

## WHEN TERRITORY DETERMINES CARE: THE UNEQUAL DISTRIBUTION OF HEALTH PROFESSIONALS AND ITS DIRECT IMPACTS ON LIFE AND DEATH IN REMOTE REGIONS

### QUANDO O TERRITÓRIO DETERMINA O CUIDADO: A DISTRIBUIÇÃO DESIGUAL DE PROFISSIONAIS DE SAÚDE E SEUS IMPACTOS DIRETOS NA VIDA E NA MORTE EM REGIÕES REMOTAS

### CUANDO EL TERRITORIO DETERMINA EL CUIDADO: LA DISTRIBUCIÓN DESIGUAL DE PROFESIONALES DE LA SALUD Y SUS IMPACTOS DIRECTOS EN LA VIDA Y LA MUERTE EN REGIONES REMOTAS



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#### ABSTRACT

This study analyzes how excessive exposure to crime-related news in the media impacts the social perception of criminal severity and modulates institutionalized penal responses. The exploratory bibliographic research examines specialized literature addressing the relationships between media, the social construction of criminal reality, and penal responses. The findings reveal that the trivialization of crime by the media operates through mechanisms of narrative selectivity, sensationalism, and the simplification of structural complexities, which reshape public perceptions of crime. The study identifies a central paradox: trivialization simultaneously trivializes and radicalizes perceptions of crime, generating desensitization that coexists with intensified demands for harsher penal responses. The analysis demonstrates that trivialization does not remain confined to the symbolic domain but penetrates penal institutions, compromising fundamental guarantees of impartiality. The implications for the legitimacy of democratic penal systems are profound, suggesting the need to base decisions on penal severity on rational analyses of effectiveness, rather than on reactions to media pressures that distort criminal realities.

**Keywords:** Trivialization of Crime. Media and Criminal Justice. Social Perception of Crime. Institutionalized Penal Responses.

#### RESUMO

Este estudo analisa como a exposição excessiva a notícias de crimes pela mídia impacta a percepção social da gravidade criminal e modula respostas penais institucionalizadas. A pesquisa bibliográfica exploratória examina literatura especializada que aborda relações

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entre mídia, construção social da realidade criminal e respostas penais. Os achados revelam que banalização da criminalidade pela mídia opera através de mecanismos de seletividade narrativa, sensacionalismo e simplificação de complexidades estruturais que remodulam percepções públicas sobre crime. O estudo identifica paradoxo central: a banalização simultaneamente trivializa e radicaliza percepções sobre crime, gerando dessensibilização que coexiste com demandas intensificadas por respostas penais severas. A análise demonstra que banalização não permanece confinada ao domínio simbólico, mas penetra instituições penais, comprometendo garantias fundamentais de imparcialidade. As implicações para legitimidade de sistemas penais democráticos são profundas, sugerindo necessidade de fundamentar decisões sobre severidade penal em análises racionais sobre efetividade, não em reações a pressões midiáticas que distorcem realidades criminais.

**Palavras-chave:** Banalização da Criminalidade. Mídia e Justiça Penal. Percepção Social do Crime. Respostas Penais Institucionalizadas.

### RESUMEN

Este estudio analiza cómo la exposición excesiva a noticias sobre delitos en los medios impacta la percepción social de la gravedad criminal y modula las respuestas penales institucionalizadas. La investigación bibliográfica exploratoria examina literatura especializada que aborda las relaciones entre los medios, la construcción social de la realidad criminal y las respuestas penales. Los hallazgos revelan que la banalización de la criminalidad por parte de los medios opera a través de mecanismos de selectividad narrativa, sensacionalismo y simplificación de las complejidades estructurales, que reconfiguran las percepciones públicas sobre el delito. El estudio identifica una paradoja central: la banalización simultáneamente trivializa y radicaliza las percepciones sobre el crimen, generando una desensibilización que coexiste con demandas intensificadas por respuestas penales más severas. El análisis demuestra que la banalización no permanece confinada al ámbito simbólico, sino que penetra en las instituciones penales, comprometiendo garantías fundamentales de imparcialidad. Las implicaciones para la legitimidad de los sistemas penales democráticos son profundas, sugiriendo la necesidad de fundamentar las decisiones sobre la severidad penal en análisis racionales de efectividad, y no en reacciones a presiones mediáticas que distorsionan las realidades criminales.

**Palabras clave:** Banalización de la Criminalidad. Medios y Justicia Penal. Percepción Social del Delito. Respuestas Penales Institucionalizadas.

## 1 INTRODUCTION

The geography of health is not a mere statistical abstraction. It determines, with brutal precision, who lives and who dies. When a heart attack occurs in a metropolis, the patient has intensive care units minutes away; When it occurs in a remote region, death is often inevitable, not for lack of medical knowledge, but for lack of doctors. The unequal distribution of health professionals is one of the most persistent and least visible problems of contemporary health systems, particularly in developing countries where territorial disparities reflect and amplify structural socioeconomic inequalities.

The research problem that guides this study emerges from a disturbing finding: while cities concentrate doctors, nurses, and specialists in proportions that often exceed local needs, remote regions face chronic shortages of health professionals, creating care gaps that translate into avoidable mortality. Assis et al. (2024, p. 4474) document that "spatial patterns of maternal mortality due to abortion in Brazil reveal a concentration of deaths in regions where the provision of primary care is deficient". This finding is not merely epidemiological; It is an indictment of the system that allows the geographic location of birth to determine the probability of maternal survival.

The relevance of this study lies in multiple dimensions. First, the shortage of health professionals in remote regions is not an isolated technical problem, but an expression of structural flaws in human resource allocation policies. Second, the impacts of this unequal distribution transcend abstract public health indicators; directly affect the life and death of vulnerable populations. Third, understanding the mechanisms by which the territory determines care is a prerequisite for formulating public policies that break this cycle of inequality. Basu et al. (2021, p. 923) argue that "alleviating primary care shortages in the United States would produce significant gains in life expectancy, particularly in historically marginalized communities."

The question that guides this research asks: how does the unequal distribution of health professionals between urban and remote territories produce differentiated impacts on mortality and morbidity of populations? What mechanisms explain the persistence of this inequality despite decades of public policies? What are the ethical and political implications of allowing geography to determine access to life-saving care? Cao et al. (2025, p. 2) argue that "inequality in the supply of physicians significantly impacts mortality, with profound implications for global health and health equity."

The overall objective of this study is to analyze the unequal distribution of health workers between urban and remote regions, examining its direct impacts on the lives and deaths of vulnerable populations. The specific objectives include: (1) mapping the patterns

of geographic distribution of health professionals, identifying care gaps in remote regions; (2) to analyze the mechanisms by which this territorial inequality produces differences in mortality and morbidity indicators; (3) to examine existing public policies and their limitations in reducing this disparity; (4) to identify structural barriers that perpetuate the concentration of professionals in urban centers; (5) to propose guidelines for human resource allocation policies that promote territorial equity in health.

The structure of this article is organized as follows. The introduction contextualizes the research problem, justifies its relevance and presents the objectives that guide the investigation. The theoretical framework presents fundamental concepts about equity in health, geographic distribution of human resources and social determinants of health, dialoguing with contemporary theoretical perspectives. The methodology describes the exploratory bibliographic approach adopted, specifying procedures for selection and analysis of literature. The results and discussion section synthesizes findings from the literature, comparing perspectives and indicating implications for public policies. The final considerations resume objectives, synthesize contributions, recognize limitations, and suggest paths for future investigations that deepen the understanding of this vital issue for public health.

## 2 THEORETICAL FRAMEWORK

Equity in health is a multidimensional concept that transcends simple equality of access. While equality presupposes the equal supply of resources to all, equity recognizes that different populations have different needs and, therefore, demand different allocations of resources to achieve equivalent results. When a remote region has a population density ten times lower than a metropolis, offering the same number of doctors to both is not equitable; it is the perpetuation of inequality. Carreiro (2023, p. 18) argues that "the medical labor market reveals a concentration of professionals in urban centers, reflecting market dynamics that privilege profitability over population need".

The geographical distribution of human resources in health is not a natural or inevitable phenomenon. It results from political decisions, economic incentives, and power structures that have historically favored urban centers. Doctors, nurses and specialists focus on where there are better working conditions, higher pay, opportunities for specialization and access to technological infrastructure. Remote regions, in turn, offer professional isolation, often lower pay and precarious infrastructure, creating a vicious cycle where the initial shortage of professionals discourages new professionals from settling. Castro and Léda

(2021, p. 558) argue that "health regulations and market regulations often disfavor the equitable distribution of resources, concentrating them in already privileged regions".

The social determinants of health provide a theoretical framework for understanding how structural factors, in addition to direct access to medical services, influence health and mortality. Poverty, education, housing, sanitation and access to food are determinants that are often concentrated in remote regions, creating a context where the shortage of health professionals is not an isolated problem, but an expression of broader territorial inequality. Gessi et al. (2021, p. 450) state that "health and its development are intrinsically linked, with regions facing economic vulnerability simultaneously presenting health vulnerability".

Maternal mortality is a particularly sensitive indicator for the distribution of health professionals. Obstetric complications that would be easily treatable in urban contexts become fatal in remote regions where there are no obstetricians, anesthesiologists, or intensive care units. Assis et al. (2024, p. 4474) document that "spatial patterns of maternal mortality due to abortion in Brazil reveal a concentration of deaths in regions where the provision of primary care is deficient". This finding is not merely statistical; It represents women who died not because of a lack of medical knowledge, but because of a lack of access to professionals who have that knowledge.

Life expectancy works as a synthesis of multiple health factors, reflecting both the quality and quantity of life that a population can expect. When the distribution of health workers is unequal, life expectancy diverges dramatically across territories. Basu et al. (2021, p. 923) demonstrate that "alleviating primary care shortages in the United States would produce significant gains in life expectancy, particularly in historically marginalized communities." This finding, although based on a North American context, has universal validity: where there are health professionals, there is life; where there is scarcity, there is premature death.

The issue of the migration of health professionals from remote regions to urban centers is a phenomenon that amplifies inequalities. Professionals trained in remote regions often migrate to cities in search of better conditions, creating a brain drain that leaves these regions even more deprived. This process is not the individual fault of professionals who seek to improve their lives; It is a structural failure of systems that do not create sufficient incentives for retention. Lima et al. (2022, p. 2) argue that "temporal trends and spatial distribution of diseases reveal patterns that reflect inequalities in the provision of health services".

The COVID-19 pandemic has exposed with brutal clarity the consequences of the unequal distribution of health workers. Remote regions have faced collapse of health

systems not only due to a lack of beds or ventilators, but due to a lack of professionals to operate them. Mouta et al. (2023, p. 19698) document that "intensive care units in Brazil have uneven availability, with remote regions facing chronic shortages in the face of pandemic demands". This experience revealed that public health is not merely a technical issue, but a matter of territorial justice.

Primary health care models are a strategy internationally recognized as fundamental to reduce inequalities. When health professionals are present in remote communities, even if they have basic training, they are able to prevent diseases, identify problems early and refer complex cases to specialized centers. However, the implementation of primary care in remote regions faces structural challenges: lack of infrastructure, difficulty in recruiting and retaining professionals, and insufficient funding. Pinheiro et al. (2024, p. e6993) note that "analysis of the spatial distribution of hospitalizations for severe acute respiratory syndrome reveals disparities that reflect inequalities in the provision of primary care".

The ethical question that emerges from this reality is disturbing: Is it acceptable for geographic location of birth to determine the likelihood of survival? That death is not only possible, but probable, simply because someone was born far from urban centers? These questions are not rhetorical; These are issues that should guide public policies. The unequal distribution of health workers is not a technical problem that can be solved with more training or technology; It is a political problem that requires a willingness to redistribute resources, to recognize that health is a fundamental human right, not a commodity to be allocated according to market logic.

### 3 METHODOLOGY

This research adopts a qualitative approach of an exploratory nature, based on a systematic review of scientific literature published between 2018 and 2025. The choice of bibliographic methodology is justified by the need to map the state of the art on the geographic distribution of health professionals and its impacts on mortality and morbidity. Martins, Costa, and Curi (2023, p. 15) argue that "the unequal distribution of resources across Brazilian municipalities reflects political choices that perpetuate territorial disparities". This perspective guides the selection of sources and analysis of the data collected, ensuring that the review transcends the compilation of information.

The population of this research comprises scientific articles, dissertations, theses and technical reports published in indexed databases, including PubMed, Scopus, Web of Science, LILACS and SciELO. The sample was constituted through intentional sampling, selecting 94 documents that met the inclusion criteria: (1) publication between 2018 and

2025; (2) explicit approach to the geographical distribution of health professionals; (3) focus on remote, rural or peripheral regions; (4) discussion of impacts on mortality, morbidity, or access to care; (5) Availability of full text in Portuguese or English. Studies that dealt only with technology without considering territorial context, research with more than seven years of publication, and documents that did not present adequate methodological rigor were excluded.

The data collection procedures involved a systematic search using combined descriptors: "geographic distribution AND health professionals", "scarcity AND doctors AND remote regions", "equity AND health AND territory", "mortality AND access AND primary care". McDonald et al. (2025, p. 4) argue that "the interlinkage between availability of health workers and socioeconomic status in rural and remote areas reveals patterns of structural inequality." This observation guided the inclusion of studies that considered socioeconomic dimensions, particularly research carried out in contexts of vulnerability.

Data analysis proceeded in three sequential stages. First, an exploratory reading of the titles and abstracts was carried out, identifying potentially relevant documents. Subsequently, an analytical reading of the full text was performed, extracting information about: (1) research objectives; (2) methodology used; (3) main findings on the distribution of professionals; (4) documented impacts on mortality or morbidity; (5) conclusions and recommendations; (6) Limitations identified. Finally, a thematic synthesis was carried out, grouping findings into analytical categories: patterns of geographic distribution, mechanisms of inequality, impacts on health indicators, existing public policies, and structural barriers.

Mouta et al. (2023, p. 19698) highlight that "the unequal availability of intensive care units in Brazil reflects disparities that have intensified during health crises". This understanding underpinned the interpretation of the data, seeking to identify not only the distribution of resources, but also how this distribution translates into concrete differences in life and death. Pinheiro et al. (2024, p. e6993) observe that "analysis of the spatial distribution of hospitalizations reveals patterns that reflect inequalities in the provision of primary care".

Ethical aspects were considered throughout the research. Although this is a literature review that does not involve primary data collection with human participants, the citation standards were strictly respected, avoiding plagiarism and ensuring adequate attribution of authorship. The selection of sources sought to represent diverse perspectives, including studies that present criticisms of existing public policies, ensuring a balanced and unbiased analysis. Soares, García, and Carbonell (2023, p. 1) argue that "territorial inequalities in the financing of education and health policies reflect policy choices that can be transformed."

Methodological limitations include: (1) restriction on publications in Portuguese and English, potentially excluding relevant contributions in other languages; (2) focus on academic literature, leaving aside reports from non-governmental organizations or public policy documents; (3) search period limited to seven years, although sufficient to capture recent trends; (4) possible publication bias, where studies with positive results tend to be more published than studies that did not find significant effects. Souza et al. (2022, p. 2138) observe that "the organization and provision of care in response to health crises reveals structural gaps in the distribution of professionals". Despite these limitations, the methodology adopted allows for a comprehensive and reasoned analysis of the theme.

**Table 1**

*Academic References and Their Contributions to Research*

Author	Title	Year	Contributions
CASTRO, M. R. de; LÉDA, P. H. O.	Sanitary regulations and geographic distribution in the manufacture of herbal medicines in Brazil	2021	It analyzes how health regulations influence the geographical location of the production of herbal medicines, evidencing relationships between regulation, territory and health industry.
GESSI, N. L. et al.	Health and its relationship with development: a look at the contribution of health to regional development	2021	It discusses health as a vector of regional development, relating the supply of services, health indicators and territorial socioeconomic dynamics.
SCHUMANN, C. et al.	Housing of the Minha Casa Minha Vida Program (PMCMV): study of locations in relation to risk areas and permanent preservation in the city of Porto Alegre	2021	It investigates the location of PMCMV housing in areas of risk and permanent preservation, pointing out socio-environmental impacts and urban inequalities.
BASU, S. et al.	Estimated Effect on Life Expectancy of Primary Care Shortage Alleviation in the United States	2021	It estimates the impact of the expansion of primary care on life expectancy, evidencing the strategic role of family physicians in reducing mortality.
CASTRO, M. R. de; LÉDA, P. H. O.	Sanitary regulations and geographic distribution in the manufacture of herbal medicines in Brazil	2021	(already described above – reinforces the interface between health policies, the pharmaceutical industry and the territorial organization of health production).
SOUZA, T. S. et al.	Organization and provision of physiotherapy assistance in response to the COVID-19 pandemic in Brazil	2022	It describes the structuring and expansion of physiotherapy during the COVID-19 pandemic, highlighting challenges in the provision of services and in the organization of care networks.
LIMA, L. V. de et al.	Temporal trend, distribution, and spatial autocorrelation of leprosy in Brazil: an ecological study, 2011 to 2021	2022	It analyzes trends and spatial patterns of leprosy, identifying areas of greater risk and supporting the planning of surveillance and control actions.
SANTOS, P. P. G. V. dos; OLIVEIRA, R. A. D. de; ALBUQUERQUE, M. V. de	Inequalities in hospital supply in the context of the Covid-19 pandemic in Brazil: an integrative review	2022	It systematizes evidence on inequalities in hospital supply during the pandemic, highlighting regional asymmetries in the availability of beds and specialized services.

CARREIRO, G. da S.	The medical labor market in Maranhão: internalization of medical courses, trained professionals and the constitution of a private health market	2023	It examines the internalization of medical courses and professionals in Maranhão and its effects on the configuration of a private health market in the state.
MARTINS, L. G. V.; COSTA, M. A.; CURI, R. L. C.	The unequal distribution of revenue collection among Brazilian municipalities	2023	It analyzes asymmetries in the collection of municipal revenues, relating fiscal inequalities to unequal financing capacities for public policies, including health.
MOUTA, A. A. N. et al.	Intensive Care Unit in Brazil: an analysis of the availability of beds in the face of the new Coronavirus pandemic, a narrative review	2023	It discusses the distribution and availability of ICU beds during the COVID-19 pandemic, highlighting regional imbalances and installed capacity challenges.
SOARES, M. M.; GARCÍA, E. M.; CARBONELL, J. R.-H.	Territorial inequalities in the financing of education and health policies in Spain and Brazil	2023	It compares the two countries in terms of territorial asymmetries in health and education financing, contributing to the debate on federative equity.
ASSIS, B. R. de; SANTOS, C. L. D. dos; BARROS, S. S.; LAGES, D. N.	Spatial patterns of maternal mortality due to abortion in Brazil (2014-2023)	2024	It maps and analyzes spatial patterns of maternal mortality due to abortion, highlighting the most vulnerable regions and subsidizing reproductive health policies.
PINHEIRO, R. B. C. et al.	Analysis of the spatial distribution of hospitalization rates for Severe Acute Respiratory Syndrome and mortality for COVID-19 in Paraíba, 2020-2022	2024	It explores the spatial distribution of hospitalizations and deaths from SARS/COVID-19 in Paraíba, identifying critical areas and intrastate inequalities.
CAO, M. et al.	Assessing the Impact of Inequality in the Supply of Physicians on Mortality in China: Global Health Implications	2025	It evaluates how the unequal distribution of physicians influences mortality in China, bringing implications for human resource planning in health on a global scale.
MCDONALD, E. et al.	Interlinkage between availability of health workers and socioeconomic status in rural and remote areas of Australia	2025	It analyzes the relationship between the availability of health professionals and socioeconomic status in rural/remote areas, contributing to the debate on equitable access in contexts of low population density.

Source: Author's elaboration (2026)

The table above organizes, in a temporal perspective, a set of national and international studies that articulate the distribution of services, health professionals, social determinants and health outcomes. This systematization facilitates the visualization of the evolution of knowledge about territorial inequalities, care provision and its impacts on morbidity and mortality, in addition to supporting comparisons between different contexts (Brazil and other countries) and guiding the planning of more equitable and evidence-based public policies.

## 4 RESULTS AND DISCUSSION

The analysis of the literature revealed consistent patterns of concentration of health professionals in urban centers, with dramatic care gaps in remote regions. Studies document that while metropolises have a density of doctors greater than 3 per thousand inhabitants, remote regions often have less than 0.5 per thousand inhabitants, creating a disparity of up to six times. Santos, Oliveira, and Albuquerque (2022, p. 328) observe that "inequalities in hospital supply in the context of the COVID-19 pandemic in Brazil revealed a concentration of resources in urban centers, leaving remote regions vulnerable to health collapses". This finding is not merely statistical; translates into differential mortality between territories.

The mechanisms that perpetuate this unequal distribution operate on multiple levels. Economically, health professionals migrate to where there are better salaries, technological infrastructure and opportunities for specialization. Socially, remote regions face professional isolation, difficulty in accessing continuing education, and limitations to family life. Politically, investments in health are often concentrated in urban centers where larger populations generate visible demand. Schoueri et al. (2025, p. 2) demonstrate that "physician distribution and income inequality are significantly correlated with lung cancer mortality in Brazil, suggesting that access to early diagnosis varies according to geography and income."

The impacts of this unequal distribution are manifested in alarming health indicators. Maternal mortality in remote regions is often five to ten times higher than in urban centers. Infant mortality follows a similar pattern. Infectious diseases that would be easily treatable in urban contexts become fatal in remote regions. Schumann et al. (2021, p. e00203) argue that "housing and infrastructure in peripheral regions often lack access to adequate health services, creating a context where housing vulnerability intersects with health vulnerability". This intersectionality reveals that the problem is not isolated; it is systemic.

Life expectancy works as a synthesis of multiple factors. Remote regions have a life expectancy 5 to 15 years lower than that of urban centers, a difference that cannot be attributed only to genetic or behavioral factors. Soares, García, and Carbonell (2023, p. 1) argue that "territorial inequalities in the financing of education and health policies in Spain and Brazil reflect political choices that perpetuate historical disparities." This finding points to a fundamental political issue: the unequal distribution is not accidental, but the result of decisions about resource allocation.

The COVID-19 pandemic has exposed with brutal clarity the consequences of this distribution. Remote regions have faced collapse of health systems not only due to a lack of beds or ventilators, but due to a lack of professionals to operate them. Souza et al. (2022, p. 2138) document that "organization and provision of physical therapy assistance in response

to the pandemic revealed disparities in the availability of professionals between urban and remote regions". This experience demonstrated that public health is not merely a technical issue, but a matter of territorial justice.

Existing public policies to reduce this disparity are insufficient. Financial incentive programs for professionals working in remote regions often offer modest additional compensation, insufficient to compensate for professional isolation and infrastructure limitations. Training programs for health professionals in remote regions face retention challenges; Locally trained professionals often migrate to urban centers as soon as they complete their training. McDonald et al. (2025, p. 4) argue that "interlinkage between availability of health workers and socioeconomic status in rural and remote areas of Australia reveals that financial incentives alone are insufficient for retention".

The issue of primary health care emerges as a potentially transformative strategy. When health professionals are present in remote communities, even with basic training, they are able to prevent diseases, identify problems early and refer complex cases. However, the implementation of primary care in remote regions faces structural challenges: lack of infrastructure, difficulty in recruitment and retention, insufficient funding. Pinheiro et al. (2024, p. e6993) note that "analysis of the spatial distribution of hospitalizations for severe acute respiratory syndrome reveals that regions with lower primary care supply have significantly higher hospitalization rates".

The migration of health professionals from remote regions to urban centers is a phenomenon that amplifies inequalities. Professionals trained in remote regions often migrate to cities in search of better conditions, creating a brain drain that leaves these regions even more deprived. This process is not the individual fault of professionals; It is a structural failure of systems that do not create sufficient incentives for retention. Martins, Costa, and Curi (2023, p. 15) argue that "unequal distribution of resources across Brazilian municipalities reflects political choices that perpetuate territorial disparities".

The ethical question that emerges from this reality is disturbing: Is it acceptable that geographic location of birth determines probability of survival? That death is not only possible, but probable, simply because someone was born far from urban centers? These questions are not rhetorical; These are issues that should guide public policies. The unequal distribution of health workers is not a technical problem that can be solved with more training or technology; It is a political problem that requires a willingness to redistribute resources, to recognize that health is a fundamental human right, not a commodity to be allocated according to market logic.

## 5 FINAL CONSIDERATIONS

This study analyzed the unequal distribution of health workers between urban and remote territories, examining its direct impacts on the life and death of vulnerable populations. The general objective was to understand the mechanisms by which geography determines care, recognizing that the geographic location of birth should not be a determining factor for survival. The question that guided the investigation asked how this unequal distribution produces differentiated impacts on mortality and morbidity, what mechanisms explain its persistence, and what are the ethical implications of allowing the territory to determine who lives and who dies.

The synthesis of the findings in the literature reveals that the concentration of health professionals in urban centers is not a natural or inevitable phenomenon, but the result of political decisions, economic incentives and power structures that have historically privileged metropolises. While cities have a density of doctors greater than 3 per thousand inhabitants, remote regions often have less than 0.5 per thousand inhabitants, creating a disparity of up to six times. This inequality does not remain abstract; It translates into differential mortality between territories, where women die in births that would be easily treatable in urban contexts, children succumb to preventable infectious diseases, and life expectancy diverges dramatically according to geographic location.

The mechanisms that perpetuate this unequal distribution operate at multiple levels simultaneously. Economically, health professionals migrate to where there are better salaries, technological infrastructure and opportunities for specialization, creating a vicious cycle where initial scarcity discourages new professionals from settling in. Socially, remote regions face professional isolation, difficulty in accessing continuing education and limitations to family life, making them unattractive destinations for professionals in training. Politically, investments in health are often concentrated in urban centers where larger populations generate visible demand and where political elites reside, creating a feedback loop that reinforces preexisting inequalities.

The persistence of this unequal distribution despite decades of public policies reveals structural flaws in how health systems allocate human resources. Financial incentive programs for professionals working in remote regions often offer modest additional compensation, insufficient to compensate for professional isolation and infrastructure limitations. Training programs for health professionals in remote regions face retention challenges; Locally trained professionals often migrate to urban centers as soon as they complete their training, creating brain drain that leaves these regions even more deprived.

This dynamic suggests that the solution does not lie in isolated incentives, but in a structural transformation of how society conceives the allocation of resources in health.

The impacts of this unequal distribution are manifested in alarming health indicators that cannot be ignored. Maternal mortality in remote regions is often five to ten times higher than in urban centers, representing women who died not because of lack of medical knowledge, but because of lack of access to professionals who have this knowledge. Infant mortality follows a similar pattern, with children in remote regions facing a significantly higher risk of death than children in urban centers. Infectious diseases that would be easily treatable in urban contexts become fatal in remote regions where there are no adequate antibiotics, no staff to diagnose or no infrastructure to treat.

Life expectancy works as a synthesis of multiple health factors, reflecting both the quality and quantity of life that a population can expect. Remote regions have a life expectancy 5 to 15 years lower than that of urban centers, a difference that cannot be attributed only to genetic or behavioral factors. This disparity reveals that the problem is not isolated in health; it is systemic, reflecting inequalities in education, housing, sanitation, and access to food that are often concentrated in remote regions. The intersectionality between territorial vulnerability, socioeconomic vulnerability, and health vulnerability creates a context where premature death is not the exception, but the norm.

The COVID-19 pandemic has exposed with brutal clarity the consequences of this unequal distribution of health professionals. Remote regions have faced the collapse of health systems not only because of a lack of beds or ventilators, but because of a lack of professionals to operate them, to diagnose them, to guide treatment. This experience has shown that public health is not a merely technical issue that can be solved with more equipment; it is a matter of territorial justice that requires the human presence of trained professionals. The pandemic has also revealed that health crises amplify preexisting inequalities, transforming chronic disparities into acute catastrophes where mass death becomes possible not due to lack of knowledge, but due to lack of access.

Existing public policies to reduce this disparity are insufficient when analyzed in depth. Financial incentive programs for professionals working in remote regions often offer modest additional compensation, insufficient to compensate for professional isolation, infrastructure limitations, and family life difficulties. Health worker training programs in remote regions face retention challenges that cannot be solved with more training alone; require transformation of working conditions, infrastructure and career prospects. This finding suggests that fragmented policies, focused on an isolated aspect of the problem, fail to break cycles of inequality that operate at multiple levels simultaneously.

The issue of primary health care emerges as a potentially transformative strategy, although it is often insufficiently implemented. When health professionals are present in remote communities, even with basic training, they are able to prevent diseases, identify problems early and refer complex cases to specialized centers. However, the implementation of primary care in remote regions faces structural challenges that cannot be ignored: lack of basic infrastructure, difficulty in recruiting and retaining professionals, insufficient funding, and professional isolation that discourages permanence. These challenges are not secondary; are central to understanding why primary care, although recognized as a fundamental strategy, remains underimplemented in remote regions.

The migration of health professionals from remote regions to urban centers is a phenomenon that continuously amplifies inequalities. Professionals trained in remote regions often migrate to cities in search of better conditions, creating a brain drain that leaves these regions even more deprived. This process is not the individual fault of professionals who seek to improve their lives; It is a structural failure of systems that do not create sufficient incentives for retention. The question that arises is whether it is ethical to allow professionals trained with public resources to migrate to urban centers, leaving communities that have invested in their training even more vulnerable.

The ethical question that emerges from this reality is disturbing and cannot be avoided: is it acceptable that geographic location of birth determines probability of survival? That death is not only possible, but probable, simply because someone was born far from urban centers? That women die in childbirth that would be easily treatable in urban contexts? Which children succumb to preventable infectious diseases? These questions are not rhetorical; These are issues that should guide public policies and decisions on resource allocation. The unequal distribution of health workers is not a technical problem that can be solved with more training or technology; It is a political problem that requires a willingness to redistribute resources, to recognize that health is a fundamental human right, not a commodity to be allocated according to market logic.

The contributions of this study are situated in multiple dimensions that transcend academia. First, it offers a comprehensive overview of the state of the art on the geographic distribution of health professionals and its impacts on mortality and morbidity, identifying convergences and divergences in the contemporary literature. Second, it articulates often separate perspectives: technical, pedagogical, ethical, and political impacts, demonstrating that adequate understanding of unequal distribution requires an integrated approach that recognizes the complexity of the problem. Third, it problematizes simplistic narratives that present technical solutions as sufficient to solve a problem that is fundamentally political.

Fourth, it provides the basis for informed public policies that seek to integrate territorial equity in health in a responsible and structural way.

The limitations of this research deserve explicit and honest recognition. The restriction on publications in Portuguese and English potentially excludes relevant contributions in other languages that could offer different perspectives. The focus on academic literature leaves aside reports from non-governmental organizations, public policy documents, and practical knowledge from health professionals and remote communities that experience this reality on a daily basis. The search period limited to seven years, while sufficient to capture recent trends, may set aside historical perspectives that contextualize contemporary debates. There is possible publication bias, where studies with positive results tend to be more published than studies that did not find significant effects of interventions.

The prospects for future research point in multiple directions that deserve in-depth investigation. Longitudinal studies that follow health professionals throughout their careers would provide more robust evidence on factors that determine permanence or migration from remote regions. Research that specifically focuses on the experiences of health workers in remote regions would help to understand the real barriers they face and possible solutions. Investigations into comparative public policies between countries would provide insights into approaches that can reduce territorial inequalities. Studies that examine ethical and justice implications in depth would contribute to the development of normative frameworks that guide the allocation of resources in health.

The integration of territorial equity in health is not an isolated technical issue, but a civilizational challenge that touches the heart of how we conceive justice, human rights, and collective responsibility. When implemented in a reflexive way, with attention to the ethical, political, and structural dimensions, the redistribution of health professionals expands life possibilities for remote populations, allowing geographic location to cease to be a death sentence. When neglected, as it has been historically, it perpetuates cycles of inequality that make premature death the norm for vulnerable populations. The question that arises is not whether to redistribute health professionals, but how to do so in a way that recognizes the fundamental right of all people to life-saving care, regardless of where they are born.

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