

**SURVEILLANCE OF EMERGING AND RE-EMERGING DISEASES:
CHALLENGES FOR GLOBAL HEALTH AND MULTIPROFESSIONAL ACTION**

**VIGILÂNCIA DE DOENÇAS EMERGENTES E REEMERGENTES: DESAFIOS
PARA A SAÚDE GLOBAL E PARA A ATUAÇÃO MULTIPROFISSIONAL**

**VIGILANCIA DE ENFERMEDADES EMERGENTES Y REEMERGENTES:
DESAFÍOS PARA LA SALUD MUNDIAL Y LA ACCIÓN MULTIPROFESIONAL**



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Vânia Cristina Ribeiro Brilhante¹, Dayvison Santos de Oliveira², Rita de Cássia Maia Rebelo³, Mariana Elizabeth Lopes de Sales⁴, Jeane da Silva Facioni⁵, Tchescolly Dias Araujo⁶, Micheline Santos da Fonseca⁷, Valdemar Mendes de Morais Filho⁸, Juliana Botelho Araújo⁹, Michelle Barbosa Silva¹⁰, Débora Teruko Kajitani Cruz¹¹, Arilana de Jesus Carretilha¹², Jander Marcus Cirino Lopes¹³, Aline de Morais Gomes¹⁴, Amanda Emanuele dos Santos Correa¹⁵, Deivid Junio Guilherme De Lanes¹⁶, Rafaela Baliot de Souza¹⁷, Jhennifer Stefany Teles Gonçalves Meira¹⁸, Anna Monise Rigon Von Heimburg¹⁹, Jean-Claude Martins de Andrade²⁰, Tassyane Martins Bezerra²¹, Sirlene

¹ Dr. in Tropical Medicine. Universidade Federal do Pará (UFPA). E-mail: vrbrilhante@hotmail.com
Orcid: <https://orcid.org/0009-0005-4014-808X>

² Doctoral Student in Tropical Diseases. Universidade Federal do Pará (UFPA).
E-mail: dayvison.oliveira2005@gmail.com Orcid: <https://orcid.org/0000-0003-1782-4842>

³ Economist. Instituto de Estudos Superiores da Amazônia (IESAM). Universidade da Amazônia (UNAMA).
E-mail: rebelorita0@gmail.com Orcid: 0009-0005-2041-4862

⁴ Master's degree in Risk Management and Natural Disasters in the Amazon. Universidade Federal do Pará (UFPA). E-mail: marydts.sespa@gmail.com Orcid: 0000-0001-8655-2364

⁵ Medical Student. UNIFG. E-mail: facionijeane@gmail.com Orcid: 0009-0004-1643-8047

⁶ Specialist in Pharmacology. Clinical and Hospital Pharmacy. Faculdade Única.
E-mail: tchescolly25@gmail.com Orcid: <https://orcid.org/0009-0004-0319-2412>

⁷ Pharmacist. Universidade da Amazônia (UNAMA). E-mail: michelinefarmacia@gmail.com

⁸ Pharmacist. Centro Universitário Leonardo da Vinci (UNIASSSELVI). E-mail: Valdemar.morais11@gmail.com

⁹ Master's Student in Pharmaceutical Sciences. Universidade Federal do Pará (UFPA).
E-mail: jubotelho1404@gmail.com Orcid: 0009-0005-1764-8094

¹⁰ Pharmacy Student. UNIFATECIE. E-mail: michellembasilva@gmail.com

¹¹ Nurse. Universidade do Estado do Pará (UEPA). E-mail: kajitanidebora@hotmail.com

¹² Postgraduate in Clinical Pharmacy. E-mail: arilana-carretilha12@gmail.com.

¹³ Master's degree in Society, Environment and Quality of Life. Universidade Federal do Oeste do Pará (UFOPA).

E-mail: jander.lopes@yahoo.com.br Orcid: 0009-0002-1819-591

¹⁴ Master's degree in Biosciences. Universidade Federal do Oeste do Pará (UFOPA).

E-mail: alinemoraisfarma@gmail.com Orcid: 0000-0002-5022-2125

¹⁵ Master's degree in Health Sciences. Universidade Federal do Oeste do Pará (UFOPA).

E-mail: amanda.emanuele95@gmail.com

¹⁶ Specialist in Clinical Pharmacy. CFF. E-mail: deividillanes@gmail.com

¹⁷ Physiotherapy Student. AFYA Centro Universitário. E-mail: rafaelabaliot9@gmail.com

¹⁸ Physiotherapy Student. AFYA Centro Universitário. E-mail: jhenniferstefanytg@gmail.com

¹⁹ Physiotherapy Student. AFYA Centro Universitário. E-mail: moniseanna0@gmail.com

²⁰ Physiotherapy Student. AFYA Centro Universitário. E-mail: jeanjejejp@gmail.com

²¹ Physiotherapist. AFYA Centro Universitário. E-mail: tassyaneemb@gmail.com

de Miranda Julião²², Júlia Roberta Silva Garcia²³, Eduardo Silva Rodrigues²⁴, Brayan Almeida Ferreira²⁵, Neide Garcia Ribeiro²⁶

ABSTRACT

The surveillance of emerging and reemerging diseases has become a key strategy for protecting global health in a context shaped by environmental, social, and epidemiological transformations. This study aimed to analyze the challenges related to disease surveillance and to discuss the importance of multiprofessional practice in developing effective responses. This is a qualitative study conducted through an integrative literature review, based on recent scientific evidence from international databases. The findings indicate that environmental changes, increased human–animal interaction, population mobility, and weaknesses in health systems have contributed to the rise of emerging and reemerging diseases. The epidemiological profile has become more complex, with the coexistence of multiple infectious agents and the growing threat of antimicrobial resistance. In this context, epidemiological surveillance faces challenges related to data integration, technological use, and structural inequalities across countries. The role of multiprofessional teams is highlighted as essential for early detection, clinical management, and implementation of preventive strategies. It is concluded that strengthening health surveillance, combined with interdisciplinary collaboration and international cooperation, is crucial to address current and future challenges, ensuring global health security.

Keywords: Emerging Diseases. Epidemiological Surveillance. Global Health. Multiprofessional Team. Public Health.

RESUMO

A vigilância de doenças emergentes e reemergentes tem se consolidado como uma das principais estratégias para a proteção da saúde global diante de um cenário marcado por transformações ambientais, sociais e epidemiológicas. Este estudo teve como objetivo analisar os desafios relacionados à vigilância dessas doenças e discutir a importância da atuação multiprofissional na construção de respostas mais eficazes. Trata-se de uma pesquisa de abordagem qualitativa, desenvolvida por meio de revisão integrativa da literatura, com base em evidências científicas recentes provenientes de bases de dados internacionais. Os resultados apontam que fatores como alterações ambientais, intensificação do contato entre humanos e animais, mobilidade populacional e fragilidades nos sistemas de saúde têm contribuído para o aumento de doenças emergentes e reemergentes. Observa-se também a crescente complexidade do perfil epidemiológico, com a presença simultânea de diferentes agentes infecciosos, além do avanço da resistência antimicrobiana. Nesse contexto, a vigilância epidemiológica enfrenta desafios relacionados à integração de dados, uso de tecnologias e desigualdades estruturais entre países. Destaca-se, ainda, o papel fundamental da equipe multiprofissional no reconhecimento precoce dos agravos, no manejo clínico e na implementação de estratégias de prevenção. Conclui-se que o fortalecimento da vigilância em saúde, aliado à integração entre diferentes

²² Physiotherapy Student. AFYA Centro Universitário. E-mail: sirlenenuliao@gmail.com

²³ Pharmacy Student. Universidade Federal do Oeste do Pará (UFOPA).

E-mail: robertagarcia1702@gmail.com Orcid: 0009-0004-2656-7264

²⁴ Postgraduate in Orthopedics and Traumatology. AFYA Centro Universitário.

E-mail: eduardo.silvarodrigu@afya.com.br

²⁵ Doctoral Student in Biodiversity and Biotechnology. Universidade Federal do Oeste do Pará (UFOPA).

E-mail: brayanenf@hotmail.com Orcid: 0000-0003-1193-9948

²⁶ Master's degree in Cardiopulmonary Physiotherapy. AFYA Centro Universitário.

E-mail: neide.ribeiro@afya.com.br

áreas do conhecimento e à cooperação internacional, é essencial para enfrentar os desafios atuais e futuros, contribuindo para a segurança sanitária global.

Palavras-chave: Doenças Emergentes. Vigilância Epidemiológica. Saúde Global. Equipe Multiprofissional. Saúde Pública.

RESUMEN

La vigilancia de enfermedades emergentes y reemergentes se ha convertido en una estrategia clave para proteger la salud mundial en un contexto marcado por cambios ambientales, sociales y epidemiológicos. Este estudio tuvo como objetivo analizar los desafíos relacionados con la vigilancia de estas enfermedades y discutir la importancia de la acción multidisciplinaria para construir respuestas más efectivas. Se trata de un estudio de investigación cualitativa, desarrollado a través de una revisión integradora de la literatura, basada en evidencia científica reciente de bases de datos internacionales. Los resultados indican que factores como los cambios ambientales, el mayor contacto entre humanos y animales, la movilidad de la población y las debilidades en los sistemas de salud han contribuido al aumento de enfermedades emergentes y reemergentes. También se observa la creciente complejidad del perfil epidemiológico, con la presencia simultánea de diferentes agentes infecciosos, además del avance de la resistencia antimicrobiana. En este contexto, la vigilancia epidemiológica enfrenta desafíos relacionados con la integración de datos, el uso de tecnologías y las desigualdades estructurales entre países. Además, se destaca el papel fundamental del equipo multidisciplinario en el reconocimiento temprano de problemas de salud, el manejo clínico y la implementación de estrategias de prevención. Se concluye que fortalecer la vigilancia epidemiológica, junto con la integración entre diferentes áreas del conocimiento y la cooperación internacional, es esencial para afrontar los desafíos actuales y futuros, contribuyendo así a la seguridad sanitaria mundial.

Palabras clave: Enfermedades Emergentes. Vigilancia Epidemiológica. Salud Global. Equipo Multidisciplinario. Salud Pública.

1 INTRODUCTION

The surveillance of emerging and reemerging diseases has assumed a central role in the organization of health systems around the world. In recent decades, the increase in the frequency of infectious outbreaks, combined with the rapid spread of pathogens between countries and continents, has highlighted the need to strengthen monitoring and response mechanisms in public health. This scenario is not the result of a single factor, but of a set of transformations that involve environmental changes, intensification of human mobility, population growth, and greater interaction between humans, animals, and ecosystems (JONES et al., 2008; HILDERINK; DE WINTER, 2021).

In this context, it is observed that most emerging diseases have a zoonotic origin, which reinforces the importance of integrated approaches such as the concept of One Health, which considers the interdependence between human, animal and environmental health. Recent studies indicate that the fragmentation of ecosystems and the loss of biodiversity favor the emergence of new pathogens, increasing the risk of epidemics and pandemics (ROSENTHAL et al., 2015; LANCET COMMISSION, 2026). This reality requires surveillance systems to be able to identify these events early, preventing their expansion.

In addition, epidemiological surveillance faces important challenges related to infrastructure, data integration, and the responsiveness of health systems. Despite technological advances, many countries still have weaknesses in the collection and analysis of information in real time, which compromises the effectiveness of control actions. International reports highlight that antimicrobial resistance and the circulation of new infectious agents represent growing threats, requiring more robust and coordinated strategies at the global level (WORLD HEALTH ORGANIZATION, 2025; WORLD HEALTH ORGANIZATION, 2023).

Another relevant point refers to the diversity of emerging and reemerging infectious agents that have been identified in different regions of the world. Recent studies describe the occurrence of outbreaks related to viruses such as Oropouche, influenza infections with zoonotic potential, in addition to the reemergence of diseases such as leprosy and dengue in new epidemiological contexts (IGLÓI et al., 2025; DAMDINJAV et al., 2025; AUYEUNG et al., 2025; VAN DER ENDE et al., 2025). These findings show that the behavior of infectious diseases is constantly changing, requiring continuous and adaptive surveillance.

The occurrence of outbreaks has also been associated with specific factors, such as environmental events, agricultural practices, and inadequate sanitary conditions. Research shows that outbreaks of bacterial and viral infections, including salmonellosis and encephalomyelitis, have been recorded in different contexts, reinforcing the need for

integrated monitoring across sectors (PIÑA-ITURBE et al., 2025; FRABASILE et al., 2025; LI et al., 2025). In addition, the reemergence of diseases such as monkeypox shows that pathogens previously considered controlled may once again pose a threat to public health (BBOSA et al., 2025).

At the same time, there has been an advance in the development of technologies aimed at health surveillance. Digital systems, large-scale data analysis, and new monitoring methodologies have contributed to improving early outbreak detection and public health decision-making. However, these advances still coexist with challenges related to privacy, data governance, and equity in access to technologies, especially in low- and middle-income countries (SHEN et al., 2025; AHMED, 2024; SERGEANT, 2025).

Another important aspect concerns the need for integration between different levels of health care and between different areas of knowledge. The surveillance of emerging diseases cannot be understood as an exclusive responsibility of epidemiologists, but as a process that involves physicians, nurses, pharmacists, physiotherapists, dentists, and public health professionals. This multidisciplinary action is essential to ensure the early identification of cases, the proper management of patients, and the implementation of prevention strategies (DE GAETANO et al., 2025; WALKER et al., 2025).

Given this scenario, it is evident that surveillance of emerging and reemerging diseases is a fundamental element for global health security. More than monitoring diseases, it is about understanding the processes that favor their emergence and dissemination, integrating science, technology, and professional practice. Thus, this study aims to discuss the main challenges related to the surveillance of these diseases and to analyze the role of multiprofessional action in the construction of more effective responses for contemporary global health.

2 LITERATURE REVIEW

2.1 EMERGING AND REEMERGING DISEASES: A CHANGING LANDSCAPE

In recent decades, the occurrence of emerging and reemerging diseases has become increasingly frequent, reflecting profound changes in the relationship between human beings, the environment and infectious agents. This phenomenon is not recent, but it has gained greater visibility in the face of the intensification of global outbreaks and the rapid spread of diseases between different countries. Classic studies have already pointed to this trend, highlighting that the emergence of new pathogens is directly related to environmental and social transformations (JONES et al., 2008).

With the advancement of research, it has become evident that these processes are still active and, in many cases, more intense. The current literature reinforces that the increase in infectious diseases is associated with factors such as disordered urbanization, globalization, and greater population mobility. In addition, the constant circulation of people and goods contributes to the rapid spread of infectious agents, making outbreaks more difficult to control (WALKER et al., 2025; DE GAETANO et al., 2025).

Another important point is that many of these diseases do not arise in a totally new way, but reappear in different contexts, with greater intensity or in areas where they were not common before. This characterizes the so-called reemerging diseases, which represent an additional challenge for health systems.

2.2 ZOOSES AND THE RELATIONSHIP BETWEEN HUMANS, ANIMALS AND THE ENVIRONMENT

Most emerging diseases have a zoonotic origin, that is, they are transmitted between animals and humans. This type of transmission highlights the strong connection between human health, animal health, and the environment. Studies indicate that changes in ecosystems, such as deforestation and loss of biodiversity, increase contact between humans and animals, favoring the emergence of new pathogens (ROSENTHAL et al., 2015; HILDERINK; DE WINTER, 2021).

In this context, the concept of One Health has gained prominence, proposing an integrated approach to understanding and coping with diseases. The central idea is that it is not possible to treat human health in isolation, without considering the environmental impacts and animal health conditions. Recent reports reinforce that this integration is essential to prevent future pandemics and improve the response capacity of health systems (LANCET COMMISSION, 2026).

In addition, more recent studies show that the circulation of zoonotic viruses remains a constant concern. Infections such as influenza of animal origin and other emerging viruses demonstrate that the risk remains high, especially in regions where there is greater interaction between humans and animals (DAMDINJAV et al., 2025).

2.3 EPIDEMIOLOGICAL SURVEILLANCE SYSTEMS: ADVANCES AND LIMITATIONS

Epidemiological surveillance is one of the fundamental pillars for the control of emerging and reemerging diseases. It allows for early identification of outbreaks, monitoring the spread of diseases, and guiding prevention and control actions. In recent years, there

have been important advances in this field, especially with the use of digital technologies and the analysis of large volumes of data (SHEN et al., 2025).

However, despite these advances, there are still significant challenges. Many countries face difficulties related to infrastructure, system integration, and the quality of available data. The lack of standardization in the collection and sharing of information can compromise the efficiency of surveillance actions, hindering rapid responses to outbreaks (AHMED, 2024).

In addition, issues related to privacy and data use have been increasingly discussed. The balance between the need for health monitoring and the protection of individual information represents an important challenge for contemporary surveillance systems (SERGEANT, 2025).

2.4 EMERGING DISEASES IN THE CURRENT CONTEXT: EXAMPLES AND EVIDENCE

Recent literature presents several examples of emerging and reemerging diseases that illustrate the challenges faced by health systems. Among them, outbreaks of viruses such as Oropouche, the simultaneous circulation of different dengue serotypes, and the reemergence of diseases such as leprosy in certain contexts stand out (IGLÓI et al., 2025; VAN DER ENDE et al., 2025; AUYEUNG et al., 2025).

In addition, bacterial infections and food outbreaks continue to represent a relevant problem. Cases related to salmonella and other infections show that surveillance must be constant and comprehensive, considering different routes of transmission (PIÑA-ITURBE et al., 2025; LI et al., 2025).

Another important example refers to the reemergence of viral diseases such as monkeypox, which has highlighted the ability of previously controlled pathogens to circulate again on a global scale. These episodes reinforce the need for surveillance systems prepared to deal with different types of threats (BBOSA et al., 2025).

2.5 ANTIMICROBIAL RESISTANCE AND NEW HEALTH CHALLENGES

Antimicrobial resistance has been identified as one of the biggest threats to global health. The inappropriate use of antibiotics and other medications has contributed to the emergence of resistant microorganisms, making it difficult to treat infections and increasing the risk of complications (WORLD HEALTH ORGANIZATION, 2025).

This problem is not limited to the hospital environment, but also involves community practices and the use of antimicrobials in animal production. Antimicrobial resistance is

directly related to health surveillance, since monitoring these cases is essential to guide public policies and control strategies (WORLD HEALTH ORGANIZATION, 2023).

In addition, the presence of resistant pathogens can aggravate the impact of emerging diseases, making outbreaks more difficult to control and increasing the associated mortality.

2.6 GLOBAL CHALLENGES AND THE NEED FOR INTEGRATION IN HEALTH

The challenges related to emerging and reemerging diseases cannot be tackled in isolation. The literature points out that international cooperation is fundamental for the development of effective surveillance and control strategies. The exchange of information between countries, the strengthening of monitoring networks, and investment in research are essential elements in this process, allowing for faster and more coordinated responses to health threats (WALKER et al., 2025; DE GAETANO et al., 2025).

In addition, the performance of international organizations has been decisive in the consolidation of more structured surveillance systems. Institutions such as the World Health Organization and the Centers for Disease Control and Prevention play an important role in standardizing protocols, monitoring outbreaks, and disseminating up-to-date information on emerging diseases in different regions of the world (WORLD HEALTH ORGANIZATION, 2023; CDC, 2025).

Another relevant aspect is the need for integration between the different levels of health care and between different areas of knowledge. The surveillance of emerging diseases cannot be understood as an isolated responsibility, but as a process that involves doctors, nurses, pharmacists, physiotherapists, dentists and public health professionals. This multidisciplinary action strengthens the early identification of cases, adequate clinical management, and the implementation of prevention strategies.

Finally, integration between sectors, such as health, environment, and food production, becomes essential to face the complexity of the factors involved in the emergence of diseases. This articulation expands the response capacity of health systems and contributes to the construction of more effective and sustainable strategies to face global challenges.

2.7 FUTURE PERSPECTIVES OF HEALTH SURVEILLANCE

The future of health surveillance is directly related to the ability of health systems to adapt to new threats. The incorporation of digital technologies, data intelligence, and real-time monitoring tends to strengthen response capacity, allowing for faster and more effective actions (SHEN et al., 2025).

However, these advances must be accompanied by policies that ensure equity in access to technologies and respect for the privacy of individuals. In addition, it is essential to invest in the training of health professionals, preparing them to deal with increasingly complex scenarios.

Overall, the literature indicates that surveillance of emerging and reemerging diseases will continue to be one of the main challenges of global health. Facing this scenario requires integration between science, professional practice, and public policies, as well as a broader vision that recognizes the interdependence between health, environment, and society.

3 METHODOLOGY

3.1 STUDY DESIGN

The present study was developed from a qualitative approach, with a theoretical-analytical character, structured through an integrative review of the scientific literature. The choice of this design was based on the need to understand, in a broader and contextualized way, the challenges related to the surveillance of emerging and reemerging diseases, as well as the role of multiprofessional action in this scenario. Instead of being limited to the description of isolated data, we sought to interpret the available evidence in a critical way, considering different dimensions of the phenomenon, such as epidemiological, social, organizational, and care aspects.

The integrative review allowed the gathering of studies with different methodologies, expanding the capacity for analysis and enabling a closer view of the reality faced by health systems. This approach also favors the construction of a coherent narrative, connecting scientific findings with health practice.

3.2 SEARCH STRATEGY AND DATABASES

The search for evidence was carried out in internationally recognized databases, selected for their relevance in the area of public health, epidemiology and infectious diseases. The following databases were used:

- PubMed/MEDLINE
- Scopus
- Web of Science
- ScienceDirect
- SciELO
- Google Scholar

In addition, institutional reports from international organizations, such as the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), were consulted due to their importance in the production of data on epidemiological surveillance at the global level.

For the search, descriptors in Portuguese and English were used, combined by Boolean operators (AND and OR), with the objective of expanding the scope and ensuring the relevance of the results. Among the main terms used, the following stand out:

- emerging diseases
- Reemerging Diseases
- Epidemiological surveillance
- Global health
- emerging infectious diseases
- disease surveillance
- Global Health
- zoonotic diseases

The combination of these descriptors allowed the identification of studies directly related to the proposed theme.

3.3 INCLUSION AND EXCLUSION CRITERIA

Scientific articles published in peer-reviewed journals, systematic reviews, epidemiological studies, and institutional documents that addressed:

- Surveillance of emerging and reemerging diseases
- Infectious outbreaks and their epidemiological dynamics
- Challenges of health systems in the detection and control of diseases
- Multiprofessional approaches in health

Studies available in English, Portuguese and Spanish, with access to the full text, were also considered.

Duplicate studies, studies with an exclusively laboratory focus without application in public health, publications without scientific rigor, and materials that had no direct relationship with the theme were excluded.

3.4 ANALYSIS PERIOD

Publications between the years 2020 and 2025 were prioritized, a period that concentrates recent advances in the surveillance of emerging and reemerging diseases, especially after health events of great global impact. However, classic studies that are widely recognized in the scientific literature were included when considered fundamental for the theoretical and conceptual understanding of the theme, contributing to a more consistent and in-depth analysis.

3.5 PROCESS OF SELECTION AND ORGANIZATION OF DATA

Initially, the titles and abstracts of the identified studies were read, with the objective of selecting those most aligned with the theme. Then, the selected articles were analyzed in full, allowing us to evaluate their relevance and contribution to the study.

At the end of this process, 20 main scientific references were selected, which composed the theoretical basis of the work. The information extracted was organized in a thematic way, allowing the analysis to be structured in central axes, such as:

- Dynamics of emerging and reemerging diseases
- Epidemiological Surveillance Systems
- Global Health Challenges
- Role of the multiprofessional team

This organization contributed to the construction of a clearer and more integrated discussion.

3.6 DATA ANALYSIS AND INTERPRETATION

The analysis of the studies was conducted in an interpretative manner, seeking to identify patterns, convergences and gaps in the scientific literature. The synthesis of the evidence was carried out in a narrative manner, focusing on the construction of a clear, coherent text that is close to the reality of health practice.

This stage allowed not only to describe the findings, but also to reflect on their implications for the organization of health services and for multiprofessional action, valuing the integration between different areas of knowledge.

3.7 SCIENTIFIC RIGOR

Methodological rigor was ensured by the selection of studies from recognized databases, by the use of clear inclusion and exclusion criteria, and by the critical analysis of the evidence. We sought to maintain fidelity to the information presented in the studies, avoiding distorted interpretations or undue generalizations.

In addition, the diversity of sources allowed different scientific perspectives to be contemplated, strengthening the consistency of the analysis and contributing to a more complete approach to the theme.

3.8 ETHICAL ASPECTS

As this was a study based exclusively on secondary data from the scientific literature, there was no need to submit it to the Research Ethics Committee. All the sources used were duly cited throughout the text, respecting the ethical principles of scientific production and ensuring transparency in the process of knowledge construction.

4 RESULTS AND DISCUSSION

The analysis of the evidence gathered allows us to understand that the surveillance of emerging and reemerging diseases is no longer an activity restricted to specific contexts and has come to occupy a strategic position in the organization of health systems. The studies analyzed show that there is a consistent increase in the occurrence of infectious events in different regions of the world, which confirms a change in the epidemiological behavior of these diseases. This scenario had already been signaled in previous studies, but it is currently more evident, driven by environmental, social and economic transformations (JONES et al., 2008; WALKER et al., 2025).

One of the main results observed concerns the strong relationship between the emergence of diseases and changes in ecosystems. The literature shows that the intensification of contact between humans and animals, associated with environmental degradation, creates favorable conditions for the transmission of pathogens. This process does not occur in isolation, but as a result of a series of interconnected factors, including deforestation, urbanization, and agricultural expansion. In this context, zoonoses stand out as one of the main current challenges, reinforcing the need for integrated health approaches (ROSENTHAL et al., 2015; HILDERINK; DE WINTER, 2021).

The discussion also reveals that, although there are important advances in epidemiological surveillance, there are still limitations that compromise the effectiveness of actions. The adoption of digital technologies and real-time monitoring systems has

contributed to improved outbreak detection, but these resources are not available equitably in all countries. In many contexts, surveillance still depends on fragmented systems, with difficulties in integrating data and communicating between different levels of care (SHEN et al., 2025; AHMED, 2024).

In addition, issues related to governance and the use of information have gained prominence. The need to collect data on a large scale to monitor diseases comes up against ethical challenges, especially with regard to privacy and the appropriate use of this information. This aspect shows that technological advancement alone is not enough, and it is necessary to establish clear guidelines that ensure security and transparency in the use of data (SERGEANT, 2025).

Another relevant point identified in the studies refers to the diversity of infectious agents involved in emerging events. The occurrence of outbreaks related to different pathogens, such as viruses, bacteria, and parasites, demonstrates that surveillance must be broad and adaptable. Recent cases involving viruses such as Oropouche, influenza of zoonotic origin, and the simultaneous circulation of different dengue serotypes illustrate the complexity of the current scenario (IGLÓI et al., 2025; DAMDINJAV et al., 2025; VAN DER ENDE et al., 2025).

The reemergence of diseases previously considered controlled also draws attention. Episodes involving leprosy and monkeypox indicate that the control of these diseases is not definitive, and there may be a resurgence under certain conditions. This phenomenon reinforces the importance of continuous surveillance and the maintenance of prevention strategies even for diseases that have a reduction in cases in certain periods (AUYEUNG et al., 2025; BBOSA et al., 2025).

In the field of bacterial infections, studies highlight the persistence of outbreaks associated with inadequate sanitary conditions and failures in the food production chain. Cases related to salmonella and other bacteria show that surveillance must cover different sectors, including health, agriculture and the food industry. This type of intersectoral approach is key to reducing risks and preventing the spread of disease (PIÑA-ITURBE et al., 2025; LI et al., 2025).

Antimicrobial resistance appears as one of the most worrying results within this scenario. The literature shows that the increase in resistant microorganisms has made it difficult to treat infections and increased the risks associated with outbreaks. This problem is directly related to the inappropriate use of medications and the lack of control at different levels, requiring coordinated and continuous actions (WORLD HEALTH ORGANIZATION,

2025). In addition, surveillance of these cases is essential to guide control strategies and reduce the impact on health systems (WORLD HEALTH ORGANIZATION, 2023).

Another aspect that deserves to be highlighted is the importance of multiprofessional action. The studies analyzed indicate that the response to emerging diseases cannot be limited to a single area of knowledge. The participation of doctors, nurses, pharmacists, physiotherapists, dentists, and public health professionals is essential to ensure a more complete approach, from the identification of cases to the follow-up of patients and the implementation of preventive measures (DE GAETANO et al., 2025).

The integration between these professionals contributes to improving the quality of care and strengthening surveillance actions. In addition, it allows a better understanding of the social and environmental determinants that influence the occurrence of diseases. This expanded vision is essential for the development of more effective and sustainable strategies.

The discussion also highlights the importance of international cooperation. The exchange of information between countries, the sharing of epidemiological data, and the construction of surveillance networks are fundamental elements to face global threats. The work of international organizations, such as the World Health Organization and the CDC, has been decisive in this process, contributing to the standardization of protocols and the strengthening of surveillance in different regions (CDC, 2025).

Overall, the results indicate that the surveillance of emerging and reemerging diseases faces complex challenges, which go beyond the identification of cases. It is a process that involves environmental, social, technological, and organizational factors, requiring an integrated and continuous approach. The responsiveness of health systems depends not only on technological resources, but also on the articulation between different areas and the construction of consistent public policies.

Given this scenario, it is evident that strengthening health surveillance is an urgent need. Investing in structure, professional qualification, and integration between sectors is essential to face current and future challenges. More than reacting to outbreaks, it is necessary to develop strategies that allow anticipating risks and reducing impacts, ensuring greater safety for populations.

5 CONCLUSION

The surveillance of emerging and reemerging diseases is currently consolidated as one of the most important pillars for the protection of global health. Throughout this study, it was possible to perceive that the increase in the occurrence of these diseases is not an

isolated event, but the result of profound transformations involving the environment, population dynamics, and the way health systems are organized. This scenario requires a change in posture, from acting only in a reactive way to taking a more preventive and integrated approach.

The findings discussed show that the complexity of emerging diseases goes beyond the identification of new infectious agents. It is about understanding the processes that favor its emergence, its dissemination and its impacts on populations. The strong relationship between environmental degradation, zoonoses, and changes in epidemiological behavior reinforces the need to look at health in a broader way, considering its multiple dimensions.

Another point that stands out is that, despite technological and scientific advances, there are still important gaps in surveillance systems. Problems related to data integration, inequality in access to technologies, and structural limitations continue to be challenges present in different contexts. This demonstrates that strengthening surveillance does not depend only on innovation, but also on organization, planning and continuous investment.

Antimicrobial resistance, the reemergence of diseases, and the circulation of new pathogens show that the challenges are likely to intensify in the coming years. In view of this, it is essential to strengthen monitoring strategies, expand the response capacity of health services, and invest in the training of professionals who work directly in care.

In this context, multiprofessional action is indispensable. The integration between doctors, nurses, pharmacists, physiotherapists, dentists and public health professionals allows for a more complete approach, ranging from the early identification of cases to the implementation of prevention and control actions. This articulation between different areas of knowledge contributes to more effective responses aligned with the real needs of the populations.

In addition, international cooperation is a fundamental element for confronting emerging diseases. Sharing information, standardizing protocols, and strengthening global surveillance networks are essential strategies to reduce risks and prevent the spread of outbreaks on a global scale.

Thus, it is concluded that the surveillance of emerging and reemerging diseases cannot be understood only as a technical activity, but as an essential strategy to ensure global health security. Addressing today's challenges requires integration between science, professional practice, and public policy, as well as an ongoing commitment to health promotion and risk prevention. The future of health will depend, to a large extent, on the ability to anticipate scenarios, strengthen surveillance systems, and act collaboratively in the face of an increasingly interconnected world.

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