Nursing Depths Series. 2025; 4:413 doi: 10.56294/nds2025:413

ORIGINAL



Didactic approach to social determinants in Medical Sciences Degree programs

Enfoque didáctico de los determinantes sociales en los programas de las carreras de Ciencias Médicas

Cite as: Díaz González Y, Noriega Bravo V de las M, Romero Fonte D, Peña Méndez A, Álvarez Figueredo M de la C, Basil Muñoz Y. Didactic approach to social determinants in Medical Sciences Degree programs. Nursing Depths Series. 2025; 4:413. https://doi.org/10.56294/nds2025413

Submitted: 27-01-2025 Revised: 09-04-2025 Accepted: 13-08-2025 Published: 14-08-2025

Editor: Dra. Mileydis Cruz Quevedo D

Corresponding Author: Yahima Diaz González

ABSTRACT

Introduction: in Higher Education, the teaching process is developed to meet the demands that society places on professional training. Didactics have a scientific nature, supported by philosophical, sociological, epistemological, and psychological positions, allowing for the approach to the Social Determinants of Health, which require systemic understanding and innovative solutions.

Objective: to justify the didactic approach to the Social Determinants of Health in medical science degree programs.

Method: qualitative research was carried out where theoretical and empirical methods were used to obtain information.

Results: didactics are developed throughout the teaching-learning process and systematically address the social development of new generations. It enables students to develop a Health Situation Analysis, systematically addressing the population distribution of opportunities for a healthy life, capturing social inequalities in health and identifying mechanisms that produce inequity, informing public policy decisions and evaluating the impact of population interventions, taking a stand for health equity and social justice, and critically examining everyday paradigms and practices.

Conclusions: the didactic approach to Social Determinants of Health represents a paradigm shift in the way we understand and address the structural causes of health and disease.

Keywords: Didactics; Social Determinants of Health; Analysis of the Health Situation.

RESUMEN

Introducción: en la Educación Superior el proceso docente educativo se desarrolla con el fin de cumplimentar las exigencias que la sociedad establece en la formación del profesional. La didáctica tiene un carácter científico que se apoya en posturas filosóficas, sociológicas, epistemológicas y psicológicas permitiendo abordar los Determinantes Sociales de la Salud que requieren comprensión sistémica y soluciones innovadoras. Objetivo: argumentar el enfoque didáctico de los Determinantes Sociales de la Salud en los programas de las carreras de Ciencias Médicas fue el objetivo del estudio realizado.

© 2025; Los autores. Este es un artículo en acceso abierto, distribuido bajo los términos de una licencia Creative Commons (https://creativecommons.org/licenses/by/4.0) que permite el uso, distribución y reproducción en cualquier medio siempre que la obra original sea correctamente citada

¹Facultad de Ciencias Médicas de la Isla de la Juventud, Informática y Bioestadística. Nueva Gerona, Cuba.

²Escuela Nacional de Salud Pública, Docente de Higiene y Epidemiología. Alta Habana, Cuba.

³Facultad de Ciencias Médicas de la Isla de la Juventud, Posgrado. Nueva Gerona, Cuba.

⁴Facultad de Ciencias Médicas de la Isla de la Juventud, Ciencias Básicas. Nueva Gerona, Cuba.

⁵Facultad de Ciencias Médicas de la Isla de la Juventud, Posgrado. Nueva Gerona, Cuba.

Método: se realizó una investigación cualitativa donde fueron utilizados métodos teóricos y empíricos para la obtención de la información.

Resultados: la didáctica se desarrolla en el proceso de enseñanza aprendizaje, se dirige de modo sistematizado a la formación social de las nuevas generaciones. Permite que el estudiante elabore un Análisis de la Situación de Salud abordando sistemáticamente la distribución poblacional de oportunidades para una vida saludable, capturar desigualdades sociales en salud e identificar mecanismos productores de inequidad, informar decisiones de política pública y evaluar el impacto de intervenciones poblacionales, tomar partido por la equidad en salud y la justicia social y ver con sentido crítico los paradigmas y prácticas cotidianas. Conclusiones: el enfoque didáctico de los Determinantes Sociales de la Salud representa un cambio de paradigma en la forma de entender y actuar sobre las causas estructurales de la salud y la enfermedad.

Palabras clave: Didáctica; Determinantes Sociales de la Salud; Análisis de la Situación de Salud.

INTRODUCTION

In higher education, the teaching process is designed to meet the demands that society places on professional training. Therefore, the logic behind it does not respond to the sciences in question or the program, but rather to the students' mastery of the content and the formation of their convictions and abilities. The assimilation of knowledge and the methods for acquiring it (skills) are inseparable aspects. (1,2,3)

Teaching has a scientific nature that is based on philosophical positions about nature, society, and thought; sociological positions about humans, society, and education; epistemological positions about knowledge itself and science; and psychological positions about how humans learn. It has methods for investigating its object and a system of categories, laws, and principles that allow for its analysis and understanding. This object, the teaching-learning process, has been shaped by the identification of a set of problems with a certain affinity to a social mandate, to the need to educate new generations in accordance with the interests of society, which is manifested in pedagogical activity. (1,3)

The work of the teacher (teaching) and that of the students (learning) are the internal expression of this process, where the most intimate relationships of the object being studied are present as essence: the laws, which ultimately constitute the pedagogical expression of social relationships, which are known as the essence of man. (1,3) This makes it possible to address the Social Determinants of Health (SDH) that require systemic understanding (health as the result of interconnected networks: environment, economy, culture) and innovative solutions (combining technology, social sciences, humanities, and public policy) to current health challenges (climate change, pandemics, chronic diseases, inequalities) that cannot be solved with biological or clinical knowledge alone. (4)

The need to address the HDS approach from a perspective that goes beyond the health sector was first endorsed in the Alma Ata Declaration in 1978, an initiative later taken up in the Ottawa Charter for Health Promotion in 1986 and the Rio Political Declaration in 2011. Over the past 40 years, a strong global movement has been dedicated to studying the "causes of the causes" and their impact on health. (5)

In May 2004, the World Health Organization (WHO) established a Commission to study the issue of HSS. The members of this working group concluded in their 2008 and 2011 reports that the social conditions in which a given population is born, grows, lives, works, and ages, including the health system, are the social determinants of health or causes of causes. (6,7,8,9)

The health-disease process is socially determined by the combined and complex impact of demographic, environmental, and technological changes on material living conditions, population behavior, health services, and human biology. (10) Poverty and social inequalities have been identified as two of the greatest challenges facing humanity in this century, as their effects impact the health of populations and their differential behavior. The international situation regarding this issue prompted the WHO to call for action to address these inequalities within a generation at the global level. (11)

The above considerations allow us to define the following objective for this study: To argue for the didactic approach to the Social Determinants of Health in medical science degree programs.

METHOD

Qualitative research was conducted using theoretical and empirical methods to obtain information.

Theoretical methods

Historical-logical: This enabled the analysis of the teaching approach to Social Determinants of Health. Inductive-deductive: This allowed generalizations to be determined in order to define or confirm theoretical formulations and reach conclusions, providing true knowledge about reality.

3 Díaz González Y, et al

Analytical-synthetic: This allowed us to establish the relationship between the elements that make up the social determinants of health and teaching.

Empirical methods

Bibliographic and documentary review: This allowed us to obtain information related to Social Determinants of Health and teaching.

Interviews with experts in pedagogy: This allowed us to define the theory of the didactic approach to Social Determinants of Health in medical science degree programs.

Ethical elements of the research

During the study, the ethical considerations established in scientific research were complied with for the collection and processing of information, as well as for the dissemination of results.

DEVELOPMENT

In 1992, the Pan American Health Organization (PAHO) proposed the use of the term ASS and later, in 1999, conceptualized it as the analytical-synthetic process that allows the health-disease profile of a population to be characterized, measured, and explained, facilitating the identification of needs and priorities, appropriate interventions and programs, and the evaluation of their impact. (12)

The ASS, together with dispensing, are the activities that most distinguish primary care health personnel from other specialties and institutions linked almost exclusively to biomedicine and clinical practice. (13) The acquisition of the most advanced working methods, as well as consolidating, expanding, and applying the knowledge learned during the educational process, with special attention to work experience as the main form of teaching, contributes to the development of skills and habits that characterize the professional activities of medical science graduates.

Currently, in Plan E for undergraduate training in Medicine, Dentistry, and Nursing, there are modifications where the approach to active teaching methods represents a paradigm shift, that is, an adjustment in the way of understanding teaching and learning; this does not mean abandoning all educational practices in medical training, but rather placing it in a different logic, beyond the transmission of knowledge. Similarly, this curriculum focuses teaching more on the cognitive development of students, using productive methods that increase their cognitive independence and protagonism, in close link with theory and practice, with an emphasis on group activities and those related to the participation of students in healthcare processes.⁽¹⁴⁾

On the path toward professionalizing teaching, it is essential to develop professional practices that correspond to the broad profile of graduates and the roles they will fulfill once they graduate. It is also important to promote, through work experience, contributions to the achievement of the five functions outlined in the professional model: care, teaching and education, administration, research, and special functions. Therefore, a change in the strategy of how ASS is taught is relevant due to its relevance as an essential function of public health.⁽¹⁵⁾

At the university, interpreting problems expressed in didactic language is what constitutes an objective. If the task is to prepare students so that when they graduate they can face social problems and solve them, teaching that does not take a social solution as its starting point has no direction. The objective is a guiding principle insofar as it expresses the problems of the community.⁽¹⁾

In the teaching-learning process, teaching allows for the transmission of knowledge and the development of skills to achieve specific objectives and attain the excellence that should be aspired to in the dynamics of teaching, research, and university outreach. The application of strategies that enable a response to greater levels of integration between the university and society are fundamental to this science, which studies the techniques and methods for effective teaching.

Teaching is a social and dialectical process that takes place in the university institution with the aim of comprehensively educating individuals capable of preserving, developing, and disseminating the culture accumulated by humanity. As a result of this practice, students appropriate the content and ways of thinking, feeling, and acting constructed in socio-historical experience, producing relatively lasting and generalizable changes in order to adapt to reality and/or transform it. It is a process of transformation in which, through appropriation and reconstruction of experience and culture, personal growth and development occur.⁽¹⁾

Fuentes González,⁽¹⁶⁾ for his part, states that Didactics is a science whose object of study is the teaching-educational process or teaching-learning process and whose objective is the search for its improvement in order to achieve the comprehensive training of younger generations. It has the characteristics of a theoretical system: concepts, categories, laws, and a particular structure of its components, which determine an internal logic in which social conditions intervene, although these are external to the object itself.⁽¹⁾

Álvarez de Zayas⁽¹⁷⁾ takes a different approach to teaching, recognizing that it aims to guide the development of the educational process in order to solve the problems that society presents to schools, namely, to produce

graduates who are prepared for social life and their role in society. Ángel Díaz Barriga19 argues that teaching is a discipline with three dimensions: theoretical, historical, and political. It is theoretical because it responds to broad conceptions of education, society, and the individual. It is historical because its proposals are the result of specific historical moments, and a relationship can be established between its models and the set of social conditions that surround them. And it is political because its proposal is not isolated, but corresponds to a political-social model.⁽¹⁾

A group of Cuban authors in the 1980s proposed a definition, considering that "Didactics or Teaching Theory aims to study the teaching process in a comprehensive manner. Currently, its purpose is: instruction, teaching, including the educational aspect of the teaching process and the conditions that foster active and creative work by students and their intellectual development." In other words, to achieve the functional integration of knowledge, skills, and values in students so that they can adequately fulfill their social responsibility.

Thus, the teaching-learning process is recognized as having three fundamental functions: instructional, educational, and more recently, according to Fuentes González, (2) developmental. These functions are closely related but have their own identity: (1,2,3)

The instructional function ensures that students acquire culture through mastery of professional and general culture, as well as the development of the cognitive abilities, skills, and attitudes necessary for a particular professional task, so that these professionals are relevant to society.

The educational function guarantees the development of values, attitudes, feelings, and norms of relationship with the world, contributing to the establishment of commitments of the subject to what they do and to the construction of meaning, while developing capacities to become aware of the reality they are learning about. At the university level, this function would encompass learning related to the full development of evaluative capacities, feelings, and human values, as well as critical participation in the transformations of social life.

The developmental function aims at the development of creative and transformative abilities, encompassing learning that enables students to innovate and actively participate in processes of change in science, technology, professional practice, and knowledge in general.

Given its professional nature, student activity is the fundamental mode of development of the teaching process, which is why it is organized in such a way that a greater degree of complexity, breadth, abstraction, and depth is gradually achieved. The process must also be organized in such a way that the initiative, interest, motivation, independence, and creativity of the student are evident in their academic, work, and research activities.^(1,2,3)

Within the framework of a developmental teaching approach, as described above, the teaching-learning process, according to Fuentes González⁽¹⁹⁾, is a space for constructing meanings and senses. It is a social process and not merely the individual realization of the production and reproduction of knowledge. Therefore, the fundamental task is to study the possibility of ensuring the conditions for students to rise to a higher level through collaboration and joint activity, that is, starting from what they cannot yet do alone, to achieve independent mastery of their abilities, knowledge, and skills.⁽¹⁾

A paradigm shift in the teaching of DSS through ASS with a didactic approach has far-reaching implications not only for the future of humanity as a species, but also for human knowledge. (20,21) It is therefore crucial to demonstrate the epistemological contexts of possibility for perceiving the emergence of a new scientific rationality, in order to ensure continued viability in a globalized world. (22)

Modern societies face increasingly complex challenges, defined by a wide range of interconnected factors that cannot necessarily be explained by a single, comprehensive explanation. (23,24) Furthermore, the academic world is currently undergoing a period marked by intense debate that calls for innovative approaches to knowledge generation. (25,26,27,28,29)

HIA is the first essential function of public health and the most relevant contribution of epidemiology to this field. This involves not only the absence of disease, but also access to opportunities for a dignified and rewarding life. The teaching of HIA is consolidating in a shift from the "risk factors" (behavioral) paradigm to the eco-epidemiological model of social causality. This change requires redefining the object of HIA, which is no longer just observing the physical environment, but analyzing HSDs as "causes of causes". (11)

The new paradigm requires a review of everything, from the rationale for interventions to policy evaluation, based on principles of equity and social justice. This implies acting on power structures and historical dynamics that perpetuate inequalities. (11) HIA must be developed without: collecting numbers and percentages of obsolete indicators, characterizing health "on average" (ignoring its distribution), and celebrating average achievements without addressing inequalities.

Differences in the behavior of indicators of the health status of the population, known as "health differentials or inequalities", are often observed between one area or territory and another. These may be avoidable, as they are determined by a group of social and economic factors or forces known as the "root causes" of the health-disease-care process. Social determinants are therefore closely linked to the economic and social context in which the process takes place, the development of its productive forces, and the contradictions between social

5 Díaz González Y, et al

classes. When this process is broken down into factors, the social determinants of health emerge. (11)

Traditionally, more attention has been paid to damage than to risk factors and social determinants of health. We must move beyond this perspective and consider developing more comprehensive interventions that go beyond the circle of damage and risk and focus on the social determinants of health. To achieve better levels of health in the population, it is necessary to act on the universe of social determinants of health (personal and collective), always remembering that this process depends on political, economic, social, and cultural conditions. Health professionals, in the fulfillment of their essential functions, are trained in job performance profiles such as teaching, care, research, and health management, with the aim of improving the health situation.⁽¹¹⁾

The educational approach to training new generations, and future university graduates in particular, is developed through the teaching-learning process, in which the internal relationships between the components of that process are decisive, establishing its structure and dynamics. It is systematically directed toward the social formation of new generations, in which students are instructed and educated, establishing their thinking and feelings. It allows students to develop an ASS by systematically addressing the population distribution of opportunities for a healthy life, capturing social inequalities in health and identifying mechanisms that produce inequality, informing public policy decisions and evaluating the impact of population interventions, taking a stand for health equity and social justice, and critically examining everyday paradigms and practices.

Medical science universities integrate knowledge based on the needs of the population through the ASS, addressing DSS, taking into account their knowledge, culture, history, and geographical location to address problems that may exist not only in health but from a comprehensive perspective that involves human beings and their harmonious relationship with nature, the needs of the realities of their country and more specifically of their community, working towards equitable social development. Establishing new methodologies for disease surveillance and control, better addressing global health challenges through prevention, promotion, treatment, and recovery from infectious and non-infectious diseases, applicable in any setting, from the community level to the global level.⁽³⁰⁾

CONCLUSIONS

The educational approach of Social Determinants of Health represents a paradigm shift in how we understand and act on the structural causes of health and disease. We need to create a new common language to address complex realities in training professionals who can lead diverse teams and design innovative interventions, where individual healing is linked to social justice and sustainability.

BIBLIOGRAPHICAL REFERENCES

- 1. Bencosme J. Estrategia metodológica para el tratamiento didáctico con enfoque interdisciplinario en las Ciencias Naturales. [Tesis]. Isla de la Juventud; 2010.
- 2. Fuentes HC. Didáctica de la Educación Superior. Monografía CeeS "Manuel F. Gran". Universidad de Oriente; 2001.
- 3. Silvestre M, Zilberstein J. Hacia una Didáctica Desarrolladora. Ciudad de La Habana, Cuba: Editorial Pueblo y Educación; 2002.
- 4. Breilh J. La Determinación Social de la Salud como Herramienta de Ruptura hacia la Nueva Salud Pública (Salud Colectiva). En: VIII Seminario Internacional de Salud Pública; 2013; Bogotá, Colombia. Universidad Nacional de Colombia.
- 5. Organización Mundial de la Salud. Comisión sobre Determinantes Sociales de la Salud. Subsanar las desigualdades en una generación: Alcanzar la equidad sanitaria actuando sobre los determinantes sociales de la salud. Ginebra, Suiza; 2009. Disponible en: https://apps.who.int/iris/handle/10665/44084
- 6. Organización Panamericana de la Salud, Organización Mundial de la Salud. Foro de cobertura universal de salud. Generando una agenda para abordar los desafíos de Guatemala para el logro de la Cobertura Universal de Salud. 2014. Disponible en: https://iris.paho.org/bitstream/handle/10665.2/52899/FORO%20 DE%20 COBERTURA%20UNIVERSAL%20DE%20SALUD.pdf?sequence=1&isAllowed=y
- 7. Organización Mundial de la Salud. Comisión sobre Determinantes Sociales de la Salud. Acción sobre los factores sociales determinantes de la salud. Aprender de las experiencias anteriores. Documento de información preparado para la Comisión sobre Determinantes Sociales de la Salud. 2005. Ginebra. Disponible en: https://pss17.files.wordpress.com/2009/01/fdsalud_oms.pdf

- 8. Solar O, Irwin A. Aconceptual framework for action on the social determinants of health. Social Determinants of Health Discussion Paper 2 (Policy and Practice). 2010. Geneva: World Health Organization. Disponible en: https://apps.who.int/iris/bitstream/handle/10665/44489/9789241500852_eng.pdf?sequence=1&isAllowed=y
- 9. Organización Mundial de la Salud. Comisión sobre Determinantes Sociales de la Salud. Cerrando la brecha: la Política de acción sobre los determinantes sociales de la salud [Documento de Trabajo]. Conferencia Mundial sobre los Determinantes Sociales de la Salud. 2011. Río de Janeiro. Disponible en: https://www.consultorsalud.com/wp-content/uploads/2014/10/politica_de_accion_sobre_los_determinantes_sociales_de_la_salu d.pdf
- 10. Maza C. La visión epistemológica de las organizaciones como sistemas adaptativos complejos. Revista Gestión I+D. 2023; 8(2), 69-92. Disponible en: https://dialnet.unirioja.es/servlet/articulo?codigo=9040567
- 11. Instituto Nacional de Higiene, Epidemiología y Microbiología. La determinación social de la salud. Una antología: veinte años de trabajo del grupo de estudios del INHEM. La Habana: Editorial Ciencias Médicas; 2023. Disponible en: http://www.bvscuba.sld.cu/libro/la-determinacion-social-de-la-salud-una-antologia/
- 12. García RP, Ballbé A, Iglesia NR. El análisis de la situación de salud y la participación social en la formación médica. Educ Med Super. 2015. 29(3). Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-2141201500
- 13. González R, Lozano JG., Chala I, Lago O, Pestana MC. Análisis de la situación de salud en un consultorio médico. Rev Cubana Med Gen Integr. 2017; 33(1): 3443. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S086421252017000100004
- 14. Artola ML., Tarifa L, Finalé L. Planes de estudio E en la Educación Superior cubana: una mirada desde la educación continua. Universidad Y Sociedad. 2019; 11(2), 364-371. Disponible en: https://rus.ucf.edu.cu/index.php/rus/article/view/1200
- 15. Martínez S. Análisis de la situación de salud pública: identidad, vigencia y renovación. Análisis de la situación de salud, una nueva mirada. 3ra edición. La Habana: Editorial Ciencias Médicas. 2020; p.1-11. Disponible en: http://www.ecimed.sld.cu/2020/11/16/analisisde-situacion-de-salud-una-nueva-mirada-tercera-edicion
- 16. Fuentes HC. Didáctica de la Educación Superior. Monografía CeeS "Manuel F. Gran". Universidad de Oriente; 2001.
- 17. Alvarez C. La escuela en la vida. Didáctica. Editorial Pueblo y Educación. La Habana; 1999. 18. Zilberstein J. Aprendizaje y categorías de una didáctica integradora. En: Zilberstein J,
- 18. Silvestre M. ¿Cómo hacer más eficiente el aprendizaje? Instituto Central de Ciencias Pedagógicas, Cuba; 2000. p.16-31.
 - 19. Fuentes HC, Álvarez IB. Teoría Holístico Configuracional de los Procesos Sociales. MEGACEN; 2002
- 20. Hurtado J. Del pensamiento complejo al pensamiento crítico: acercamiento a la transformación educativa. En Serna P, Madrigal J, Lara Y, Meléndez O, González M, Hurtado J. El pensamiento crítico germen de la transformación social y educativa. 2021; (1era ed., pp. 153-184). Disponible en: https://www.researchgate.net/profile/Mariela-Gonzalez-Lopez/publication/359497661_El_pensamiento_critico_germen_de_la_transformacion_socia l_y_educativa/links/623f9b025e2f8c7a03415fb8/El-pensamiento-critico-germen-de-la-transformacion-social-y-educativa.pdf
- 21. Saavedra M, López R. La conexión epistémica entre formación humanista y educación profesional universitaria. Sophia, Colección de Filosofía de la Educación. 2022; (32), 275-297. Disponible en: http://scielo.senescyt.gob.ec/scielo.php?pid=S1390-86262022000100275&script=sci_arttext
- 22. López J. Pensamiento complejo, ética planetaria y transformación social en la formación del profesorado. Revista Digital de Investigación en Docencia Universitaria. 2022; 16(1). Disponible en: http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S2223-25162022000100003

- 23. Alcaraz G, Hernández P, Nieto O. Pensamiento complejo y psicología. Revista electrónica de psicología Iztacala. 2022; 25(1), 182-204. Disponible en: https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=105514
- 24. Vargas R. La perspectiva naturalizada de la condición humana en el pensamiento complejo. Revista de Filosofía de la Universidad de Costa Rica. 2022; 61(159), 57-68. Disponible en: https://revistas.ucr.ac.cr/index.php/filosofia/article/view/45289
- 25. Blanco B, Blanco Y, Blanco M. (2023). Formación integral en universidades experimentales al alumbre del pensamiento complejo. Revista EDUCARE UPEL-IPB. 2022; 27(1), 436-449. Disponible en: https://revistas.investigacion-upelipb.com/index.php/educare/article/view/181
- 26. Benito PV. Contemporary art and networks: Analysis of the Venus Project using the UCINET software. AWARI, 3. 2022. Disponible en: https://doi.org/10.47909/awari.166
- 27. Hernández IS, Guardado RT, Gálvez CE. Industrial clusters: A scientific review mapping. Iberoamerican Journal of Science Measurement and Communication. 2022; 2(2), Article 2. Disponible en: https://doi.org/10.47909/ijsmc.143
- 28. Ignacio YM. Intervención educativa sobre las terapias alternativas para las artropatías. Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria. 2021; 1, 3-3. Disponible en: https://doi.org/10.56294/ri20213
- 29. Jiménez DC, Reynaldos KL. Aprendizaje organizacional: Un camino para el desarrollo de la competencia cultural en salud. Salud, Ciencia y Tecnología. 2022; 2, 147-147. Disponible en: https://doi.org/10.56294/saludcyt2022147
- 30. Mettenleiter TC, Markotter W, Charron DF, Adisasmito WB, Almuhairi S, Behravesh CB. et al. The One Health High-Level Expert Panel (OHHLEP). One Health Outlook; 2023, 5; 18.

FUNDING

The authors did not receive funding for the development of this research.

CONFLICT OF INTEREST

The authors declare that there were no conflicts of interest.

AUTHOR CONTRIBUTION

Conceptualization: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.

Data curation: Yahima Díaz González, Aliana Peña Méndez.

Formal analysis: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.

Research: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez, Mercedes de la Caridad Álvarez Figueredo, Yohanna Basil Muñoz.

Methodology: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.

Project management: Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte Resources: Mercedes de la Caridad Álvarez Figueredo, Yohanna Basil Muñoz.

Software: Yahima Díaz González, Aliana Peña Méndez.

Supervision: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.

Validation: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.

Visualization: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez, Mercedes de la Caridad Álvarez Figueredo, Yohanna Basil Muñoz.

Writing - original draft: Yahima Díaz González, Aliana Peña Méndez.

Writing - revision and editing: Yahima Díaz González, Vivian de las Mercedes Noriega Bravo, Dehymelín Romero Fonte, Aliana Peña Méndez.