	23,294	1	0,000	1,934	4,579
	[Interest = 4,00]	4,426	0,678	42,632	1	0,000	3,097	5,754
	[Interest = 5,00]	5,648	0,712	62,985	1	0,000	4,253	7,043
	[Interest = 6,00]	6,355	0,745	72,714	1	0,000	4,894	7,816
	[Interest = 7,00]	6,982	0,782	79,649	1	0,000	5,449	8,515
	[Interest = 8,00]	7,631	0,824	85,721	1	0,000	6,015	9,246
	[Interest = 9,00]	9,133	0,919	98,668	1	0,000	7,331	10,935
Location	Knowledge	0,205	0,064	10,258	1	0,001	0,079	0,330
	Service Quality	0,115	0,031	13,728	1	0,000	0,054	0,176
	Facilities and Infrastructure	0,546	0,080	46,204	1	0,000	0,389	0,704

The Wald test results indicated that all three independent variables—knowledge, service quality, and infrastructure—had statistically significant effects on visiting intention. Knowledge showed a regression coefficient (Estimate = 0.205, Wald = 10.258,  $p = 0.001$ ), confirming a positive association at the 1% significance level. This suggests that respondents with greater knowledge of traditional health services, including the types of therapies, their benefits, and safety aspects, were more likely to express higher levels of intention to visit. In practical terms, individuals who possessed adequate understanding and awareness demonstrated stronger confidence and readiness to use Griya Sehat compared to those with limited knowledge.

Service quality also made a significant contribution, though its effect was smaller relative to the other predictors. The regression coefficient was 0.115 (Wald = 13.728,  $p < 0.001$ ), indicating a positive and statistically significant relationship. This means that better perceptions of service delivery—such as responsiveness to patient needs, empathy, and professional assurance—were associated with increased likelihood of stronger visiting intention. Although the effect size was more modest, the findings underline the importance of interpersonal communication and professionalism in shaping public interest to visit or return to the facility.

Infrastructure emerged as the strongest determinant among the three variables. The regression coefficient was 0.546 (Wald = 46.204,  $p < 0.001$ ), reflecting a very strong and highly significant effect. Respondents who perceived the facility as clean, adequately equipped, and physically comfortable were substantially more likely to report strong intentions to visit. On the contrary, unfavorable conditions—such as poor lighting, uncomfortable room temperature, or unclear navigation within the facility—were associated with lower interest in visiting. This large coefficient highlights the decisive role of infrastructure as the most influential factor compared

to knowledge and service quality in determining visiting intention at Griya Sehat UPT Laboratorium Herbal Materia Medica Batu.

The findings of this study demonstrate that knowledge, service quality, and infrastructure each had a significant effect on public intention to visit Griya Sehat UPT Laboratorium Herbal Materia Medica Batu. Among the three predictors, infrastructure exerted the greatest influence, as reflected by the largest regression coefficient. Knowledge also played an important role, indicating that respondents with better understanding of traditional health services were more likely to express stronger visiting intentions. Service quality, although significant, contributed the smallest effect, suggesting that improvements in responsiveness, empathy, and professional assurance have a positive yet comparatively modest impact. Overall, the results emphasize that strengthening the physical environment should be prioritized, while simultaneously advancing community education and maintaining high-quality service delivery to encourage greater utilization of Griya Sehat.

This study investigated the key determinants influencing public intention to visit Griya Sehat at the UPT Laboratory of Herbal Materia Medica Batu, focusing on three primary predictors: knowledge, service quality, and infrastructure. Using ordinal regression analysis, the findings revealed that all three variables had statistically significant effects on visiting intention, thereby validating their collective importance in understanding patient behavior. Infrastructure emerged as the most influential factor, indicating that physical attributes such as facility cleanliness, comfort, and the availability of functional equipment strongly shape public decision-making. This result aligns with prior evidence suggesting that tangible environmental cues are among the most immediate drivers of patient perceptions and utilization patterns (Molenaar et al., 2022). Knowledge followed as the second strongest predictor, reflecting how individuals who possess greater awareness of the benefits, safety, and effectiveness of traditional therapies are more likely to seek care services (Handayani et al., 2022). This supports the broader notion that informed patients demonstrate higher levels of engagement with health facilities. Service quality also played a meaningful role, as perceptions of staff responsiveness, empathy, and professionalism contributed positively to visiting intention, albeit with a smaller effect size compared to infrastructure and knowledge (Kusmiati & Susanti, 2023). This suggests that while interpersonal interactions matter, they may not override the importance of physical and informational factors in traditional health settings. Altogether, these results highlight that optimizing infrastructure, enhancing public health literacy, and improving service delivery collectively form a strategic pathway to increasing patient visits. Such an integrated approach is essential for aligning institutional offerings with community expectations and for fostering sustainable service utilization (Andersen, 1995).

The influence of knowledge was evident in that respondents who understood the types of therapies and their benefits were more likely to report higher intention to visit. This supports earlier studies in Indonesia which show that adequate knowledge reduces hesitation and enhances confidence in using traditional health services

(Handayani et al., 2022). From a theoretical standpoint, this finding aligns with the Theory of Planned Behavior, where knowledge shapes positive attitudes that translate into stronger intentions to act (Ajzen, 1991). Service quality also showed a significant effect, although it was the least dominant variable. Respondents emphasized the importance of interpersonal dimensions of care, such as empathy, assurance, and clear communication. This echoes Kusmiati and Susanti (2023), who observed that responsiveness and assurance directly contribute to patient satisfaction and loyalty. In the case of Griya Sehat, these results suggest that service providers need to complement technical competence with improved patient education and engagement.

Infrastructure emerged as the strongest determinant influencing visiting intention, a result that aligns closely with Donabedian's structure-process-outcome model, which emphasizes that the physical and organizational attributes of healthcare settings shape service delivery and health outcomes (Donabedian, 2003). Structural factors serve as the foundational layer upon which processes and outcomes are built, meaning that inadequacies in infrastructure can compromise both patient experience and clinical effectiveness. Respondents in this study highlighted cleanliness and equipment readiness as particularly valued features, yet they also identified deficits in lighting, temperature control, and wayfinding, which may generate discomfort and impede service accessibility. These environmental elements play a crucial role in shaping patients' first impressions and perceptions of care quality. Prior research has shown that environmental comfort significantly influences satisfaction levels and behavioral intentions, particularly in primary and traditional healthcare facilities (Molenaar et al., 2022). Similarly, recent evidence underscores that physical facilities, including spatial layout and thermal comfort, are decisive factors in determining whether patients are likely to return for future visits (Luo et al., 2024). Addressing these shortcomings through targeted infrastructure upgrades can enhance both the functional and emotional dimensions of care environments. Improvements in lighting, ventilation, and navigational signage can create a more welcoming and reassuring atmosphere, thereby increasing patient trust and willingness to utilize services. Moreover, infrastructure enhancements often produce visible and rapid improvements, making them a strategic priority for healthcare managers seeking to increase service utilization. Collectively, these findings affirm that investing in structural improvements is not merely cosmetic but a critical lever for improving both patient experience and overall health system performance.

Taken together, these findings offer meaningful theoretical and practical implications for enhancing the utilization of traditional health services. From a theoretical standpoint, they reaffirm that knowledge, service quality, and infrastructure jointly shape health-seeking behaviors, aligning with multidimensional models of health service utilization that incorporate cognitive, social, and environmental determinants (Andersen, 1995). This integrated understanding underscores that patients' decisions are influenced not only by personal beliefs but also by their interactions with health systems and the accessibility of care environments. Recognizing this complexity enables more accurate predictions of

service utilization patterns and provides a robust foundation for intervention design (Fishbein & Yzer, 2003). On the practical side, the results suggest that facility managers should prioritize infrastructure improvements to ensure that health facilities are clean, comfortable, and easily navigable, as these features are strongly associated with improved patient experiences and trust (Luo et al., 2024). Equally important is the enhancement of staff communication skills, empathy, and cultural competence, which have been shown to significantly strengthen patient-provider relationships and increase satisfaction (Handayani et al., 2022). Community-based health promotion efforts should also be intensified to correct misconceptions, raise awareness of therapeutic benefits, and build social support for traditional health practices (Nutbeam, 2000). Policymakers can leverage these insights to design integrated strategies that simultaneously address physical, informational, and interpersonal dimensions of care delivery. By aligning facility environments, human resources, and community engagement, traditional health institutions can foster greater trust, improve accessibility, and increase service utilization. Ultimately, such a holistic approach contributes to more sustainable health systems that are responsive to community needs and cultural contexts (Penchansky & Thomas, 1981).

The simultaneous analysis of knowledge, service quality, and infrastructure provides a more comprehensive picture than examining these factors in isolation. While many previous studies have focused on either patient knowledge or service quality, this research confirms that infrastructure plays the most decisive role in shaping visiting intention. The combination of these factors explains why visitation at Griya Sehat remains below expectations despite high cultural affinity with traditional medicine.

A comparative perspective also suggests that in government-managed health facilities, infrastructure improvements tend to be more visible and immediately appreciated by patients compared to incremental changes in service delivery or education campaigns. This explains why infrastructure produced the largest effect size in this study. Nonetheless, infrastructure alone is insufficient; without adequate knowledge and positive service interactions, patient loyalty and repeat visits may not be sustained.

The findings of this study strongly support the applicability of the Theory of Planned Behavior (TPB) proposed by Ajzen (1991) in explaining traditional health service utilization. According to TPB, behavioral intention is shaped by attitudes toward the behavior, subjective norms, and perceived behavioral control, each of which can be mapped onto the determinants analyzed in this study. Knowledge functions as a key attitudinal factor, as individuals who understand the safety, benefits, and efficacy of traditional therapies are more likely to develop favorable evaluations of visiting Griya Sehat. This reflects prior evidence that positive attitudes significantly predict health-related behaviors, including the adoption of preventive and alternative medicine practices (Godin & Kok, 1996). Service quality influences subjective norms by shaping perceptions of social expectations and institutional trust, both of which are essential in health decision-making, particularly in culturally

embedded healthcare contexts (Yadav & Pathak, 2016). Furthermore, infrastructure contributes to perceived behavioral control by reducing physical and logistical barriers, thereby making access to traditional health services more convenient and comfortable. Previous studies indicate that environmental and structural factors can significantly enhance individuals' sense of control and likelihood of acting on their intentions (Gupta & Ogden, 2009). Together, these determinants form a coherent explanatory framework that clarifies why individuals choose to visit or avoid traditional health facilities. Integrating TPB with contextual variables such as infrastructure provides a more comprehensive understanding of patient behavior than relying on psychological factors alone. These insights are particularly valuable for policymakers and practitioners seeking to design interventions that address both motivational and structural aspects of health service utilization.

In addition, the findings affirm Donabedian's (2003) quality assurance model, which underscores that structure (infrastructure) and process (service quality) interact to influence outcomes (visiting intention). This highlights the importance of integrating both physical and interpersonal dimensions of care in order to achieve desired health-seeking behaviors.

From a managerial standpoint, several strategic recommendations can be drawn from this study. First, infrastructure improvements should be prioritized, particularly in addressing environmental factors such as lighting, temperature control, and navigation systems. These upgrades are relatively straightforward and can have immediate positive impacts on patient perceptions. Second, service quality should be enhanced through targeted staff training, focusing on communication skills, empathy, and patient education. By ensuring that patients receive clear explanations of therapy procedures and expected outcomes, Griya Sehat can build stronger trust and encourage repeat visits. Third, continuous efforts to improve community knowledge are essential. Health promotion campaigns using digital platforms, community workshops, and collaborations with local leaders can help dispel misconceptions and increase awareness of the benefits and safety of traditional therapies. By implementing these three strategies in combination, Griya Sehat can increase visitation rates, optimize facility utilization, and strengthen its role as a provider of promotive and preventive health services in East Java.

This study is not without limitations. The cross-sectional design restricts causal inference, meaning that while associations were identified, direct causality cannot be established. The sample was also limited to one facility, which may reduce the generalizability of findings to other regions or types of traditional health services. Future research should consider longitudinal designs to track changes in visiting intention over time, as well as multi-center studies to compare determinants across different Griya Sehat units or other complementary health facilities. Including qualitative approaches could also provide deeper insights into patient motivations and barriers that quantitative surveys may not capture.

The study confirmed that knowledge, service quality, and infrastructure each significantly influence public intention to visit Griya Sehat, with infrastructure

emerging as the most dominant determinant, followed by knowledge and service quality. These findings emphasize the decisive role of physical environment, while reaffirming the importance of patient education and service delivery. Strengthening these three aspects in a balanced and integrated manner will not only increase visitation but also enhance Griya Sehat's contribution to Indonesia's strategy for integrating traditional medicine into promotive and preventive healthcare.

## E. CONCLUSION

This study demonstrated that knowledge, service quality, and infrastructure each play significant roles in shaping public intention to visit Griya Sehat. Infrastructure was the most influential determinant, underscoring that a supportive physical environment is essential for patient comfort and confidence. Knowledge was also important, as individuals with accurate understanding of therapies were more likely to express stronger intentions to seek care. Service quality, though less dominant, remained significant in building trust and sustaining interest. To increase visitation, a comprehensive strategy is needed. Infrastructure improvements should be prioritized to address environmental concerns such as lighting, temperature, and navigation systems. Parallel efforts to enhance service quality—through staff training and better communication—will further strengthen patient trust. Finally, targeted health promotion initiatives are necessary to expand community knowledge and reduce misconceptions. By integrating these three strategies, Griya Sehat Materia Medica Batu can strengthen its role as a promotive and preventive health facility and support Indonesia's broader agenda for the integration of traditional medicine into the national health system (Kementerian Kesehatan RI, 2018; Kusmiati & Susanti, 2023; Luo et al., 2024).

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