Bridging the Implementation Gap in One Health: A Systematic Review of Governance, Pathogen Dynamics, and Socio-Behavioral Interfaces in the Poultry Sector[1]

Febriangga Harmawan[2]

Siti Amanah,

Sumardjo,

Sarwititi Sarwoprasodjo

Faculty of Human Ecology, IPB University, Bogor, West Java, Indonesia

Hiroki Kasamatsu

Faculty of Collaborative Regional Innovation, Ehime University, Japan

---

[1] APA7th Citation: Harmawan, F., Amanah, S., Sumardjo, Sarwoprasodjo, S. & Kasamatsu, H. (2026). Bridging the implementation gap in One Health: A systematic review of governance, pathogen dynamics, and socio-behavioral interfaces in the poultry sector. *In Proceedings of the ICA Regional Hub Thailand 2026: Official Concurrent Event of the 76th Annual Conference of the International Communication Association (ICA)* (pp. 155–187). Faculty of Communication Arts, Chulalongkorn University.

[2] Correspondence concerning this article should be addressed to Febriangga Harmawan at Faculty of Human Ecology, IPB University, Bogor, West Java, 16680, Indonesia or by email at: febrianggaharmawan@gmail.com

The author is also affiliated with the Faculty of Collaborative Regional Innovation, Ehime University, Matsuyama, Ehime 790-8577, Japan, and Ministry of Forestry of the Republic of Indonesia, Central Jakarta, Jakarta 10270, Indonesia

Abstract

The unrelenting surge of zoonotic spillovers and antimicrobial resistance (AMR) has repositioned the One Health approach from a theoretical ideal to a global biosecurity imperative. This Systematic Literature Review (SLR) interrogates the "implementation gap" within the poultry sector, examining why sophisticated scientific surveillance often fails to translate into effective field-level practices. Specifically, we investigate how institutional mechanisms and socio-cognitive biases mediate this disconnect between advanced laboratory data and frontline behavioral execution. Following the PRISMA 2020 guidelines, we synthesized 75 high-impact studies (2020–2025) retrieved from Scopus and specialized databases. Employing the Theory, Context, and Method (TCM) framework, the extracted data were systematically categorized into governance structures, pathogen dynamics, and socio-behavioral interfaces to evaluate health information flow across global poultry hubs. The analysis reveals a profound "Japanese Paradox," defined as the systemic co-existence of world-class, high-precision molecular diagnostic capacity alongside a scarcity of field-level behavioral data targeting agricultural stakeholders. Out of the reviewed corpus, Japan leads with 25 technical pathogen studies, yet exhibits a complete blind spot regarding farmer compliance. Conversely, evidence from emerging economies like Indonesia and Thailand offers rich behavioral insights through Knowledge, Attitude, and Practice (KAP) models. However, these settings reveal a critical "behavioral paradox" where farmers maintain high-risk cultural practices despite possessing moderate theoretical knowledge due to underlying economic and structural constraints. This study introduces the "Multi-Level One Health Implementation Nexus" to address the asymmetric advancement where laboratory technology

outpaces socio-behavioral risk communication—a phenomenon we conceptualize as a "human-tech mismatch." We argue that this mismatch serves as a primary communication barrier to sustainable health outcomes. By contrasting high-tech surveillance systems with localized human factors, we advocate for a transdisciplinary shift toward culturally resonant risk communication that amplifies frontline farmer voices and bridges the divide between laboratory science and field-level production.

Keywords. biosecurity, Japan, KAP, One Health, poultry

The unrelenting surge in zoonotic spillovers, coupled with the burgeoning “silent pandemic” of antimicrobial resistance (AMR), has drastically reframed our understanding of the fragile interdependence between human, animal, and environmental domains. Consequently, the One Health approach has rapidly transitioned from a merely conceptual ideal to an indispensable global imperative for health security. Notably, scholarly discourse in the early 2020s began to rigorously expose the fundamental linkages between intensive livestock farming and the dissemination of AMR (Dafale *et al.*, 2020; Steele *et al.*, 2021). However, a persistent and troubling “One Health gap” remains—a palpable disconnect between sophisticated a scientific knowledge and the practical realities of medical and veterinary professionals on the ground. This gap is particularly evident in dairy farming cooperatives within emerging economies, where moderate theoretical knowledge regarding antimicrobial stewardship fails to translate into rigorous adherence to antibiotic withdrawal periods, thereby sustaining local AMR reservoirs (Suherman *et al.*, 2023).

Interestingly, the operationalization of this holistic framework often stumbles over complex socio-political hurdles rather than purely technical ones. Localized evidence from Indonesia suggests that multisectoral readiness is best achieved through district-level Joint Risk Assessments (JRA), which meticulously map vulnerabilities at the human-animal-environment interface within high-density settings like live bird markets (Sudarnika *et al.*, 2025). This underscores the critical role of validated instruments, such as Knowledge, Attitude, and Practice (KAP) assessments, which are now recognized as vital for evaluating cross-sectoral readiness (Asaaga *et al.*, 2021; Park, 2021). The poultry sector, particularly in technologically advanced contexts like Japan, stands as a precarious nexus of these challenges. While contemporary studies have succeeded in meticulously mapping pathogens in retail products and modeling the temporal lags of Avian Influenza (AI) outbreaks (Asakura *et al.*, 2022; Hayama *et al.*, 2022), the broader academic conversation has shifted toward quantifying the global footprints of industrial agriculture through comprehensive national indices (Sun *et al.*, 2024; Zhang *et al.*, 2024).

Despite these advancements, many existing systematic reviews remain somewhat fragmented or overly focused on narrow geographic or disciplinary silos. For instance, while some reviews have effectively mapped the role of pathology in diagnosing zoonoses (Guarner & Jean, 2023), others have focused on localized research landscapes in emerging contexts like Somalia (Mumin *et al.*, 2023) or utilized bibliometric approaches to evaluate national output against global trends, as seen in the case of Turkey (Diop *et al.*, 2025).

Crucially, what is often overlooked in macro-level reviews is the granular "behavioral paradox" revealed in field studies: a scenario where stakeholders demonstrate adequate theoretical

knowledge yet persist in high-risk cultural practices (Abunna *et al.*, 2024; Kito, 2025). This discrepancy is further complicated by geographically specific pathogen evolution trends, such as the dominance of highly resistant serovars in regional poultry hubs (Sanga *et al.*, 2025; Sasaki *et al.*, 2025a). This research, therefore, seeks to fill this void by introducing a "Multi-Level One Health Implementation Nexus". By synthesizing evidence from the challenging implementation contexts of low-and-middle-income countries (Asaaga *et al.*, 2021; Nyokabi *et al.*, 2023) with high-precision pathogen data from developed nations (Matsui *et al.*, 2021), this study moves beyond descriptive analysis to interrogate the fundamental disconnect between knowledge and practice in zoonosis control.

Within the geopolitical and ecological context of the Thailand-Mekong-ASEAN region, these biosecurity gaps present a profound institutional and communication challenge. The Mekong sub-region, characterized by highly dense, transboundary poultry trade networks and a reliance on traditional live bird markets (LBMs), serves as a critical epicenter for endemic Highly Pathogenic Avian Influenza (HPAI) strains and emerging antimicrobial resistance (AMR) reservoirs. While macro-level regional directives frequently mandate uniform biosecurity blueprints, they often manifest as an asymmetrical risk communication apparatus.

Current health communication paradigms in this region tend to operate on a top-down, technocratic transmission model. This structure naturally marginalizes the lived experiences, socioeconomic localized realities, and non-expert vernacular voices of smallholder farmers and traditional poultry traders. Consequently, there is an urgent need to reframe One Health not merely as a biological surveillance mechanism, but as a transdisciplinary communication intervention. By

integrating systematic literature from global hubs with the contextual realities of Southeast Asia, this study seeks to investigate how risk communication can transcend purely structural constraints and successfully amplify the frontline farmer voices that are structurally omitted from macro-policy formulations.

Research Questions:

RQ1 (Trend Profiling): How has the One Health research landscape in the poultry sector transformed between 2020 and 2025 regarding its geographical focus and methodological rigor?

RQ2 (Thematic Synthesis): Through the lens of the TCM framework, how do institutional mechanisms and socio-cognitive biases mediate the persistent gap between biosecurity knowledge and field-level execution?

Methods

To ensure methodological transparency and facilitate future replicability, this study employs a Systematic Literature Review (SLR) design that strictly adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. Notably, this protocol—originally established by Moher *et al.* (2009) and widely recognized as the global gold standard—was selected to maximize the rigor and reporting quality of the synthesis (Panic *et al.*, 2013; Siddaway *et al.*, 2019). Interestingly, the entire screening and selection process is visually elucidated in the PRISMA flow diagram (Figure 1), which meticulously chronicles the transition through the identification, screening, eligibility, and inclusion phases. The systematic search was conducted across two distinct repositories: the

Scopus database and the specialized Watase database. Scopus was selected as the primary engine due to its rigorous peer-review indexing standards, which effectively minimize data noise and eliminate predatory literature. The Watase database was utilized as a vital supplemental repository to capture high-impact, regionally specific veterinary and agricultural communication reports that are frequently omitted from Western-centric indices.

The initial identification phase involved an exhaustive search of the Scopus database, chosen specifically for its superior indexing of high-impact, peer-reviewed literature compared to more erratic platforms like Google Scholar, which often suffer from redundant results and potential inclusion of "predatory" journals (Hariningsih *et al.*, 2025; Lasda Bergman, 2012; Petermann-Rocha *et al.*, 2022). The search strategy employed a highly targeted Boolean string: "Knowledge" AND "Attitude" AND "Practice" AND "KAP" AND "One Health" AND "Zoonosis" AND ("Poultry" OR "Chicken") AND ("Japanese" OR "Japan").

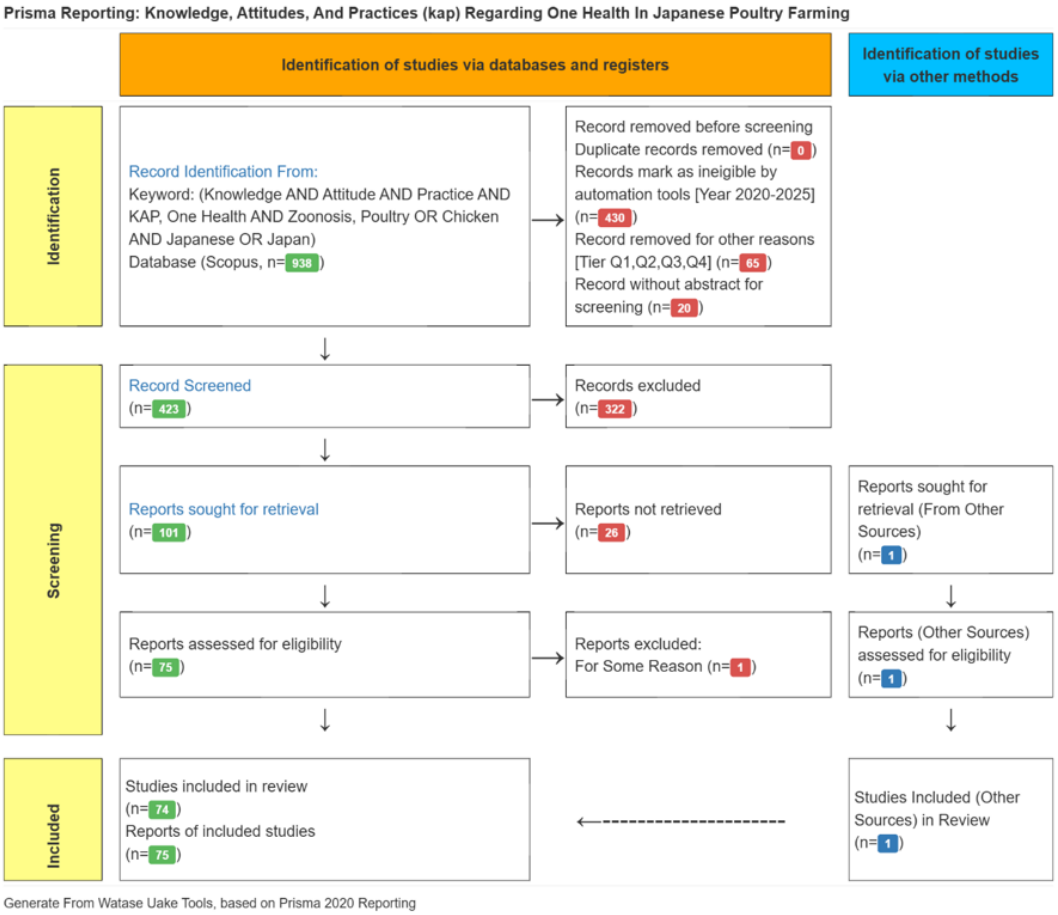
This specific string was intentionally defined to maintain a strict, high-density intersection between socio-behavioral metrics and avian biosecurity, deliberately screening out broader public health commentaries. To ensure no critical data was overlooked, we supplemented these results with the Watase database and other relevant sources (Wahyudi, 2024). Notably, the screening phase proved particularly rigorous; of the 938 records initially identified, we excluded 430 for falling outside the 2020–2025 timeframe, 65 for failing to meet Q1–Q4 quality tiers, and 20 due to missing abstracts.

After the initial title and abstract screening, we scrutinized the remaining 423 articles, eventually narrowing the field to 76 reports for full-text evaluation. However, as is often the case in systematic reviews, 26 reports remained inaccessible despite retrieval efforts. To secure data

collection reliability and eliminate individual selection bias, a rigorous multi-reviewer screening protocol was implemented. Two researchers independently executed the initial title and abstract screening across the 938 identified records. Discrepancies regarding study eligibility were resolved through a formal consensus-seeking discussion mediated by a third senior reviewer. Figure 1 summarizes the PRISMA diagram executed in this study.

Figure 1

PRISMA 2020 Flow Diagram for the Systematic Review Process



International Communication Association
Chula Chulalongkorn University
76TH ANNUAL ICA REGIONAL HUB THAILAND 2026
6–7 June 2026 • Bangkok • Chulalongkorn University
Where Thailand-Mekong-Asian Region
Bridges Divides and Amplifies Voices

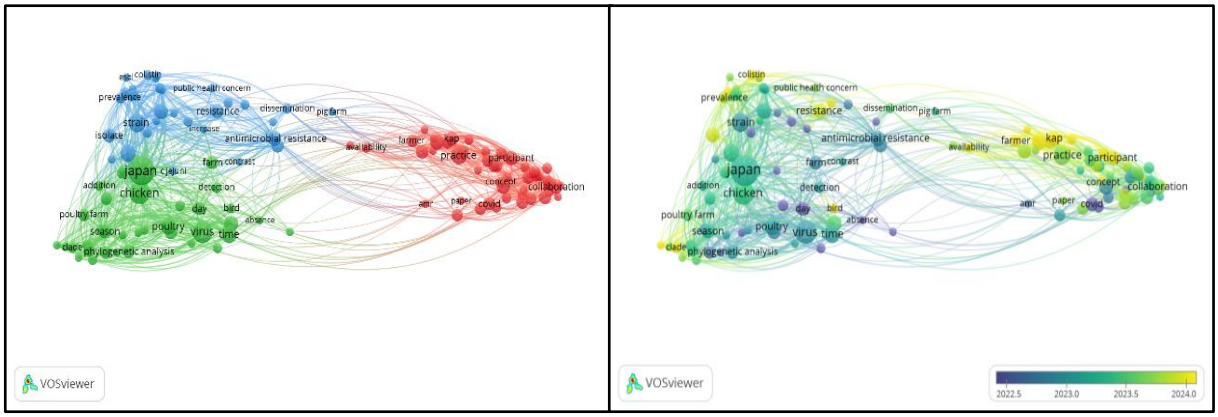
This qualitative synthesis was further bolstered by the Watase Uake System (Wahyudi, 2024) to ensure consistency in identifying core patterns regarding KAP among stakeholders. By weaving these quantitative and qualitative strands together, the methodology offers a nuanced understanding of the systemic barriers hindering One Health implementation in the Japanese poultry sector.

Results

The following section elucidates the empirical findings derived from a systematic review of 75 high-quality studies centered on KAP within the Japanese poultry sector. To facilitate a rigorous interpretation of the current research landscape, the data is presented through a series of multi-dimensional visualizations and systematic classifications. Specifically, the analysis begins with a bibliometric overview of research trends, followed by a thematic synthesis of core variables.

Figure 2

Bibliometric Analysis of the One Health Landscape in Poultry Research: Network Visualization (left), Overlay Visualization (right)



Bibliometric Mapping and the Thematic Evolution of One Health

The thematic landscape of contemporary literature is vividly captured through keyword co-occurrence analysis. This visualization reveals a powerful convergence around three primary pillars: the KAP framework, the One Health paradigm, and the specific socio-technical context of Japanese poultry farming. The high frequency of terms such as "knowledge," "attitude," and "practice" confirms that the KAP model remains the dominant methodological engine for investigating behavioral drivers in zoonosis control. Notably, the term "One Health" acts as a conceptual bridge, inextricably linking human health threats with "zoonoses" specifically "Avian Influenza" "*Salmonella*" and "AMR".

Interestingly, the analysis of keyword clusters suggests a significant shift in research trajectory. While earlier studies focused predominantly on the descriptive mapping of awareness levels, emerging trends—indicated by terms like "biosecurity", "intervention" and "health policy"—signal a move toward evaluative and action-oriented research. This evolution aligns with the global imperative to transition from theoretical frameworks to ground-level implementation (Sánchez *et al.*, 2022). Furthermore, the inclusion of regional nodes such as "Bangladesh" and "China" alongside "Japan" highlights a growing body of comparative literature that seeks to understand KAP dynamics across diverse economic and regulatory environments.

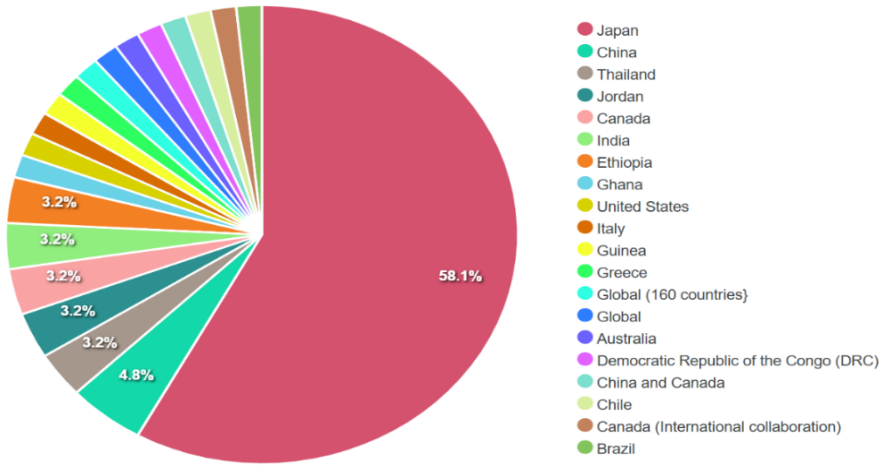
Geographic Dispersion and the "Japanese Paradox" in Biosecurity Research

The spatial distribution of the reviewed literature uncovers a notable variation between developed and developing nations' research priorities. Within this corpus, Japan serves as a highly prolific geographic focus, accounting for 25 analyzed studies. However, a deeper conceptual

synthesis reveals what may be characterized as the "Japanese Paradox. While research in Japan demonstrates world-class, high-precision molecular surveillance and advanced genomic tracking of pathogens like HPAI and resistant Salmonella serovars (Hayama *et al*., 2022; Takadate *et al*., 2024), explicit socio-behavioral social science research targeting the poultry farmers themselves appears relatively underrepresented within the current indexed literature.

Figure 3

Spatial Distribution of the Literature Review



This trend suggests that within Japan's highly industrialized and corporate-consolidated poultry sector, biosecurity strategies have historically operated through a centralized, top-down technocratic framework that prioritizes laboratory detection and viral evolution modeling (Tajima, 2023). Consequently, the integration of human-centric factors—specifically the granular KAP profiles of frontline agricultural producers—remains a critical area that requires further systematic development within the national biosecurity communication chain.

Meta-Analysis of Research Variables: The Dominance of AMR and Biosecurity

The systematic classification of research foci demonstrates that "Biosecurity Practices" and "AMR" are the two most dominant variables in the current One Health discourse. Biosecurity research typically centers on physical interventions such as disinfection protocols, pest control, and human traffic management (Asaaga *et al.*, 2021). Meanwhile, AMR variables focus on antibiotic stewardship, the prevalence of resistance genes, and the prescribing behaviors of veterinary professionals (Kawano *et al.*, 2025; Xedzro *et al.*, 2025).

Notably, there is a consistent "KAP-gap" identified across the literature, where high theoretical knowledge regarding zoonoses does not automatically translate into stringent practice due to underlying economic constraints or cultural inertia (Abunna *et al.*, 2024). This suggests that "attitude" serves as a complex mediator that requires deeper psychological investigation (Kito, 2025). Furthermore, while the "hard science" of pathogen tracking is robust—particularly in Japan—the integration of "social science" variables such as cross-sectoral collaboration and institutional trust remains underdeveloped (Nyokabi *et al.*, 2023).

Methodological Divergence: Bridging the Laboratory and the Field

The methodological analysis reveals a sharp bifurcated landscape. Over half of the analyzed studies adopt a quantitative, laboratory-centric approach. This is particularly evident in Japan, where researchers utilize advanced tools like Whole-Genome Sequencing (WGS), Polymerase Chain Reaction (PCR), and phylogenetic modeling to track viral reassortment and AMR gene spread (Sanga *et al.*, 2025; Takadate *et al.*, 2024). These "hard science" approaches provide indispensable empirical data for vaccine development and technical biosecurity (Nishiura *et al.*, 2025).

Conversely, the social dimension is predominantly explored through cross-sectional surveys and structured questionnaires in lower-income settings to evaluate the "human factor" (Mumin *et al.*, 2023; Suwannarong *et al.*, 2024). Interestingly, the use of specialized software follows this divide: Statistical Package for Social Sciences (SPSS) and R are utilized for behavioral regression models (Kito, 2025; Sun *et al.*, 2024), while bioinformatic suites like Molecular Evolutionary Genetics Analysis (MEGA) and CLC Genomics Workbench are employed for viral evolution (Saito *et al.*, 2022; Takadate *et al.*, 2024). The recurring use of EZR (Easy R) in Japanese veterinary studies further underscores a regional preference for accessible statistical interfaces in clinical research (Sasaki *et al.*, 2025b; Tangkonda *et al.*, 2021).

Synthesis of Results and Future Implications

Collectively, the findings indicate that while the scientific foundation for zoonosis control in Japan is technically superior, it lacks the socio-behavioral integration necessary for a holistic One Health implementation. The dominance of AMR and biosecurity as research categories reflects global health priorities (Steele *et al.*, 2021) but highlights a neglect of environmental and human psychological variables (Dafale *et al.*, 2020). Therefore, the proposed study on the KAP of Japanese poultry farmers is not merely supplemental; it is a critical requirement to bridge the gap between high-level genomic surveillance and ground-level biosecurity execution.

Discussion

The Epistemological Divide: Technical Sovereignty vs. Socio-Behavioral Scarcity

The synthesis of the 75 reviewed studies reveals a profound epistemological tension within the One Health discourse, particularly when contrasting the Japanese context with global trends.

Notably, our findings expose a stark dichotomy between "hard science" technicality and "soft science" behavioral insights. In Japan, research exhibits an overwhelming sovereignty in molecular epidemiology and genomic surveillance, with a sophisticated focus on pathogens such as HPAI, *Salmonella*, and *Campylobacter* (Hayama *et al.*, 2022; Nishiura *et al.*, 2025; Takadate *et al.*, 2024). This high-precision approach is in line with the national priority of maintaining a resilient agricultural infrastructure through laboratory excellence (Sanga *et al.*, 2025).

However, contrary to the holistic aspirations of the One Health framework, there is a conspicuous lack of explicit KAP research targeting the Japanese poultry farmer. While the global literature—particularly from developing economies—extensively utilizes KAP to diagnose biosecurity failures (Abunna *et al.*, 2024; Ahmed *et al.*, 2025), Japanese scholarship remains largely silent on the human dimensions of disease transmission. This discrepancy adds nuance to our understanding of the "Japanese Paradox": a system that possesses world-class diagnostic capabilities but lacks a granular understanding of the stakeholders who must execute these protocols on the front lines (Kawano *et al.*, 2025).

Unpacking the One Health Gap: A Theory, Context, and Method (TCM) Synthesis

By strictly applying the Theory, Context, and Method (TCM) framework, this review moves beyond descriptive literature mapping to systematically interrogate the causal breakdowns within the One Health paradigm.

Theory: Socio-Cognitive Biases and Risk Perception

The theoretical landscape of the reviewed literature reveals a critical breakdown in how health information triggers behavioral change. While most of the global poultry research relies on

the Knowledge, Attitude, and Practice (KAP) model as its dominant theoretical engine, the synthesis exposes a severe "KAP-gap." Stakeholders across diverse economic settings frequently demonstrate adequate theoretical knowledge regarding zoonotic pathways and AMR stewardship, yet persist in high-risk field practices. Theoretically, this indicates that "knowledge" alone is an insufficient predictor of compliance. The psychological mediator of risk perception often fails due to a deep cognitive dissonance, where immediate economic constraints or long-standing cultural inertia consistently override scientific data.

Context: The Epistemological Divide in Global Poultry Sectors

Contextual variables heavily dictate how biosecurity is managed and communicated. In highly industrialized, strictly regulated contexts like Japan, biosecurity infrastructure operates through a top-down approach centered on automated systems and corporate consolidation. Conversely, in the high-density, traditional market topographies of emerging economies like Indonesia and Thailand, biosecurity relies entirely on individual compliance at the frontline. This structural variation creates an epistemological divide: developed systems focus their resources on tracking the pathogen within the value chain, whereas emerging systems are forced to focus on managing human factors. This contextual mismatch explains why centralized regional health policies fail when applied to localized, low-tech production floors.

Method: The Human-Tech Methodological Bifurcation

The operational "implementation gap" is ultimately sustained by a sharp methodological bifurcation in contemporary research. Over half of the analyzed studies—predominantly in developed nations—adopt a quantitative, laboratory-centric approach utilizing advanced

molecular tools such as Whole-Genome Sequencing (WGS) and phylogenetic modeling. Conversely, behavioral variables in lower-income settings are investigated almost exclusively through cross-sectional questionnaires analyzed via standard statistical software (SPSS/R). This methodological split creates deep organizational and disciplinary silos; laboratory scientists and social communication experts map the same biosecurity threats using entirely incompatible research languages, rendering data inert at the frontline of zoonosis control.

Novelty and Scholarly Contribution

Unlike prior studies, which typically focus on either purely molecular data or purely socio-behavioral surveys in developing regions (Dafale *et al.*, 2020; Mumin *et al.*, 2023), this review offers a novel perspective by identifying the systemic "implementation nexus" in a high-income setting. Most existing SLRs in this field are geographically siloed or discipline-specific; however, this review breaks new ground by integrating pathogen dynamics with governance and behavioral interfaces.

The findings reveal that the "One Health gap" in Japan is not a product of scientific ignorance, but of organizational and disciplinary silos (Asaaga *et al.*, 2021; Nyokabi *et al.*, 2023). The uniqueness of this study lies in its identification of the "human-tech mismatch," where the advancement of laboratory surveillance has outpaced the development of social-behavioral interventions. This insight provides a critical roadmap for future research, shifting the focus from "more data" to "more integrated practice".

Theoretical and Practical Implications

Theoretically, this study contributes to the evolution of One Health from a biological concept to a transdisciplinary governance model (Steele *et al.*, 2021). It demonstrates that

biosecurity is as much a social construct as it is a biological necessity. Practically, the results suggest that Japanese policymakers must recalibrate their approach. Rather than solely investing in high-end surveillance, there is an urgent need for "behavioral biosecurity" programs that address the specific KAP profiles of farmers (Kito, 2025).

The transition from a reactive, outbreak-focused strategy to a proactive, prevention-based model requires a fundamental shift in how risk is communicated to and perceived by the farming community (Mubareka *et al.*, 2023). Ultimately, the effectiveness of Japan's biosecurity infrastructure will depend on bridging the gap between the genomic findings of the laboratory and the daily practices on the farm floor.

Conclusion and Future Research Directions

This systematic review underscores a fundamental paradox within the One Health landscape: the coexistence of a high-tech surveillance infrastructure alongside a notably stagnant socio-behavioral understanding of its primary stakeholders. The synthesis of 75 high-impact studies reveals that while laboratory-based pathogen tracking has reached an impressive stage of maturity, there remains a conspicuous neglect of the "human factor"—specifically the KAP of farmers—within developed agricultural systems such as Japan. Unlike prior studies that predominantly fixate on technical biosecurity or specific geographic silos, this review identifies a critical "implementation nexus" where scientific knowledge frequently fails to translate into sustained field-level practice due to a lack of behavioral integration.

The primary scholarly contribution of this study lies in its shift from a mere descriptive mapping of zoonotic threats toward a critical interrogation of the organizational and psychological barriers hindering the One Health paradigm. Historically, biosecurity has been treated as a technical challenge; however, this review demonstrates that it is equally a social construct. Theoretically, the study extends the current discourse by showing that molecular diagnostics must be balanced with social cognitive models to achieve meaningful health outcomes. Practically, the findings suggest that the efficacy of national health security is contingent upon bridging this "KAP-gap," moving beyond top-down mandates toward interventions that resonate with the socio-economic realities of the farming community.

To address the profound gaps identified, future research must prioritize three strategic pathways. First, there is an urgent need for transdisciplinary mixed-methods studies that link genomic surveillance data directly with behavioral metrics to uncover the "why" behind biosecurity non-compliance. Interestingly, while we can track a virus's evolution with pinpoint accuracy, we still struggle to understand the farmer's decision-making process. Second, research must move away from cross-sectional snapshots toward longitudinal evaluations of One Health interventions, assessing whether knowledge gains result in permanent behavioral shifts. Finally, future investigations should explore the role of institutional trust and digital risk communication in mediating stakeholder attitudes during crises.

In conclusion, this review serves as a catalyst for a more reflexive One Health agenda—one that acknowledges that even the most sophisticated laboratory data remains inert if it cannot

influence the hands that manage the farm. Bridging this disconnect is not merely an academic exercise but a vital necessity for the long-term resilience of global food systems.

References

Abunna, F., Gebresenbet, G., & Megersa, B. (2024). Assessment of knowledge, attitude and practices (KAP) of farmers about transmission of zoonotic diseases in Ada'a district, Oromia, Ethiopia. *Heliyon*, *10*(4), e25713. https://doi.org/10.1016/j.heliyon.2024.e25713

Ahmed, M. J., Bhuiyan, M. I. H., Chalise, R., Mamun, M., Bhandari, P., Islam, K., Jami, S. S., Ali, M., & Sabrin, M. S. (2025). One health assessment of farmers' knowledge, attitudes, and practices (KAPs) on zoonoses in Bangladesh. *Scientific Reports*, *15*(1), 1–17. https://doi.org/10.1038/s41598-025-85462-9

Asaaga, F. A., Young, J. C., Oommen, M. A., Chandarana, R., August, J., Joshi, J., Chanda, M. M., Vanak, A. T., Srinivas, P. N., Hoti, S. L., Seshadri, T., & Purse, B. V. (2021). Operationalising the "One Health" approach in India: facilitators of and barriers to effective cross-sector convergence for zoonoses prevention and control. *BMC Public Health*, *21*(1), 1–21. https://doi.org/10.1186/s12889-021-11545-7

Asakura, H., Yamamoto, S., Yamada, K., Kawase, J., Nakamura, H., Abe, K. I., Sasaki, Y., Ikeda, T., & Nomoto, R. (2022). Quantitative detection and genetic characterization of thermotolerant Campylobacter spp. in fresh chicken meats at retail in Japan. *Frontiers in Microbiology*, *13*(October), 1–11. https://doi.org/10.3389/fmicb.2022.1014212

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Dafale, N. A., Srivastava, S., & Purohit, H. J. (2020). Zoonosis: An Emerging Link to Antibiotic Resistance Under "One Health Approach." *Indian Journal of Microbiology*, *60*(2), 139–152. https://doi.org/10.1007/s12088-020-00860-z

Diop, S. D., Inci, A., Kizgin, A. D., & Duzlu, O. (2025). Understanding One Health and Zoonosis: A Systematic Review with a Bibliometric Analysis of Turkish Research and Global Perspectives (1974-2023). *Kafkas Universitesi Veteriner Fakultesi Dergisi*, *31*(3), 333–340. https://doi.org/10.9775/kvfd.2025.34009

Guarner, J., & Jean, S. (2023). One Health: The Role of Pathology as it Pertains to Diagnosis of Zoonoses and Discovery of Emerging Infections. *Modern Pathology*, *36*(8), 100236. https://doi.org/10.1016/j.modpat.2023.100236

Hariningsih, E., Haryanto, B., Wahyudi, L., & Sugiarto, C. (2025). Ten years of evolving traditional versus non-traditional celebrity endorser study: review and synthesis. *Management Review Quarterly*, *75*(3), 1937–1997. https://doi.org/10.1007/s11301-024-00425-0

Hayama, Y., Sawai, K., Yoshinori, M., Yamaguchi, E., & Yamamoto, T. (2022). Estimation of introduction time window of highly pathogenic avian influenza virus into broiler chicken farms during the 2020 – 2021 winter season outbreak in Japan. *Preventive Veterinary Medicine*, *208*, 105768. https://doi.org/10.1016/j.prevetmed.2022.105768

Kawano, K., Masaki, T., Kawaguchi, T., & Kuroda, M. (2025). Persistence of Colistin Resistance and mcr-1.1-Positive E. coli in Poultry Despite Colistin Ban in Japan. *Antibiotics*, *14*(4), 1–13. https://doi.org/10.3390/antibiotics14040360

Kito, Y. (2025). What drives risky eating behavior: Applying an extended theory of planned behavior to raw or undercooked chicken consumption in Japan. *Food Research International*, *219*(September 2024), 116971. https://doi.org/10.1016/j.foodres.2025.116971

Lasda Bergman, E. M. (2012). Finding Citations to Social Work Literature: The Relative Benefits of Using Web of Science, Scopus, or Google Scholar. *Journal of Academic Librarianship*, *38*(6), 370–379. https://doi.org/10.1016/j.acalib.2012.08.002

Matsui, K., Nakazawa, C., Khin, S. T. M. M., Iwabuchi, E., Asai, T., & Ishihara, K. (2021). Molecular characteristics and antimicrobial resistance of salmonella enterica serovar schwarzengrund from chicken meat in japan. *Antibiotics*, *10*(11). https://doi.org/10.3390/antibiotics10111336

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., Gøtzsche, P. C., … Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7). https://doi.org/10.1371/journal.pmed.1000097

Mubareka, S., Amuasi, J., Banerjee, A., Carabin, H., Jack, J. C., Jardine, C., Jaroszewicz, B., Keefe, G., Kotwa, J., Kutz, S., McGregor, D., Mease, A., Nicholson, L., Nowak, K., Pickering, B., Reed, M. G., Saint-Charles, J., Simonienko, K., Smith, T., … Parmley, E. J. (2023). Strengthening a One Health approach to emerging zoonoses. *Facets*, *8*, 16–79. https://doi.org/10.1139/facets-2021-0190

Mumin, F. I., Fenton, A., Osman, A. Y., & Mor, S. M. (2023). Zoonoses research in Somalia: A scoping review using a One Health approach. *One Health*, *17*(July), 100626. https://doi.org/10.1016/j.onehlt.2023.100626

Munyaneza, C., Bizimana, F., Mukumbo, F., Gatesi, S., Sibomana, E., Munyampuhwe, S., & Dutuze, M. F. (2025). Knowledge, attitudes, practices (KAP), and risk factors toward zoonotic diseases among smallholder livestock farmers in Bugesera district of Rwanda. *Frontiers in Public Health*, *13*, 1569682. https://doi.org/10.3389/fpubh.2025.1569682

Nishiura, H., Kumagai, A., Maeda, M. H., Takadate, Y., Sakuma, S., Tsunekuni, R., Mine, J., Uchida, Y., & Miyazawa, K. (2025). Pathogenic and Antigenic Analyses of H5N1 High Pathogenicity Avian Influenza Virus Isolated in the 2022/2023 Season From Poultry Farms in Izumi City, Japan. *Transboundary and Emerging Diseases*, *2025*(1), 1535116. https://doi.org/10.1155/tbed/1535116

Nyokabi, N. S., Moore, H., Berg, S., Lindahl, J., Phelan, L., Worku, G. G., Mihret, A., & Wood, J. L. N. (2023). Implementing a one health approach to strengthen the management of zoonoses in Ethiopia. *One Health*, *16*, 100521. https://doi.org/10.1016/j.onehlt.2023.100521

Panic, N., Leoncini, E., De Belvis, G., Ricciardi, W., & Boccia, S. (2013). Evaluation of the endorsement of the preferred reporting items for systematic reviews and meta-analysis (PRISMA) statement on the quality of published systematic review and meta-analyses. *PLoS ONE*, *8*(12). https://doi.org/10.1371/journal.pone.0083138

Park, D. I. (2021). Development and validation of a knowledge, attitudes and practices questionnaire on covid-19 (Kap covid-19). *International Journal of Environmental Research and Public Health*, *18*(14). https://doi.org/10.3390/ijerph18147493

Petermann-Rocha, F., Balntzi, V., Gray, S. R., Lara, J., Ho, F. K., Pell, J. P., & Celis-Morales, C. (2022). Global prevalence of sarcopenia and severe sarcopenia: a systematic review and meta-analysis. *Journal of Cachexia, Sarcopenia and Muscle*, *13*(1), 86–99. https://doi.org/10.1002/jcsm.12783

Saito, H., Nakagawa, K., Kitamura, Y., Kuwata, K., & Tanaka, E. (2022). Molecular survey of infectious bronchitis virus on poultry farms in Gifu Prefecture, Japan from 2021 to 2022 by RT-PCR with an enhanced level of detection sensitivity for the S1 gene. *Journal of Veterinary Medical Science*, *84*(9), 1157–1163. https://doi.org/10.1292/jvms.22-0206

Sánchez, A., Contreras, A., Corrales, J. C., & de la Fe, C. (2022). In the beginning it was zoonosis: One Health to combat this and future pandemics. SESPAS Report 2022. *Gaceta Sanitaria*, *36*(tabla 1), S61–S67. https://doi.org/10.1016/j.gaceta.2022.01.012

Sanga, G. J., Hiramoto, S., Miyajima, R., Duc, V. M., Obi, T., Shigemura, H., & Chuma, T. (2025). Increased kanamycin-resistant Salmonella Schwarzengrund, serovar changing and antimicrobial susceptibility of Salmonella enterica from broiler chickens in Kagoshima, Japan between 2019 and 2023. *BMC Veterinary Research*, *21*(1), 599. https://doi.org/10.1186/s12917-025-05031-0

Sasaki, Y., Furuya, Y., Suzuki, S., Momose, Y., Uema, M., Kayano, M., Aikawa, C., Sasaki, M., Okamura, M., & Ohya, K. (2025a). Geographical variation in antimicrobial resistant Salmonella Schwarzengrund from chicken meat in Japan. *Journal of Veterinary Medical Science*, *87*(3), 315–319. https://doi.org/10.1292/jvms.24-0279

Sasaki, Y., Furuya, Y., Suzuki, S., Momose, Y., Uema, M., Kayano, M., Aikawa, C., Sasaki, M., Okamura, M., & Ohya, K. (2025b). Geographical variation in antimicrobial resistant Salmonella Schwarzengrund from chicken meat in Japan. *Journal of Veterinary Medical Science*, *87*(3), 315–319. https://doi.org/10.1292/jvms.24-0279

Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to Do a Systematic Review: A Best Practice Guide for Conducting and Reporting Narrative Reviews, Meta-Analyses, and Meta-Syntheses. *Annual Review of Psychology*, *70*, 747–770. https://doi.org/10.1146/annurev-psych-010418-102803

Steele, S. G., Booy, R., Manocha, R., Mor, S. M., & Toribio, J. A. L. M. L. (2021). Towards One Health clinical management of zoonoses: A parallel survey of Australian general medical practitioners and veterinarians. *Zoonoses and Public Health*, *68*(2), 88–102. https://doi.org/10.1111/zph.12799

Sudarnika, E., Pisestyani, H., Idris, S., Setiaji, G., Iryawati, D., Hardianti, N., Mayasari, N. L. P. I., Poetri, O. N., Basri, C., Ridwan, Y., & Agungpriyono, S. (2025). District-level joint risk assessment of highly pathogenic avian influenza H5N1 at the human–animal–environment interface in live bird markets of Bogor, Indonesia. *Veterinary World*, *19*(1), 210–223. https://doi.org/10.14202/vetworld.2026.210-223

Suherman, D. A., Sudarnika, E., & Purnawarman, T. (2023). Antibiotic resistance: A cross-sectional study on the characteristics, knowledge, attitudes, and practices of dairy farmers' cooperative in North Cianjur (KPSCU), Cianjur District, Indonesia. *Veterinary World*, *16*(8), 1736–1746. https://doi.org/10.14202/vetworld.2023.1736-1746

Sun, Z. S., Wan, E. Y., Agbana, Y. L., Zhao, H. Q., Yin, J. X., Jiang, T. G., Li, Q., Fei, S. W., Wu, L. B., Li, X. C., Zhang, Q. Y., Liu, J. S., Gu, S. Y., Guo, Z. Y., Xue, J. B., Han, L. F., Zhang, X. X., Xia, S., Welburn, S. C., … Kassegne, K. (2024). Global One Health index for zoonoses: A performance assessment in 160 countries and territories. *IScience*, *27*(4). https://doi.org/10.1016/j.isci.2024.109297

Suwannarong, K., Thammasutti, K., Ponlap, T., Kanthawee, P., Saengkul, C., Boonyakawee, P., Pothita, R., Phosri, D., Anuragudom, S., Changtes, S., & Amonsin, A. (2024). A quantitative survey on exposures, knowledge, attitudes, and practices (KAP) related to swine influenza among villagers in different regions of Thailand. *BMC Veterinary Research*, *20*(1). https://doi.org/10.1186/s12917-024-04406-z

Tajima, A. (2023). Historical Overview of Poultry in Japan. *Journal of Poultry Science*, *60*(2), 1–11. https://doi.org/10.2141/jpsa.2023015

Takadate, Y., Mine, J., Tsunekuni, R., Sakuma, S., Kumagai, A., Nishiura, H., Miyazawa, K., & Uchida, Y. (2024). Genetic diversity of H5N1 and H5N2 high pathogenicity avian influenza viruses isolated from poultry in Japan during the winter of 2022–2023. *Virus Research*, *347*, 199425. https://doi.org/10.1016/j.virusres.2024.199425

Tangkonda, E., Kubo, M., Sekiguchi, S., Shinki, T., Sasaki, S., Yamada, K., Taniguchi, T., Vetchapitak, T., & Misawa, N. (2021). Work-related increases in titer of campylobacter jejuni antibody among workers at a chicken processing plant in miyazaki prefecture, japan, independent of individual ingestion of edible raw chicken meat. *Journal of Veterinary Medical Science*, *83*(8), 1306–1314. https://doi.org/10.1292/jvms.21-0244

Wahyudi, L. (2024). *Watase Uake: Research Collaboration Tools*. https://www.watase.web.id

Xedzro, C., Shimamoto, T., Ahmed, A. M., Yu, L., Sugawara, Y., Sugai, M., & Shimamoto, T. (2025). Genomic insights into multidrug-resistant extraintestinal pathogenic \textit{{Escherichia} coli} {O4}:{H12} harboring \textit{mcr-5} and \textit{bla} {SHV}-12 on conjugative plasmids isolated from chicken meat in {Japan}. *Journal of Applied Microbiology*, *136*(9), lxaf229. https://doi.org/10.1093/jambio/lxaf229

Zhang, T., Nickerson, R., Zhang, W., Peng, X., Shang, Y., Zhou, Y., Luo, Q., Wen, G., & Cheng, Z. (2024). The impacts of animal agriculture on One Health—Bacterial zoonosis, antimicrobial resistance, and beyond. *One Health*, *18*, 100748. https://doi.org/10.1016/j.onehlt.2024.100748

Appendix

Overview of Research Context and Methodological Designs

No.	Author & Year	Research Context	Methodological Designs
Pathogen Dynamics, Disease Ecology, and Molecular Surveillance			
1	Takadate *et al.* (2024)[29]	Addresses the unprecedented scale of H5N1 and H5N2 Highly Pathogenic Avian Influenza (HPAI) outbreaks in Japan during the 2022–2023 winter season, focusing on the genomic evolution of these dominant subtypes.	Phylogenetic and Genomic Surveillance
2	Sanga *et al.* (2025)[16]	Addresses the shifting landscape of *Salmonella serovars* and the emergence of high kanamycin resistance in *Salmonella Schwarzengrund* within broiler flocks in Kagoshima, Japan, from 2019 to 2023.	Longitudinal Microbiological Surveillance
3	Nishiura *et al.* (2025)[35]	Investigates the antigenic and pathogenic characteristics of the H5N1 Highly Pathogenic Avian Influenza Virus (HPAIV) isolated during the massive 2022/2023 winter outbreak in Izumi City, Japan.	Genomic and In Vivo Pathogenesis Study
4	Hayama *et al.* (2022)[8]	Quantifies the temporal gap between the introduction of Highly Pathogenic Avian Influenza (HPAI) virus and its clinical detection within Japanese poultry farms.	Epidemiological Simulation Modeling
5	Sasaki *et al.* (2025)[39]	Explores the regional variations in antimicrobial resistance patterns of *Salmonella Schwarzengrund* isolated from retail chicken meat across different geographical zones in Japan	Geospatial Epidemiological Analysis
6	Kawano *et al.* (2025)[33]	Examines the persistence of colistin-resistant and mcr-1.1-positive *Escherichia coli* in the Japanese poultry sector despite the official national ban on colistin use in livestock.	Molecular Surveillance and Comparative Analysis

No.	Author & Year	Research Context	Methodological Designs
7	Asakura *et al.* (2022)[7]	Monitors the prevalence of *Campylobacter* spp. in retail poultry across Japan to assess the risks of zoonotic exposure within the downstream food supply chain.	Quantitative Molecular Surveillance
8	Okuya *et al.* (2022)[41]	Identifies viral reassortment events between high and low pathogenicity avian influenza strains to understand the emergence of novel zoonotic threats.	Phylogenomic Mapping
9	Kakita *et al.* (2023)[42]	Assesses the prevalence and genetic diversity of heat-labile enterotoxin (LT)-harboring *Escherichia fergusonii* in broiler chickens and pigs in Okinawa to evaluate its potential as an emerging zoonotic threat.	Molecular Prevalence Survey
10	Matsui *et al.* (2021)[19]	Assesses the environmental and food-chain prevalence of mcr resistance genes to map the dissemination of colistin resistance in Japanese agriculture.	Molecular Environmental Surveillance
11	Dong *et al.* (2022)[43]	Performs molecular characterization of Chicken Anemia Virus (CAV) strains causing high mortality in chicks, focusing on genetic evolution and regional spread patterns within Japan.	Phylogenomic Analysis
12	Fujino *et al.* (2024)[44]	Investigates the etiology of hemorrhagic hepatitis in debilitated chickens at a Japanese broiler farm, specifically identifying the pathogenic role of chicken chapparvovirus 2.	Molecular Diagnostics & Sequencing
13	Hayashi *et al.* (2024)[45]	Examines the regional genetic evolution and phylogenetic distribution of influenza viruses across Japanese prefectures to improve localized biosecurity.	Phylogenetic Surveillance
14	Jiarpinitnun *et al.* (2024)[46]	Investigates the specific involvement of *Campylobacter* species in the development of Spotty Liver Disease (SLD)-like lesions in broiler chickens detected during meat inspections in Miyazaki Prefecture.	Case-Control Histopathological Study
15	Mase *et al.* (2022)[47]	Focuses on the genomic evolution of Highly Pathogenic Avian Influenza (HPAI) viruses within the	Structural Bioinformatics

No.	Author & Year	Research Context	Methodological Designs
		Japanese poultry landscape to improve regional biosecurity and vaccine strain selection.	
16	Matsuda *et al.* (2025)[48]	Evaluates the nexus between genetic diversity and disease resilience in Japanese Native Chickens (JNC), aiming to optimize conservation and industrial breeding strategies.	Population Genetics & Modeling
17	Osman *et al.* (2021)[49]	Deciphers the evolutionary origins and breeding history of the Tosa-Jidori breed, a critical component of Japan's avian genetic heritage.	Molecular Phylogenetics
18	Saito *et al.* (2022)[37]	Focuses on improving the detection sensitivity of the S1 gene in Infectious Bronchitis Virus (IBV) through enhanced RT-PCR protocols to better monitor circulating variants on poultry farms.	Methodological Optimization and Survey
19	Sakuma *et al.* (2021)[50]	Documents the first confirmed outbreak of H5N8 Highly Pathogenic Avian Influenza (HPAI) on a Japanese chicken farm in 2020, focusing on the source and rapid transmission dynamics.	Outbreak Investigation and Forensic Virology
20	Soda *et al.* (2023)[51]	Conducts a simultaneous genetic and antigenic analysis of H5N8 and H5N1 HPAI subtypes isolated from both wild birds and poultry farms during the 2021-2022 winter season.	Comparative Genomic and Antigenic Profiling
21	Takahashi *et al.* (2024)[52]	Investigates the emergence of Infectious Bursal Disease Virus (IBDV) antigenic variants in Japan that circumvent immunity provided by current commercial vaccines.	Molecular & Phylogenetic Profiling
22	Tangkonda *et al.* (2021)[38]	Evaluates the occupational health risks associated with *Campylobacter jejuni* exposure among slaughterhouse workers and the relationship between workplace hygiene and seroconversion.	Sero-epidemiological Study
23	Tajima (2023)[32]	Provides a comprehensive historical synthesis of the Japanese poultry industry’s post-war expansion,	Systematic Historical Review

No.	Author & Year	Research Context	Methodological Designs
		emphasizing the role of academic platforms and the deep-seated cultural attributes of poultry in society.	
24	Xedzro *et al.* (2025)[53]	Provides high-resolution genomic data on a multidrug-resistant E. coli O4:H12 strain carrying critical resistance genes (mcr-5 and blaSHV-12) isolated from Japanese retail meat.	Comparative Genomics and Bioinformatics
25	Inoue *et al.* (2025)[54]	Analyzes the growth kinetics and population density of the poultry red mite *(Dermanyssus gallinae)* to establish more effective control strategies in laboratory and field settings.	Controlled Experimental Study
26	Alnuaimi *et al.* (2024)[55]	Pertains to the development of healthy lifestyle interventions within primary care settings, focusing on culturally sensitive and region-specific adaptation of behavioral assessment tools.	Instrument Validation & Cultural Adaptation
27	Alzghoul *et al.* (2025)[56]	Evaluates the efficacy of pain management within primary healthcare by assessing the cognitive and behavioral competencies of nursing professionals.	Psychometric Questionnaire Development
28	Dafale *et al.* (2020)[1]	Explores modern infectious disease scenarios by identifying management strategies for etiological agents and their impact on broader ecosystem equilibrium.	One Health Theoretical Synthesis
29	Eda *et al.* (2023)[57]	Traces the biological and archaeological evidence of early domestic chickens in Japan to understand the history of human-animal cohabitation and domestication.	Zooarchaeological & Biomolecular Analysis
30	Fujimoto *et al.* (2021)[58]	Develops antimicrobial stewardship standards in Japan by establishing Defined Daily Doses (DDDjp) for livestock species (pigs, cattle, and poultry).	Comparative Pharmaco-epidemiological Analysis
31	Lin *et al.* (2023)[59]	Investigates the co-selection and horizontal transfer of streptomycin resistance genes in *E. coli* isolates from retail chicken meat in Japan.	Molecular & Statistical Analysis

No.	Author & Year	Research Context	Methodological Designs
32	Kakita *et al.* (2024)[60]	Focuses on the high-resolution genomic characterization of enterotoxigenic *E. fergusonii* isolates found in retail chicken meat in the Japanese domestic market.	Genomic Epidemiology
33	Nishiura *et al.* (2024)[61]	Characterizes the phylogenetic evolution and pathogenic potential of H5N1 and H5N6 HPAI strains isolated during the 2023/2024 Japanese poultry season.	Genomic & Pathogenic Characterization
34	Kakita *et al.* (2023)[62]	Assesses the prevalence and distribution of enterotoxin-harboring *E. fergusonii* across broiler chicken and pig farms to understand inter-species transmission risks.	Cross-sectional Microbiological Survey
35	Kibenge (2023) [63]	Emphasizes the necessity of continuous viral discovery and surveillance as core components of an integrated One Health approach to address recent reverse zoonoses.	Strategic Framework Review
36	Sakuma *et al.* (2023)[64]	Evaluates the virulence and infectivity of H5N8 HPAI viruses isolated in Japan during the winter of 2020-2021 through experimental infection.	In vivo Pathogenesis
37	Takadate *et al.* (2023)[65]	Investigates the differential infection mechanics and transmission efficiencies of H5N8 versus H5N1 HPAI strains isolated in Japan to inform targeted outbreak mitigation strategies.	Experimental Comparative Virology
38	Tanimoto *et al.* (2021)[66]	Monitors the presence of ESBL-producing *Serratia fonticola* (FONA) in imported chicken meat as a critical component of national biosecurity and food safety surveillance.	Microbiological Import Surveillance
Socio-Behavioral Interface and Professional Knowledge (KAP)			
39	Abunna *et al.* (2024)[14]	Investigates the health and economic burden of zoonotic diseases in Ethiopia, highlighting high farmer exposure due to traditional husbandry and the socio-behavioral drivers of infection.	Quantitative Cross-sectional Survey

No.	Author & Year	Research Context	Methodological Designs
40	Ahmed *et al.* (2025)[30]	Evaluates zoonotic risk at the animal-human-environment interface in Bangladesh, identifying intensive human-animal interactions in traditional agriculture as primary spillover pathways.	Integrated One Health Assessment
41	Mumin *et al.* (2023)[12]	Examines the awareness and biosecurity readiness regarding zoonotic threats in conflict-affected regions (Somalia), where fragile health systems exacerbate pandemic risks.	Descriptive Quantitative Survey
42	Munyaneza *et al.* (2025)[31]	Identify the socio-economic determinants influencing biosecurity compliance among small-scale poultry producers in rural, low-resource settings.	Econometric Analysis
43	Kito (2025)[15]	Addresses a critical public health concern in Japan: the high-risk consumption of raw or undercooked chicken as a gourmet delicacy, focusing on the "human factor" in foodborne disease transmission.	Structural Equation Modeling (SEM)
44	Suwannarong *et al.* (2024)[36]	Evaluates the risk factors for Swine Influenza Virus (SIV) transmission among rural villagers in Thailand, focusing on the intersection of environmental exposure and daily behavioral practices	Analytical Cross-sectional Study
45	Park (2021)[6]	Evaluates the social cognitive determinants of institutional readiness and professional compliance behavior regarding emerging zoonotic threats.	Social Cognitive Theory (SCT) Modeling
46	Dogbey *et al.* (2025)[67]	Evaluates the capacity of Ghanaian healthcare workers to diagnose and manage zoonoses based on their professional knowledge and field experience.	Analytical Cross-sectional Survey
47	Suwannarong *et al.* (2023)[68]	Investigates the socio-behavioral determinants of swine influenza transmission and disease reporting within the Thai pig production sector, emphasizing knowledge gaps and biosecurity deficiencies among stakeholders.	Qualitative Methodological Framework
48	Xu *et al.* (2025)[69]	Evaluates the social determinants of *brucellosis* control in China by assessing the Knowledge,	Cross-sectional KAP Survey

No.	Author & Year	Research Context	Methodological Designs
		Attitudes, and Practices (KAP) of frontline animal health staff and livestock farmers.	
49	Bert *et al.* (2024)[70]	Assesses public awareness and risk perception in Italy regarding emerging zoonotic threats (e.g., Mpox) in the context of One Health risk communication.	National Cross-sectional Study
50	Velasco *et al.* (2024)[71]	Maps the genetic diversity and demographic history of Japanese native chicken breeds to support national germplasm conservation and industrial breeding strategies.	Large-scale Genomic Mapping
51	Wu *et al.* (2023)[72]	Proposes a Human-oriented One Health (HOH) conceptual framework to address unsustainable environmental behaviors that facilitate zoonotic spillovers.	Thematic and Conceptual Analysis
		Governance Architecture and Policy	
52	Asaaga *et al.* (2021)[5]	Explores the operational challenges of implementing the One Health approach in India, specifically focusing on facilitators and barriers to cross-sectoral convergence for zoonosis control.	Qualitative Descriptive-Analytic Study
53	Zhang *et al.* (2024)[10]	Investigates the holistic impact of industrial animal agriculture on the One Health triad, emphasizing the nexus between bacterial zoonoses and the antimicrobial resistance (AMR) crisis.	Multidisciplinary Bibliometric Review
54	Diop *et al.* (2025)[13]	Evaluates the conceptual understanding and scientific output related to One Health and zoonoses among Turkish researchers, providing a comparative analysis against global research trends and thematic clusters.	Bibliometric Mapping Analysis
55	Sun *et al.* (2024)[9]	Develops robust quantitative metrics to evaluate national global health security performance, focusing on the capacity for early detection and rapid response to biological threats.	Composite Index Performance Modeling

No.	Author & Year	Research Context	Methodological Designs
56	Nyokabi *et al.* (2023)[18]	Explores the institutional barriers to effective One Health implementation, focusing on how "siloed" professional cultures among human and animal health workers hinder multisectoral policy.	Qualitative Thematic Framework Analysis
57	Steele *et al.* (2021)[2]	Compares risk perceptions and clinical preparedness for zoonosis management between General Practitioners (GPs) and veterinarians to identify institutional barriers to One Health clinical collaboration.	National Parallel Survey
58	Sánchez *et al.* (2022)[28]	Critically examines the animal-human-environment interface as a driver for zoonotic emergence and pandemic risk, advocating for the institutionalization of One Health strategies in post-COVID-19 surveillance.	Narrative Review and Policy Report
59	Lederman (2022)[73]	Critically assesses the ethical, scientific, and economic justifications for mass animal culling as a public health intervention, highlighting political tensions within national emergency preparedness legislation.	Normative and Bioethical Policy Analysis
60	Rodriguez (2024)[74]	Develops a critical bioethical framework ("zoonoethics") to address the complex ecosocial dynamics of zoonotic emergence amid mass species extinction, advocating for non-anthropocentric multispecies justice.	Integrative Critical Review and Framework Development
61	Clifford *et al.* (2025)[75]	Analyzes the impact of wildlife conservation policies on food systems and unintended zoonotic risks in high-risk regions including China, the Philippines, and the DR Congo.	Complex Systems Analysis
62	Wakimoto *et al.* (2022)[76]	Critiques the multisectoral preparedness and response mechanisms in Brazil regarding COVID-19 and its implications for future zoonotic spillover events.	Qualitative Environmental Scan

No.	Author & Year	Research Context	Methodological Designs
63	Zayed (2025)[77]	Maps the legislative and policy landscape related to disease prevention and One Health in Jordan to identify foundational strengths and regulatory gaps.	Policy Mapping and Desk Review
64	Qiang *et al.* (2025)[78]	Maps the global research landscape and collaborative networks of zoonosis research in Asia to identify intellectual clusters and future research trajectories.	Bibliometric Network Analysis
65	Mubareka *et al.* (2023)[40]	Provides a multidimensional strategy to strengthen Canadian national preparedness for emerging zoonoses, integrating biological, ecological, and socio-economic determinants within a functional One Health action plan.	Consensus-based Strategic Policy Framework
66	Guarner & Jean (2023)[11]	Elucidates the pivotal role of human and veterinary pathologists in the multidisciplinary One Health team for the early detection and characterization of emerging zoonotic pathogens and clinical pathologies	Technical Systems Review
67	Horefti (2023)[79]	Synthesizes the global importance of the One Health framework in mitigating zoonotic threats, analyzing the environmental and anthropogenic drivers that facilitate cross-species pathogen spillover.	Comprehensive Literature Review
68	Cho *et al.* (2023)[80]	Reviews the epidemiological status of Q Fever in South Korea, aiming to strengthen multisectoral preparedness and early detection capabilities for zoonotic outbreaks.	Integrated Preparedness Evaluation
69	Gharbi & Dupouy-Camet (2025)[81]	Addresses the rising incidence of occupational zoonoses among animal health professionals, advocating for integrated medical-veterinary screening and care protocols under a One Health paradigm.	Narrative Review and Clinical Viewpoint
70	Takahashi (2025)[82]	Explores the integration of native Japanese chicken breeds into the Japan Agriculture Standards (Jidori JAS) to optimize the conservation of genetic resources and enhance high-value poultry production.	Policy and Genetic Resource Review

No.	Author & Year	Research Context	Methodological Designs
71	Kibenge (2023)[83]	Provides a theoretical review of host range as a primary risk factor for the reverse zoonosis of Influenza A Virus (IAV) from humans to animals.	Narrative Synthesis
72	Guenin *et al.* (2022)[84]	Evaluates community capacity and surveillance network opportunities for detecting emerging zoonoses in the forest region of Guinea, post-Ebola.	Participatory Epidemiology
73	Giessen *et al.* (2022)[85]	Evaluates the effectiveness of the "Zoonoses Structure" in the Netherlands as a governance model for integrated One Health response to public health threats over a ten-year period.	Retrospective Evaluative Analysis
74	Osman *et al.* (2023)[86]	Establishes a strategic prioritization of zoonotic diseases for multisectoral collaboration in Somalia to optimize limited health resource allocation.	Multi-Criteria Decision Analysis (MCDA)
75	Dumet *et al.* (2025)[87]	Investigates the policy determinants and institutional barriers influencing zoonosis prevention and control in low-resource settings (Peru).	Qualitative Policy Analysis