

Service Access and Veterinarian Communication as Predictors of Cat Owners' Core Vaccination Compliance

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Abstract

Core vaccination is a fundamental preventive service for maintaining cat health and limiting the transmission of infectious diseases with potential animal and public health consequences. Nevertheless, cat owners' adherence to recommended vaccination schedules remains a managerial challenge in veterinary clinics. This study examined the effects of service access and veterinarian communication on cat owners' compliance with core vaccination at Sukma Animal Care Veterinary Clinic, Wonosobo. A quantitative survey design was applied to 100 cat owners selected through purposive sampling. Data were collected using a structured five-point Likert questionnaire and analyzed with descriptive statistics and multiple linear regression. The findings showed high respondent perceptions of service access (mean = 4.03), veterinarian communication (mean = 3.92), and compliance (mean = 3.99). Regression analysis indicated that service access significantly predicted compliance ($B = 0.496$, $\beta = 0.480$, $p < 0.001$), while veterinarian communication also had a significant positive effect ($B = 0.508$, $\beta = 0.478$, $p < 0.001$). Simultaneously, both variables explained 44.3% of compliance variance ($R^2 = 0.443$; $F = 38.560$; $p < 0.001$). The study concludes that improving accessible service systems and strengthening clear, empathetic, and interactive veterinarian communication are essential managerial strategies for increasing owner compliance with preventive vaccination programs.

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1. INTRODUCTION

Companion animal ownership has increased the demand for professional veterinary services, including preventive services that protect animal health and support community health. Cats occupy an important position in household companionship; however, their preventive care often depends on the willingness and capacity of owners to follow clinical recommendations. Core vaccination is one of the most important preventive interventions because it helps protect cats from major infectious diseases and reduces the risk of disease transmission in the wider animal population. From a veterinary service-management perspective, vaccination compliance is not merely a technical medical issue. It is also a service outcome that reflects how well a clinic manages access, information exchange, client education, and continuing relationships with owners.

The practical problem addressed in this study is the continuing variation in cat owners' compliance with core vaccination recommendations. In many veterinary settings, the availability of vaccination services does not automatically result in timely, complete, and

repeated owner compliance. Owners may delay visits, fail to return for follow-up vaccination, or rely on incomplete information when deciding whether preventive care is necessary. Previous work on veterinary service quality has emphasized that client satisfaction and the use of veterinary services are shaped by reliability, responsiveness, professional competence, empathy, and tangible service conditions [1]. The management of clinical information systems and administrative processes also contributes to service efficiency because owners are more likely to continue using services when registration, records, and appointments are clear and coordinated [2].

A management lens is particularly relevant because the performance of a veterinary clinic depends on the alignment of clinical competence, service accessibility, and human interaction. Competency development among the veterinary management workforce has been identified as a key determinant of effective clinical practice and sustainable service delivery [3]. In the present study, compliance is therefore treated as an outcome of service management rather than as a purely individual decision. This approach is consistent with contemporary adherence scholarship, which views compliance as an active behavior shaped by the client's understanding, beliefs, perceived barriers, and relationship with a professional provider [4], [5].

The Health Belief Model provides a useful behavioral explanation for why owners decide to follow or ignore preventive recommendations. Individuals are more likely to adopt a health behavior when they perceive susceptibility and severity, recognize the benefits of prevention, face manageable barriers, and receive cues to action [6]. Evidence from vaccination research confirms that perceived threats and perceived benefits are associated with vaccination uptake [7]. Communication is central in this process because well-designed health messages reduce uncertainty, address perceived barriers, and encourage adherence to recommended interventions [8]. Although the Health Belief Model has been widely applied to human health behavior, its logic is highly relevant to veterinary settings because owners act as decision-makers on behalf of their animals.

In the context of animal vaccination, owner knowledge, attitudes, and perceptions of risk are closely related to preventive behavior. Studies in Indonesia have shown that owner knowledge and attitudes toward rabies risk influence awareness and willingness to prevent disease through vaccination [9]. Similarly, community perceptions of rabies vaccination policies demonstrate that perceived benefits, barriers, and confidence in animal health services influence owner participation [10]. These findings suggest that improving compliance requires more than offering vaccination. Clinics must design services that are easy to access and must communicate benefits and risks in a way that owners can understand and trust.

Sukma Animal Care Veterinary Clinic in Wonosobo provides vaccination and consultation services for companion animals, including cats. The clinic serves owners with diverse backgrounds, levels of health awareness, and patterns of mobility. The observed managerial issue is that some cat owners do not consistently follow the recommended core vaccination schedule even though vaccination services are available. This gap between service availability and owner compliance raises an important research question: to what extent do service access and veterinarian communication influence owner compliance with core vaccination?

The novelty of this study lies in integrating a service-access perspective and a communication perspective within a veterinary clinic management context. Existing studies have examined access to veterinary care, veterinarian-client communication, trust, and vaccination decisions in separate streams of literature [11]-[13], [14]-[20]. This study combines those dimensions in a single empirical model and applies it to a local Indonesian

veterinary clinic. The findings are expected to contribute to service administration and veterinary health management by clarifying how structural service conditions and relational communication jointly shape preventive-care compliance.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Veterinary Service Management and Preventive Compliance

Veterinary service management refers to the planning, organizing, implementation, and evaluation of clinical and administrative services in veterinary practice. A veterinary clinic is not only a site of medical treatment. It is a service organization that coordinates patient reception, medical records, scheduling, client communication, follow-up, and quality control. Service quality in veterinary clinics is reflected in the ability of the organization to meet client expectations through reliable care, responsive staff, professional competence, empathy, and adequate facilities [1]. In modern clinics, digital medical records and information systems can strengthen the accuracy of records, improve the speed of administration, and support coordination among staff [2].

Preventive services such as vaccination require repeated and coordinated interactions between the clinic and owners. Unlike emergency or one-time services, vaccination programs depend on owners' willingness to return according to a schedule, remember follow-up dates, understand risks, and trust the clinical advice they receive. Therefore, preventive compliance is an appropriate indicator of service effectiveness. It reflects not only the owner's personal attitude but also the clinic's ability to reduce access barriers and provide persuasive professional communication.

Compliance, adherence, and concordance are often used to describe how far clients follow health-related recommendations [4], [5]. In the present study, cat owner compliance refers to the owner's willingness and consistency in following the veterinarian's recommendations related to core vaccination, including timely visits, acceptance of clinical advice, and continuity of preventive care. This definition is consistent with broader adherence theory, which emphasizes active client involvement rather than passive obedience [4]. It is also supported by evidence showing that adherence is influenced by provider-client relationship quality, perceived usefulness of the recommendation, and the client's capacity to implement it [11].

2.2. Service Access

Service access is defined as the degree to which owners can reach, use, and sustain engagement with veterinary care. Access does not simply mean the physical existence of a clinic. It includes location, cost, time availability, appointment flexibility, administrative simplicity, transportation burden, and the ability of the service system to accommodate owner needs [12], [13]. In this study, access is operationalized through the ease of locating the clinic, the availability of doctor schedules during reservation, and the simplicity of administrative procedures.

Access is a strategic dimension in preventive veterinary care because even owners who value vaccination may fail to comply when access barriers are high. Barriers such as distance, limited service hours, long waiting times, complicated procedures, and perceived costs can reduce the likelihood of returning for scheduled vaccination. Research on veterinary care access has demonstrated that perceived access affects owners' care-seeking decisions and satisfaction with services [13]. Pet acquisition and veterinary care trends also show that access barriers influence owner decisions to use preventive services, including vaccination [19].

The access-compliance relationship can be explained through both service-management theory and behavioral theory. From a service-management perspective, a clinic that offers clear schedules, simple procedures, and predictable service flows reduces transaction costs

for clients. From a behavioral perspective, access barriers function as perceived barriers within the Health Belief Model [6]. When barriers are reduced, the owner is more likely to convert positive attitudes into actual preventive behavior. Therefore, the first hypothesis is proposed: H1: Service access has a positive effect on cat owners' compliance with core vaccination.

2.3. Veterinarian Communication

Veterinarian communication refers to the exchange of information, explanation, consultation, and interpersonal interaction between the veterinarian and the owner. Effective communication involves clarity, openness, empathy, responsiveness to client concerns, and the ability to translate medical terminology into understandable language. Studies have shown that owners may experience difficulty understanding veterinary medical terminology, which creates a need for clearer explanation and client-centered language [17]. Communication in veterinary practice is therefore not a supplementary skill; it is a core element of service quality and clinical decision-making.

Information exchange between veterinarians and owners plays a central role in shared decision-making. Janke et al. found that pet owners and veterinarians perceive information exchange as essential for clinical decisions in companion-animal practice [15]. Arnecke et al. also demonstrated that owners' perceptions of veterinarian communication about zoonoses and antimicrobial resistance are linked to their need for clearer, deeper, and more useful information [14]. Communication competence improves clients' satisfaction, trust, and willingness to follow recommendations [16].

Communication is particularly important for vaccination because vaccination is preventive rather than curative. Owners may not observe immediate illness and may underestimate the urgency of vaccination. A veterinarian must therefore explain disease risks, vaccination benefits, possible schedules, and consequences of non-compliance. Trust is a crucial mechanism in this relationship. Haeder showed that trust in veterinarians is associated with vaccine information sources and vaccination status among dog and cat owners [20]. Communication also acts as a cue to action within the Health Belief Model because it provides the owner with timely, credible, and professionally endorsed information [6], [8]. Therefore, the second hypothesis is proposed: H2: Veterinarian communication has a positive effect on cat owners' compliance with core vaccination.

2.4. Integrated Framework

Service access and veterinarian communication are complementary dimensions of veterinary service management. Access provides the structural condition that allows owners to use a service, while communication provides the relational condition that helps owners understand, trust, and continue the recommended care. A clinic with accessible services but weak communication may attract visits without building long-term adherence. Conversely, a veterinarian with excellent communication may still face low compliance if owners encounter practical barriers in reaching the clinic or booking appointments. The integrated model proposes that both variables simultaneously shape compliance. Therefore, the third hypothesis is proposed: H3: Service access and veterinarian communication simultaneously influence cat owners' compliance with core vaccination. The conceptual framework is presented in Figure 1.

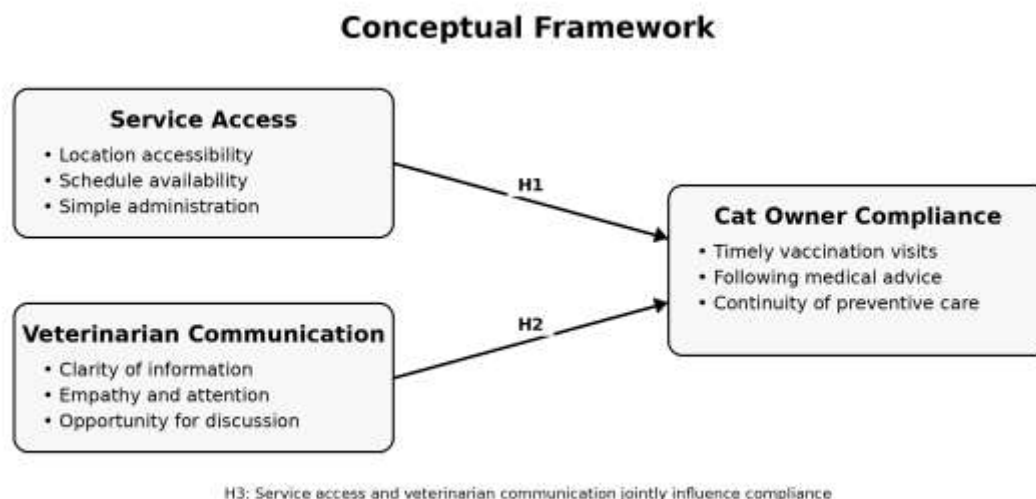


Figure 1. Conceptual framework of the study

3. RESEARCH METHOD

3.1. Research Design, Setting, and Respondents

This study used a quantitative survey design. The design was selected because the research objective was to test the relationships among measurable variables and to evaluate the effects of two independent variables on one dependent variable through statistical analysis. A survey approach is appropriate for collecting standardized information about perceptions, experiences, and behavioral tendencies from respondents in a service setting. The research was conducted at Sukma Animal Care Veterinary Clinic, Wonosobo, which provides core vaccination and health consultation services for cats.

The population consisted of cat owners who had used core vaccination services at the clinic during the research period. The sample comprised 100 cat owners who met three inclusion criteria: they had used core vaccination services at the clinic, they were willing to participate, and they had direct interaction with a veterinarian during the vaccination service process. Purposive sampling was used because the variables examined in this study could only be assessed by owners with actual experience of service access and veterinarian communication in the clinic.

3.2. Measurement and Data Collection

Primary data were collected through a structured questionnaire. Each item was measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The questionnaire consisted of three constructs. Service access (X1) measured the owner's perception of ease in obtaining veterinary services, including location, schedule availability, and administrative simplicity. Veterinarian communication (X2) measured the clarity of medical explanation, attention to the animal and owner, and opportunity to ask questions or discuss treatment. Cat owner compliance (Y) measured the owner's consistency in following recommendations, including timely visits, appropriate medication behavior when instructed, and implementation of follow-up care. The measurement constructs are summarized in Table 1.

The measurement approach follows prior service-quality and health-service studies using ordinal Likert scales to capture client perceptions [22]. Quantitative data collection using structured instruments has been widely used in health service research because it enables standardized comparison across respondents and supports inferential analysis [23]. Related studies of hospital information systems and electronic medical records also emphasize the

importance of measurable constructs, systematic data collection, and statistically interpretable service indicators [24], [25].

3.3. Data Analysis

Data analysis was conducted in two stages. First, descriptive statistics were used to summarize respondent perceptions for each variable using minimum, maximum, mean, and standard deviation values. Second, multiple linear regression was used to test the effects of service access and veterinarian communication on cat owner compliance. The regression model was specified as $Y = a + b_1X_1 + b_2X_2 + e$, where Y represents cat owner compliance, X1 represents service access, X2 represents veterinarian communication, a is the constant, b1 and b2 are regression coefficients, and e is the error term.

Partial effects were evaluated using t-tests, simultaneous effects were evaluated using the F-test, and the explanatory power of the model was evaluated using the coefficient of determination (R²). The significance criterion was set at 0.05. Therefore, a variable was considered significant when its p-value was less than 0.05. The regression procedure was appropriate because the study aimed to evaluate the influence of two predictor variables on one outcome variable using cross-sectional survey data.

Table 1. Measurement constructs and indicators

Variable	Operational definition	Dimensions	Indicators	Scale
Service access (X1)	The perceived ease with which cat owners obtain veterinary health services, including service location, schedule availability, and simple procedures.	Accessibility; availability; procedural simplicity	Easy clinic location; availability of doctor schedule during reservation; simple administrative process	Ordinal Likert 1-5
Veterinarian communication (X2)	The process of delivering medical information and interacting with cat owners through clarity, empathy, and shared understanding of animal care.	Information clarity; empathy; interaction	Clear explanation of diagnosis and action; attention to animal and owner; opportunity to ask questions and discuss	Ordinal Likert 1-5
Cat owner compliance (Y)	The willingness and consistency of cat owners in following veterinarian recommendations related to core vaccination and follow-up care.	Schedule compliance; medical advice compliance; follow-up care compliance	Timely control or vaccination visits; following medical instructions; implementation of follow-up care recommendations	Ordinal Likert 1-5

4. RESULTS AND DISCUSSION

4.1. Results

The descriptive analysis provides an initial overview of respondents' perceptions of service access, veterinarian communication, and compliance. As shown in Table 2, all variables had minimum values of 3.00 and maximum values of 5.00, indicating that respondents generally reported neutral to highly positive perceptions. Service access had a mean value of 4.03 and a standard deviation of 0.47. This suggests that respondents generally considered the clinic accessible in terms of location, scheduling, and administrative procedures. Veterinarian communication had a mean value of 3.92 and a standard deviation of 0.46, indicating that respondents tended to perceive the veterinarian's explanation, attention, and discussion opportunity positively. Cat owner compliance had a mean value of 3.99 and a standard deviation of 0.47, suggesting a generally high level of adherence to preventive care recommendations.

The relatively small standard deviations across the three variables indicate that respondents' answers were fairly homogeneous. This pattern suggests that most owners shared similar perceptions of service access and veterinarian communication in the clinic. The descriptive findings also provide a managerial indication that the clinic has developed a generally acceptable service process, although further improvements remain necessary to strengthen sustained compliance.

Multiple linear regression was conducted to test the hypotheses. Table 3 presents the model summary and ANOVA results. The correlation coefficient was $R = 0.666$, while the R^2 value was 0.443 and the adjusted R^2 was 0.431. This means that 44.3% of the variance in

cat owner compliance can be explained by service access and veterinarian communication. The remaining 55.7% may be explained by other factors not included in the model, such as owner knowledge, socioeconomic conditions, previous experience with pet illness, perceived disease risk, reminder systems, or trust formed through longer service relationships.

The F-test showed that the regression model was statistically significant ($F = 38.560$, $p < 0.001$). This result supports H3, indicating that service access and veterinarian communication simultaneously influence cat owner compliance. The model is therefore fit for explaining the relationship between service-management variables and compliance behavior in this veterinary clinic context.

The coefficient results are presented in Table 4. Service access had a positive and significant effect on compliance ($B = 0.496$, $SE = 0.077$, $\beta = 0.480$, $t = 6.456$, $p < 0.001$). Therefore, H1 is supported. Veterinarian communication also had a positive and significant effect on compliance ($B = 0.508$, $SE = 0.079$, $\beta = 0.478$, $t = 6.445$, $p < 0.001$). Therefore, H2 is supported. The unstandardized coefficients indicate that increases in perceived access and communication quality are associated with higher owner compliance. The standardized beta coefficients also show that both variables have almost equal predictive strength, suggesting that structural access and relational communication are both essential to compliance management.

Table 2. Descriptive statistics of research variables

Variable	N	Minimum	Maximum	Mean (SD)
Service access	100	3.00	5.00	4.03 (0.47)
Veterinarian communication	100	3.00	5.00	3.92 (0.46)
Cat owner compliance	100	3.00	5.00	3.99 (0.47)

Table 3. Model summary and simultaneous test

Model	R	R ²	Adjusted R ²	Std. Error	F	df	Sig.
1	0.666	0.443	0.431	0.401	38.560	2; 97	0.000

Table 4. Multiple linear regression coefficients

Predictor	B	Std. Error	Beta	t	Sig.
Constant	-0.002	0.456	-	-0.004	0.997
Service access (X1)	0.496	0.077	0.480	6.456	0.000
Veterinarian communication (X2)	0.508	0.079	0.478	6.445	0.000

4.2. Discussion

The first finding shows that service access significantly improves cat owner compliance. This result confirms that owners are more likely to follow vaccination recommendations when the clinic is easy to locate, doctor schedules are available, and administrative procedures are simple. In practical terms, access reduces the effort required for owners to attend vaccination appointments and return for follow-up services. The result is consistent with veterinary access studies showing that perceived availability, cost, transportation, and service convenience shape care-seeking decisions [12], [13]. It is also aligned with evidence that veterinary service access influences owner decisions regarding preventive care [19] and that disruptions to access can alter veterinary care-seeking behavior [21].

The finding also supports the view that access functions as a perceived barrier in preventive health behavior. Within the Health Belief Model, even when an owner recognizes the value of vaccination, high perceived barriers can prevent actual action [6]. Therefore, reducing administrative complexity, improving appointment flexibility, and providing clear service information can transform favorable attitudes into actual compliance. For Sukma

Animal Care, this suggests that compliance can be improved through managerial interventions such as structured appointment systems, reminder mechanisms, simplified registration, and efficient patient flow.

The second finding indicates that veterinarian communication significantly improves compliance. This result highlights the importance of clear medical explanation, empathy, and opportunity for discussion. Owners are more likely to comply when they understand the purpose of vaccination, the risk of not vaccinating, and the expected timeline of preventive care. This finding is consistent with studies showing that information exchange and shared decision-making are central to companion-animal practice [15]. It also supports the argument that communication competence enhances veterinarian-client relationships and promotes trust [16].

Communication is especially important because many owners may not fully understand veterinary terminology or may interpret preventive recommendations through everyday assumptions rather than clinical reasoning. Research on pet owners' comprehension of veterinary terminology indicates that technical language can reduce understanding [17]. Pun's integrated review also emphasizes that communication is a key component of veterinary clinical practice and affects how clients understand and act on professional recommendations [18]. Therefore, veterinarians should avoid overly technical explanations and should instead use plain language, visual explanations, and confirmatory questions to ensure that owners have understood the recommendation.

The near-equal beta values of service access and veterinarian communication provide an important managerial insight. Compliance is not driven by one dimension alone. Access creates the practical possibility of obtaining care, while communication creates the cognitive and relational basis for accepting care. The simultaneous significance of both variables supports an integrated model of veterinary service management in which structural and interpersonal dimensions are managed together. This is consistent with broader adherence evidence showing that provider recommendations, trust, and client experience influence adherence behavior [11], as well as vaccination evidence showing the importance of credible information sources and trust in veterinarians [20].

The findings have implications beyond the specific clinic. In veterinary service administration, preventive-care compliance can be viewed as a quality indicator. A clinic that achieves high vaccination compliance demonstrates not only clinical availability but also managerial capability in scheduling, communication, and follow-up. The evidence from self-reported dog vaccination practices in the United States shows that many owners report vaccination according to veterinarian recommendations when professional guidance is clear and accepted [26]. Although the present study focuses on cats in Wonosobo, the underlying managerial logic is applicable to other companion-animal settings where compliance depends on repeated client engagement.

4.3. Managerial Implications

Several managerial implications can be drawn from the results. First, the clinic should strengthen service access by maintaining a clear appointment system, reducing waiting time, simplifying administrative procedures, and ensuring that owners can easily obtain information about doctor availability. Second, the clinic can introduce reminder systems through short messages or digital applications to encourage owners to return on schedule. Third, the clinic should standardize communication during vaccination visits. A brief but structured communication protocol could include explanation of disease risk, vaccination benefits, expected schedule, possible side effects, and the date of the next visit.

Fourth, training in interpersonal communication should be considered part of clinical service development. Veterinarians and front-office staff need a shared understanding that

compliance begins before the medical procedure and continues after the visit. Fifth, the clinic should evaluate compliance data periodically. Monitoring missed appointments, delayed vaccinations, and owner questions can help management identify whether non-compliance is caused by access barriers, communication problems, or other behavioral factors. These actions position compliance not as a passive outcome but as an actively managed service performance indicator.

4.4. Limitations and Future Research

This study has several limitations. First, the research was conducted in a single veterinary clinic, so the findings may not fully represent other regions or clinic types. Second, the cross-sectional survey design captures perceptions and compliance at one point in time, whereas vaccination compliance is a longitudinal behavior. Third, the model includes two predictors, while the R² value indicates that other factors also influence compliance. Future research should include additional variables such as owner knowledge, perceived disease risk, trust, cost sensitivity, prior vaccination experience, pet attachment, reminder systems, and social influences. Qualitative or mixed-method research could also provide deeper insight into why some owners delay or refuse vaccination despite having access to services and receiving professional communication.

5. CONCLUSION

This study concludes that service access and veterinarian communication are significant predictors of cat owners' compliance with core vaccination at Sukma Animal Care Veterinary Clinic, Wonosobo. Service access has a positive and significant effect on compliance, indicating that owners are more likely to comply when the clinic is easy to reach, doctor schedules are available, and administrative procedures are simple. Veterinarian communication also has a positive and significant effect, showing that clear information, empathy, and opportunities for discussion strengthen owner understanding and willingness to follow vaccination recommendations.

Simultaneously, service access and veterinarian communication explain 44.3% of the variance in compliance, demonstrating that both structural and relational dimensions of service management are essential for preventive-care success. The findings suggest that veterinary clinics should treat vaccination compliance as a managerial outcome that can be improved through accessible service design, systematic scheduling, reminder systems, and client-centered communication. Future studies are encouraged to expand the model by adding behavioral, socioeconomic, and trust-related variables and by testing the framework across multiple veterinary clinics.

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7. REFERENCES

- [1] W. Syafitri, R. Prafitri, and H. D. Utami, "Evaluasi Kualitas Pelayanan dan Dampaknya terhadap Kepuasan Pelanggan di Klinik Hewan," *Jurnal Publikasi Manajemen Informatika*, vol. 4, no. 2, pp. 171-189, 2025, doi: 10.55606/jupumi.v4i2.3824.
- [2] S. Kirana and A. Zakir, "Web-Based Medical Record and Veterinary Clinic Service Information System Using The Waterfall Method at UPTD Veterinary Health Clinic, Medan City," 2025.

- [3] T. Hompas and Z. Liang, "Understanding competency development of the management workforce in veterinary clinical practice: A scoping review," *Veterinary Record Open*, vol. 12, no. 1, e70011, 2025, doi: 10.1002/vro2.70011.
- [4] J. Dunbar-Jacob and J. Zhao, "Medication Adherence Measurement in Chronic Diseases: A State-of-the-Art Review of the Literature," *Nursing Reports*, vol. 15, no. 10, 370, 2025, doi: 10.3390/nursrep15100370.
- [5] S. Thummak, W. Uppor, and L.-O. Wannarit, "Patient compliance: A concept analysis," *Belitung Nursing Journal*, vol. 9, no. 5, pp. 421-427, 2023, doi: 10.33546/bnj.2807.
- [6] Y. B. Limbu and R. K. Gautam, "How Well the Constructs of Health Belief Model Predict Vaccination Intention: A Systematic Review on COVID-19 Primary Series and Booster Vaccines," 2023.
- [7] S. Ssentongo et al., "COVID-19 vaccine uptake in Zimbabwe and Sierra Leone: An application of Health Belief Model constructs," 2025.
- [8] S. N. Williams, K. Dienes, J. Jaheed, J. K. Wardman, and J. Petts, "Effectiveness of communications in enhancing adherence to public health behavioural interventions: A COVID-19 evidence review," *Philosophical Transactions of the Royal Society A*, vol. 381, no. 2257, 20230129, 2023, doi: 10.1098/rsta.2023.0129.
- [9] K. Purnamasari, B. R. Putri, and M. N. Fuddin, "Tingkat Pengetahuan dan Sikap Pemilik terhadap Risiko Penularan Rabies dari Hewan Peliharaannya," *Journal of Innovation Research and Knowledge*, vol. 4, no. 12, pp. 9529-9538, 2025, doi: 10.53625/jirk.v4i12.10287.
- [10] R. H. Z and P. Susanto, "Analisis Kebijakan Vaksinasi Rabies Ditinjau dari Aspek Perspektif Masyarakat Pemilik Hewan di Kota Payakumbuh," *Jurnal Ekonomi Manajemen dan Bisnis*, vol. 4, no. 2, pp. 651-664, 2025, doi: 10.47233/jemb.v4i2.3580.
- [11] S. Panahi, N. Rathi, J. Hurley, J. Sundrud, M. Lucero, and A. Kamimura, "Patient Adherence to Health Care Provider Recommendations and Medication among Free Clinic Patients," *Journal of Patient Experience*, vol. 9, 23743735221077523, 2022, doi: 10.1177/23743735221077523.
- [12] K. Pasteur, A. Diana, J. K. Yacilla, S. Barnard, and C. C. Croney, "Access to veterinary care: Evaluating working definitions, barriers, and implications for animal welfare," *Frontiers in Veterinary Science*, vol. 11, 1335410, 2024, doi: 10.3389/fvets.2024.1335410.
- [13] K. Pasteur, N. O. Widmar, C. V. Tran, and C. C. Croney, "U.S. residents' self-reported access to veterinary care and implications for care-seeking decisions," *Frontiers in Veterinary Science*, vol. 12, 1655537, 2025, doi: 10.3389/fvets.2025.1655537.
- [14] A. L. Arnecke, S. Schwarz, A. Luebke-Becker, K. C. Jensen, and M. Bahramsoltani, "A Survey on Companion Animal Owners' Perception of Veterinarians' Communication About Zoonoses and Antimicrobial Resistance in Germany," *Animals*, vol. 14, no. 22, 3346, 2024, doi: 10.3390/ani14223346.
- [15] N. Janke, J. B. Coe, T. M. Bernardo, C. E. Dewey, and E. A. Stone, "Pet owners' and veterinarians' perceptions of information exchange and clinical decision-making in companion animal practice," *PLOS ONE*, vol. 16, no. 2, e0245632, 2021, doi: 10.1371/journal.pone.0245632.
- [16] A. A. Kedrowicz, "Enhancing Veterinarian-Client Relationships With Competent Communication," 2024.
- [17] C. Piazza, L. Dominguez Cots, and C. Dye, "Assessing pet owners' knowledge and comprehension of veterinary medical terminology," *Veterinary Record*, vol. 196, no. 9, e5163, 2025, doi: 10.1002/vetr.5163.

- [18] J. K. H. Pun, "An integrated review of the role of communication in veterinary clinical practice," *BMC Veterinary Research*, vol. 16, no. 1, 394, 2020, doi: 10.1186/s12917-020-02558-2.
- [19] C. Bir, K. Pasteur, N. Widmar, and C. Croney, "Pet acquisition trends and veterinary care access in the US," *PLOS One*, vol. 20, no. 7, e0325075, 2025, doi: 10.1371/journal.pone.0325075.
- [20] S. F. Haeder, "Trust in veterinarians and association with vaccine information sources and vaccination status among dog and cat owners," *Journal of the American Veterinary Medical Association*, vol. 263, no. 5, pp. 1-11, 2025, doi: 10.2460/javma.24.08.0551.
- [21] S. C. Owczarczak-Garstecka et al., "Impacts of COVID-19 on Owner's Veterinary Healthcare Seeking Behavior for Dogs With Chronic Conditions: An Exploratory Mixed-Methods Study With a Convenience Sample," *Frontiers in Veterinary Science*, vol. 9, 902219, 2022, doi: 10.3389/fvets.2022.902219.
- [22] R. R. Marzo et al., "The impact of service quality provided by health-care centers and physicians on patient satisfaction," *Journal of Education and Health Promotion*, vol. 10, no. 1, 2021, doi: 10.4103/jehp.jehp_979_20.
- [23] C. A. Maida et al., "Quantitative data collection approaches in subject-reported oral health research: A scoping review," *BMC Oral Health*, vol. 22, no. 1, 435, 2022, doi: 10.1186/s12903-022-02399-5.
- [24] S. H. Gea, F. Adhikara, and R. Hilmy, "Penerapan Metode TAM (Technology Acceptance Model) dalam Aktualisasi Sistem Informasi Rumah Sakit (SIMRS)," *Jurnal Health Sains*, vol. 3, no. 3, pp. 495-503, 2022, doi: 10.46799/jhs.v3i3.455.
- [25] V. A. Wahyudi, T. Subianto, and M. I. Mohammad, "Implementation of Electronic Medical Records and Work Effectiveness in The Medical Records Unit of Ciremai Hospital in 2025," vol. 4, no. 2, 2025.
- [26] J. E. Ekakoro, A. Rupple, D. Renter, and N. Cernicchiaro, "Self-reported dog vaccination practices in pet owners enrolled in the Dog Aging Project in the United States found most dogs were vaccinated according to veterinarians' recommendations," *American Journal of Veterinary Research*, vol. 86, no. 9, ajvr.25.01.0016, 2025, doi: 10.2460/ajvr.25.01.0016.