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# JAIME BREILH'S CRITICAL EPIDEMIOLOGY THOUGHT AND MICHAEL HARVEY'S POLITICAL ECONOMY OF HEALTH

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## Summary

In this critical essay, a theoretical reflection was carried out on the relationship between the capitalist system and social and health inequities, through one of Michael Harvey's studies on the political economy of health in the light of the critical thinking of Jaime Breilh, a prominent author of critical epidemiology originating from the Latin American movement of social medicine/collective health. The text is structured in three parts. The first describes a brief intellectual and political-institutional biography of Michael Harvey and Jaime Breilh in order to situate them historically. The second describes and explains Michael Harvey's thinking when analyzing the political economy of health. The third discusses the value of Jaime Breilh's critical epidemiology thought. Finally, it is possible to understand the conjunction of ideas of these authors in the discussion of social and health inequities reproduced by the capitalist system, allowing us to advance, from a historical-critical perspective, in the broad and in-depth analysis of the social and health reality.

**Keywords:** Epidemiology; Health policy; Social medicine; Economy and health organizations.

## O PENSAMENTO DA EPIDEMIOLOGIA CRÍTICA DE JAIME BREILH E A ECONOMIA POLÍTICA DA SAÚDE DE MICHAEL HARVEY

**Resumo:** Neste ensaio crítico, realizou-se uma reflexão teórica sobre a relação entre o sistema capitalista e as iniquidades sociais e em saúde, através de um dos estudos sobre economia política da saúde de Michael Harvey à luz do pensamento crítico de Jaime Breilh, autor destacado da epidemiologia crítica originada do movimento latino-americano da medicina social/saúde coletiva. O texto está estruturado em três partes. A primeira descreve uma breve biografia intelectual e político-institucional de Michael Harvey e Jaime Breilh a fim de situá-los historicamente. A segunda descreve e explica o pensamento de Michael Harvey ao analisar a economia política da saúde. A terceira discute o valor do pensamento

## EL PENSAMIENTO EPIDEMIOLÓGICO CRÍTICO DE JAIME BREILH Y LA ECONOMÍA POLÍTICA DE LA SALUD DE MICHAELHARVEY

**Resumen:** En este ensayo crítico, se realizó una reflexión teórica sobre la relación entre el sistema capitalista y las iniquidades sociales y en salud, mediante uno de los estudios sobre economía política de la salud de Harvey, a la luz del pensamiento crítico de Breilh, destacado autor de la epidemiología crítica originada del movimiento latinoamericano de medicina social/salud colectiva. El texto está estructurado en tres partes. La primera describe una breve biografía intelectual y político-institucional de Harvey y Breilh para situarlos históricamente. La segunda describe y explica el pensamiento de Harvey al analizar la economía política de la salud. La

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| da epidemiologia crítica de Jaime Breilh. Por fim, compreende-se a conjunção de ideias desses autores na discussão das iniquidades sociais e em saúde reproduzidas pelo sistema capitalista, permitindo avançar, desde uma perspectiva histórico-crítico, na análise ampla e aprofundada da realidade social e sanitária.<br><br>**Descritores:** Epidemiologia; Política de saúde; Medicina social; Economia e organizações de saúde. | | tercera discute el valor del pensamiento de la epidemiología crítica de Breilh. Finalmente, se comprende la conjunción de ideas de estos autores para discutir las iniquidades sociales y en salud reproducidas por el sistema capitalista, permitiendo avanzar, desde una perspectiva histórico-crítica, en el análisis amplio y profundo de la realidad sociosanitaria.<br>**Descriptores:** Epidemiología; Política sanitaria; Medicina social; Economía y organizaciones sanitarias. |


## INTRODUCTION

The political economy of health has been constructed in recent decades as a field of political economy in general, consisting of relatively recent debates. The same can be said about critical epidemiology, which, similarly to the former, began to be proposed in Latin America by a group of scholars. They start from reflections on conventional epidemiological practice that fails to explain the health-disease process in depth. Thus, it is due to the perception of important dialogues between two authors, each representing one of these fields, that the present work is justified.

With the course of political economy studies, health issues were addressed indirectly, but progressively gaining greater visibility, in the context of the centrality of the debate on labor issues under capitalism. Health was indirectly linked to the workers' struggle for better working conditions and wages, as well as to the role of the State in this guarantee. The exploitation of labor and precarious working conditions, in addition to low wages, have conditioned poor health and lower survival of workers and their families. The classical economists were more concerned with the formation and distribution of value in industrial capitalism, disregarding any criticism of the contradictions of capitalism, disconnecting the social from the economic.[1]

Although health issues were not a concern of classical economists, they pointed out important elements, not explicitly, to discuss health inserted in the capitalist

production process, such as the reproduction of the labor force, working conditions, and the minimum subsistence wage. The productive process was placed at the center of the debate thanks to the development of the labor theory of value (labor is the source of exchange value), and this was articulated with the theory of income distribution (the participation of social classes in the distribution of the value produced in the production process: wages, income and benefits). The question about the minimum level of subsistence, which in reality expressed the concern for the reproduction of the labor force that would guarantee the expansion of capital, was indirectly linked to health issues, such as mortality and population births, as well as to population growth. In this sense, the most important social relationship was between capital and labor, and the question of health was derived from that relationship.[2.3]

Marx and Engels[1] criticized the political economy of that time, highlighting the contradictions of the capitalist mode of production and the antagonism between social classes. Still, health was not posed as an important issue *per se*, but only as a harmful consequence for the process of capital accumulation, but there was already a link between the capitalist mode of production and the health-disease process. Marx and Engels developed reflections on capitalism as a social relationship between capital and labor, in the conditions of the production process as a whole, allowing us to suppose that the capitalist mode of production explained and determined the health-disease process.[1]

In the nineteenth century, population epidemiological investigations were replaced by the control of infectious agents, with the unicausal model predominating. In the twentieth century, with the decrease in infectious causes and the increase in chronic degenerative diseases, **biological** and **social** ambivalence returned and the multicausal model prevailed, but in the latter model, social phenomena are not considered determinants of the disease process, being measurable from **individual** factors. In the middle of the twentieth century, the epidemiology of risk factors emerged, opening up a range of factors for their subsequent control. The criticism of this last model (risk) is the great value given to the choice and behavior of the individual, without considering the structural and political determinations of the social organization.[4]

Still in the twentieth century, in the 1970s, a critical movement emerged in preventive and community medicine and public health, focusing on social and economic factors as determinants in the health-disease process. In the twenty-first century,[5]

> [The] Social Determinants of Health have been defined as structural determinants and conditions of daily life responsible for most health inequities between countries and internally. They include the distribution of power, income and services and people's living conditions, and their access to health care, schools and education; their working and leisure conditions; and the state of their housing and environment.[5]

The concept of social inequity generally refers to situations that imply some degree of injustice, that is, differences that are unfair because they are related to social characteristics that put some groups at a disadvantage in relation to the opportunity to be and maintain themselves healthy. In the field of health, these inequalities are present in the health conditions of different groups, levels of health risks, differentiated access to resources available in the health system, and generate unequal possibilities of taking advantage of the scientific and technological advances that have occurred in this area, as well as different chances of exposure to the factors that determine health and disease and, finally, the different chances of illness and death. In the same way as social inequalities, health inequalities have persisted in all countries regardless of the degree of development achieved.[4]

Breilh[6] differentiates inequity from inequality, considering that inequality is an obstacle to access and right to health, a disparity in quality of life, while inequality (with **e**) is the lack of equity, the structured invisibility that prevents a human distribution that provides each one according to their needs and allows them to contribute to this society according to their capacity. And it proposes to incorporate the analysis of ethnicity and gender, social class in the determination of the health-disease process, since these are the three sources of inequities: class, ethnicity and gender. These three processes share the same origin, which is the accumulation and concentration of power, and have mechanisms of social reproduction that are interrelated.[6]

As a form of paradigm transition in epidemiology, the World Health Organization - WHO points to the social determinants of health, still based on a causalist view, but which is open to understanding the structure. In his studies, Breilh presents the understanding that in this view there is a classification of factors as variables and not as categories of

analysis of capital accumulation. It also defends the complexity of health, as a complex, socially determined phenomenon – a notion that is often neglected by public health – and that, therefore, should not be analyzed in a strictly individual and biomedical way.

In addition, the analysis is extended towards the inequality of health practice based on behavioral theories signaling the failure of interventions in structurally vulnerable populations, whose objectives would come from behavioral changes. As a result of this epistemological practice, in which broader social factors are understood as **non-modifiable risk factors**, social dynamics end up not being examined or, at least, challenged.[7]

In view of this, the objective of this essay is to carry out a theoretical reflection on the relationship between the capitalist economic-political system and social inequities in health, through one of Michael Harvey's studies on the political economy of health and the coincidences or divergences of this study with the thought of critical epidemiology by Jaime Breilh.

## JAIME BREILH AND MICHAEL HARVEY: A BRIEF INTELLECTUAL AND POLITICAL-INSTITUTIONAL BIOGRAPHY

Jaime Breilh is an Ecuadorian physician and researcher, born August 23, 1947, in Quito. Masters in Social Medicine graduated from the *Universidad Autónoma Metropolitana de México*, specialized in Epidemiology from the School of Hygiene of the London University, and PhD in Epidemiology from the Federal University of Bahia in Brazil. Breilh is one of the founders of the Latin American collective health movement and the most cited thinker in scientific articles between 2013 and 2017, according to a bibliometric study carried out by the *Universidad de Antioquia*, in Colombia.[8]

In the 1970s, workers, researchers and students in the health area questioned the developmental model, which was strongly implemented at the end of the 1960s and argued that economic growth should lead to an improvement in public health, a fact not evidenced in reality, and which showed, in fact, its deterioration. Breilh,9 was part of this movement and, at the end of his master's degree in 1977, published the "*Crítica a la interpretación ecológica funcionalista de la epidemiología: un ensayo para desmystizar*

*el proceso salud-enfermedad",* in which he mentioned that the debate on health and social problems were obliged to develop solutions to capitalist crises.[9]

The book "Epidemiology: Economics, Politics and Health"[10] is one of his most important and controversial works, discussed in several universities in Latin America. Breilh criticizes the work of Social Medicine and traditional Public Health, treating health-disease as a collective process in a society. The systematic study of the structural processes of society, the profiles of social reproduction related to the production and consumption of the different classes and fractions of classes, and the integral understanding of the biological phenomena that characterize health patterns, cited in his book, are highlighted. For Breilh, in this work, the analyses of the relationships established between groups of individuals and their connections should be used to understand epidemiology from the historical perspectives and from the perspective of social reproduction.[10]

Throughout his career, Breilh[10] has won awards as a researcher and author, due to his numerous published works, becoming a reference in universities and research institutions in epidemiology. His thinking does not refer only to health as a social production, but also to the ways in which capitalist society consolidates inequalities deeply linked to an **economy of death**, an excerpt he said in 2015, during one of his visits to Brazil where Breilh gave an interview at the "V Seminar of the National Front against the Privatization of Health". In this same interview, he agrees that the epidemiological model of the Theory of Risk Factors weakens the idea of social determination through fragmentation, making them less visible, generating health diagnoses that do not relate structural and living conditions of the population, but that focus on the phenomena surrounding the disease and justify a monopolistic practice and a functionalist health action.[11]

Jaime Breilh has been invited as a visiting professor at more than 40 universities in 10 different countries, which demonstrates his importance as a researcher and critic in epidemiology. Since the 2000s, Breilh has been a professor at the *Universidad Andina Simón Bolívar*, in Quito, Ecuador. At the same university, he was Director (2006) and Coordinator (2008) of the Health Area and of the doctorate in Health, Environment and Society.[12]

Michael Harvey is a professor in the Department of Administration and Policy at the Health Service at *Temple University*, Philadelphia-Pennsylvania. His academic background includes a doctorate in public health from the University of California, *Berkeley*, a master's degree in public health from the University of Pennsylvania, and a bachelor's degree in English from *Temple University*. He teaches courses on global public health, U.S. health systems, social and behavioral health theory, and social determinants of health. The studies conducted by Dr. Harvey are focused on public health education, social theories of health inequality, political economy of health, among others.[13]

Harvey is part of the Doctor *of Public Health Coalition* (DrPH), whose goal is to strengthen public health practice, create a healthy and equitable world, where public health, led by a community of trained public health professionals, is an integral part of social change.[13]

In 2016, Harvey outlined a theoretical and methodological approach to conducting politics in the analysis of health systems economics that draws on the traditions of political economy of health and social medicine, in order to explain the multiple approaches to conducting political economy analysis and confusion over the term in health. Her research was due to the growing interest of researchers in health systems and particularly in the debate for the achievement of universal health coverage within low- and middle-income countries.[14]

## MICHAEL HARVEY'S INTERPRETATION OF HEALTH IN THE TWENTY-FIRST CENTURY AND ITS INEQUALITIES

Harvey[15] affirms the need to know the Marxist origins of the political economy of health in order to address health inequities in this century. For the author, political economy refers to the combined and interacting effects of economic and political structures, as well as their study. The beginning of the study of political economy takes place with the rise of the capitalist economic-political system. Politics creates and shapes the economy and cannot be separated. In turn, politics is formed by economic relations and economic power.

The study of political economy focuses on political-economic systems or the different forms of organization of political and economic life and the impact of this

organization on the production, distribution and consumption of goods and services. These systems include the organization of production (ownership and control of the means of production) and the conditions associated with the production process (working conditions), distribution (inequality and inequity) and the degree of access to social protection (or welfare), as well as the analysis of consumption (which goods and services are available and to whom).[15]

The political economy of health refers to the extension of the study of political economy and political-economic systems in the field of health, to explore the relationship between these themes and the changes in epidemiological distributions over time. Thus, Harvey[15] points out that the connections between political economy and health are very well characterized in the literature on the history of public health.

Harvey[15] criticizes the fact that political economy is not referenced in the public health literature, despite the relevance it has in the understanding of health, as well as in inequalities – inequities – in health. However, it also clarifies that, although it is pointed out in some text, it is not always defined, and when it is defined, it has divergences, which becomes more problematic, because the various theoretical currents, such as Marxists, neoclassicals, Keynesians, neoliberals, etc., use this term in very divergent ways.

Regarding the origin of the political economy of health, Harvey[15] points out that this term emerged in the 1970s, and that it commonly referred to a broadly Marxist approach to scientific-social analysis. He reaffirms that the political economy of health is closer to the works of Karl Marx, Friedrich Engels and the Marxist theoretical tradition.

Even so, the early works on the political economy of health by Waitzkin (*The Exploitation of Illness in Capitalist Society*, 1974)[16], Vicente Navarro (*Medicine Under Capitalism*, 1976)[17], Doyal and Pennell (*The Political Economy of Health*, 1979)[18], Laurell (*Work and health in Mexico*, 1979)[19], and Breilh and Miño (*Epidemiology: Economics, Politics and Health. Bases Estructurales de la Determinación Social de la Salud*, 2010)[20] are explicitly situated in the Marxist theoretical tradition, incorporating categories such as classes, class struggle, material inequality, exploitation, capital accumulation, working conditions, organization of production, imperialism and underdevelopment.[15]

However, the origin of political economy in health can be traced back to Engels' work in "The Condition of the Working Class in England",[21] written in 1845. In this book,

Engels[21] studied the effects of the development of industrial capitalism on the health of workers and their families in Manchester, England, showing how the social and working conditions produced by this mode of production resulted in widespread suffering and premature death among workers, while also producing excessive wealth for the capitalist class. Engels[21] used the term "social murder" [to] explain this terrible situation:

> During the period that I remained in England, the direct cause of the death of twenty or thirty persons was starvation, in the most revolting circumstances; but at the time of the inquiries a jury was seldom found which had the courage to test it in public. The testimonies of the witnesses could be the clearest and most unequivocal, but the bourgeoisie – to which the members of the jury belonged – always found a pretext to escape the terrible verdict: death by starvation. In such cases the bourgeoisie must not tell the truth: to pronounce it would be tantamount to condemning itself. Much more numerous were the deaths caused indirectly by hunger, because the systematic lack of food causes deadly diseases: the victims were so weakened that diseases which, in other circumstances, might have progressed favorably, in these cases determined the severity that led to death. This is what the English workers call social murder and accuse our society of continuously practising it. Are they wrong?[21(57-58)]

So important was Engels's book,[21] that Harvey[15] points out that it profoundly shaped Marx's thought, relying on David McLellan, the greatest historian of Marx, who claimed that this book is the foundational document of what would become the Marxist socialist tradition. Yet, Richard Horton, the editor of *The Lancet*, has stated that public health is the midwife of Marxism.[15]

The origins of the political economy of health are also associated with nineteenth-century European and Latin American social medicine, and the works of Rudolf Virchow and Salvador Allende (along with Engels) made the greatest contributions to understanding the social origins of disease.[15]

Rudolf Virchow was an English physician, and he wrote about the material conditions in which diseases arise and how political and economic forces prevented social reforms aimed at alleviating poverty, food insecurity, and the poor living and working conditions among the poor and the working class.[15] Breilh,[10,22] in agreement with Harvey,[15] highlights the importance of Virchow's work in the political economy of health, placing this work in the economic, political, and social context of the evolution of epidemiological paradigms, explaining how the confrontation arising from the transition from absolutist to liberal regimes (beginnings of pre-monopoly capitalism) was also

reflected in the health environment and epidemiological practice with the confrontation between the defenders of conservative **contagionism** (with the medical police as precedence) *versus* the defenders of the political economy of health and the progressive miasmatic theories.

Salvador Allende was a Chilean physician, minister of health and president of the Republic of Chile, and wrote the report "*La realidad médica social chilena*",[23] in which, following the perspective of Engels and Virchow, he identified the organization of work and the working and living conditions of the working class as responsible for its disproportionate burden of disease.[15] Breilh,[22] in agreement with Harvey,[15] also highlights the work of Allende,[23] pointing out that he recognized the relationship between political economy, disease, and suffering by focusing his study on the role of imperialism, underdevelopment, and the need for structural change in the life of the working class to reduce health inequalities.

In addition, Breilh[10] highlights another Latin American author who contributed to clarifying the social origin of diseases, the Ecuadorian physician Eugenio Espejo, who in his work "*Reflections on contagio y la transmisión de las Viruelas*",[24] written at the end of the eighteenth century, already had epidemiological arguments that intertwined the categories of economics, politics, and health. Espejo[10] developed his ideas on the 'harmful powers' and 'predispositions' to explain the differences in the distribution of diseases in the population, such as the problems of 'popular air' in poor housing and urban areas, and the economic difficulties of 'food and drink', due to the scarcity of food generated by the farmers intermediaries who made their 'purse' at the expense of the misery and hunger of the public.[10]

On the other hand, Harvey[15] points out that among Marxist authors there is a generally shared understanding of the political economy of health. The concept that Harvey[15] uses to explain the political economy of health is based on the study he made of the concepts used by Raphael and Bryant,[25] Krieger[26] and Baer.[27]

Raphael and Bryant[25] State that the political economy of health explains how the health of a population is determined by the way society produces and distributes its resources, for this, they use categories such as the production and distribution of wealth, the relative political power of social classes, the accumulation of capital, the organization

of work, state control and market control in the distribution of wealth, etc. On the other hand, Raphael and Bryant[25] explain political economy by referring to the economic-political systems that distribute resources according to the relative levels of power that people and institutions are capable of exercising in a society, and whose **imbalance** leads to greater inequity and lower health of the population.

Krieger[26] highlights the importance of the theory of the social production of diseases or the political economy of health in contemporary social epidemiology, citing Breilh among its main authors. In this sense, Krieger[26]states that economic and political institutions and their decisions that contribute to the maintenance of the economic and social privileges of the dominant classes are the fundamental causes of health inequities. However, the issues behind these inequities are the relentless pursuit of greater capital accumulation and the role of the state in ensuring it. Therefore, one of the concerns of the political economy of health is the understanding of how the capitalist political-economic system, in its voracious hunger to maximize its profits, harms health, evidenced in the precarious conditions of health and safety at work, the overexploitation of labor, the contamination of the environment and the depredation of nature, and in the commodification of almost all human needs.[26]

Baer[27] points out that the objective of the political economy of health is the analysis and understanding of health issues in the context of class and imperialist relations typical of capitalism. It divides the study of the political economy of health into two areas: the political economy of disease and the political economy of health care. The first is responsible for the study of the social production of diseases, as a by-product of the capitalist economic-political system; while the second is responsible for the study of the impact of the capitalist mode of production on the production, distribution and consumption of sanitary resources, and how this distribution is a reflection of class relations in capitalist societies. Both areas would be intertwined, with the analysis of one being influential on the understanding of the other.[27]

Other authors emphasize the role of class and class struggle in the configuration of power relations between capitalists and workers. The balance of power in this class struggle shapes the character of the political-economic system, which in turn shapes social inequities in general and in health. In this sense, Harvey[15] points out that, when

members of the working class are organized, they can materialize their material interests in social and political changes (establishment of social welfare systems and universal and redistributive social policies, for example, in the sphere of work, health, education, *etc.*), which results in apparent changes in the capitalist political-economic system.

For this reason, Harvey[15] highlights the importance of empowering the working class, for example, through political organizing, increasing union density, and labor unrest, such as participation in strikes and broad-based union movements, and the struggle against exploitation, oppression, hierarchy, and injustice. Even so, it recognizes that the general struggle of the working class must include the specific struggles of feminists, anti-racists, immigrants, the lesbian, gay, bisexual, transgender, *queer* and intersex community, people with disabilities, *etc.*, recognizing them as historically marginalized and oppressed social groups, as well as exposed to excessive material deprivation and complex forms of discrimination and exploitation within the framework of the work and society in general.[15]

However, Harvey[15] recognizes that these **social and political changes** won by the working class are only concessions of the capitalist class and the capitalist state. He points out that we must go beyond this, and think of alternative political-economic systems, which implies extending democratic control beyond the political, economic, and labor spheres, which are currently controlled by corporations, their capitalist owners, and high-level managers, and who organize themselves (and **society**) according to their own interests rather than those of workers and social welfare.

> Economic decisions about what to produce, how to produce it, and how to distribute those products would be, at least in part, driven by issues of social necessity and distributive justice, rather than commodity exchange and profit maximization.[15(297)]

Harvey[15] also addresses the issue of race in the political economy of health, as a new theory in development, when he addresses the issue of Race *versus* Class and explains the relationship between racism and capitalism, imperialism and colonialism. From the Marxist approach, we have that racism is useful to capitalism. It serves as a barrier to the unity of the working class, keeping it divided. It facilitates the exploitation of the underclass of racialized workers. In addition, there is also the development of a racist ideology, which attempts to rationalize and justify racial hierarchy through biological,

behavioral, cultural, or moral factors. In this way, racism can be considered a tool in favor of capitalism, favoring the exploitation of labor and the weakening of the working class, being, therefore, decisive in the generation of social inequities, including health.

In more recent publications, Harvey[28] affirms the importance of various critical social theories to analyze and understand the health-disease process inserted in a social reality, as well as its critical explanatory role in public health, in addition to the political economy of health, which provides a theoretical framework to explain the relationship between economic-political systems, the class structure, political power and the unequal distribution of morbidity and mortality in the population.

In this sense, Harvey[15] highlights Breilh's theory of the social determination of health, and places it in opposition to that of the social determinants of health explained by the WHO, which has a restricted theoretical explanation of the conditions in which people are born, grow, live, work and age, their origins, how they are maintained, how they are socially legitimized, and what could be done to change them. In this way, he will agree with Breilh's statement that this theory systematically separates the empirically observable and measurable social **risk factors** from social theory and that it can explain them, thus concealing the complex dialectical social processes and power relations from which these **risk factors** arise and by whose logics resources are unequally and unjustly distributed.[28]

Along the same lines, in his most recent book "*Critical Epidemiology and The People's Health*", Breilh[22] recognizes the importance of political economy, including it as one of his categories of analysis to analyze and understand the transdisciplinarity and complexity of health, from the critical epidemiology approach. In this proposal, he will explain that the object of study of critical epidemiology encompasses and articulates multiple dimensions: of society in general, of its particular ways of social life, and of its personal daily processes, in order to understand the socially determined forms of embodiment – bodily and psychological – one of which is diseases.

> On a general level, critical theory of space, society, and culture, together with political economy, deals with the processes of social reproduction by capital accumulation, its spatial elements, and general political and cultural relations. Critical ecology and political ecology, as disciplines that study metabolic movement in specific places in society, also participate in the understanding of general determination. At the particular level, the goal of sociology and

> critical anthropology is to deal with social class, gender, and ethnic processes of social determination; subsequent ways of life; and the incorporation of exposure and vulnerability patterns. At the individual level, the goal of critical anthropology is to understand the determining movement of personal lifestyles, while critical biology, social psychology, and clinical psychology aim to understand the terminal pathways of physiological and psychological incarnations.[22(192)]

## THE THOUGHT OF CRITICAL EPIDEMIOLOGY BY JAIME BREILH

Breilh[10] makes a critical analysis of medical practice, relating it to central characteristics of capitalism. He points out that epidemiological models have come to guide a predominant biological bias, disregarding the economic-social phenomenon for understanding the dynamics and determination of health-disease phenomena.

According to Breilh,[10] the epidemiological thinking inscribed in the contagionist line presupposes that health should be regulated and supervised by the State for the benefit of society, in all spheres of human activity.

Breilh[10] will reaffirm the instrumental character of medicine and epidemiology for the development of capitalism throughout history. During the nineteenth century and the first decades of the twentieth century, the imperialist expansion of European countries and, later, of the United States in regions of Asia, Africa and Latin America, motivated by the extraction of raw materials, caused the emergence and increase of tropical infectious diseases in the workers of these regions, due to the enormous construction of land accesses and, in turn, the greater destruction of nature, associated with spoilage forms of work, as well as exposure to new pathogens.

The investigation of tropical infectious diseases from the microbiological point of view was understood as one of the solutions with the lowest price and adequate to capitalist thinking. Thus, it was decided to support schools and institutes with technical and financial support, since aggression against man for supposedly natural causes exonerates the dominant classes from responsibility for their illness. Medicine was placed at the service of capitalism, in a context of the greatest productivity in the history of humanity, but also of greater destruction of its fundamental resource: the human workforce.

The development of microbiology is considered the greatest discovery of medicine, by modifying the concepts about the causality and treatment of most diseases. And so, in the phase of consolidation of capitalist monopolies, it allowed their imperialist expansion, by taking to underdeveloped countries programs for the eradication of yellow fever and malaria, for example. The Rockefeller group was one of the pioneers in this regard. Despite the apparently humanitarian nature of these projects, they were actually aimed at maintaining the productivity of the units set up in their new colonies. In addition, the guidelines of Institutes such as the Harvard Fatigue Laboratory spread through health institutions putting into practice the Principles of Flexner's Reform. In this way, a new type of medical practice based on hospital infrastructure and technological innovations was consolidated, opening a long period of biological and scientific predominance. In this context, it broke the links with the social.[10]

Thus, the scientific-hospital model achieved maximum articulation with the needs of the capitalist mode of production through the large hospitals, initially belonging to social security. These functioned as instruments of conciliation, absorbing the demands of workers who demanded better health conditions and the requirements of capital to repair the sick workforce.[6]

Epidemiology, as a science as it was created – essentially biologizing – has gone through different stages both in the focus given to diseases and in the way it was conceptualized. In this sense, the model was essentially based on **causalism**. The starting point was the unicausal theory, when the disease was considered the product of a pathogenic agent, and the multicausal theory, when several factors are considered in the disease process, including the view of the ecological triad of Leavell and Clark. [6]

Contrary to this biologizing movement aimed at meeting capitalist interests, a new epistemological project began to develop in the early 1970s. The authors belonging to this movement argued that conventional practices, by considering risk factors as a key point in the production of health knowledge, would be limited in the in-depth explanation of the health-disease process, by analyzing individuals in isolation. It would be, therefore, a linear and fragmented logic, by visualizing in a non-dialectical way the individual effects suffered as a function of external factors.[6]

In this sense, the construction of a critical epidemiology required extrapolating the analyses of care with individual processes of well-being centered on the biological and genetic to the challenges inherent to social processes and the relationship with work. Breilh[10] points out that critical epidemiology went through several stages, influenced by the international movement and by the maturation of the theoretical-methodological discussions that were presented.

At the beginning of the 1970s, the central categories were on the basis of a **new objectivity in epidemiology**. In this first moment, the criticism was focused on the discussion of the positivist model of thinking about health based on the examination of **risk factors** and **causalism** as structuring. The debate aimed to advance from **causalism** and risk theory to the conception of determination.[6]

Between 1991 and 1995, we sought to analyze the effects of the triple inequity in the determination of health – social, gender and ethnic class inequity. During this period, categories such as social reproduction, way of life, social classes, and epidemiological profile were added to the idea of determination, expanding the critical view developed until then.

Finally, in the period that begins in 1995 and continues to the present day, Breilh's studies of critical epidemiology[6] were concentrated on the construction of a **popular neo-humanism and a new subjectivity**. In this phase, epidemiology broadens the critical sense about the subject and proposes to relate science to the new conception of gender according to a social metacritical perspective and intercultural praxis.

The debate traced since the 1970s allows us to observe the path that critical epidemiology initially followed in the discussion of its object, rediscussing and structuring it from a new perspective; subsequently, the subject of its action was reconstructed and, finally, the articulation of these two **new** elements, through the movement of a metacritical and intercultural epidemiology.[29]

## FINAL CONSIDERATIONS

This essay presents a theoretical reflection on the thought approaches of Michael Harvey and Jaime Breilh. Harvey, on the relationship between the capitalist economic-

political system and social inequities in general and in health discussed in the light of the political economy of health and Breilh on critical epidemiology.

The critical epidemiology, discussed and developed by Breilh, seeks to extrapolate the analyses of care with individual processes of well-being centered on the biological and genetic to the challenges inherent to social processes and the relationship with work. The debate contributes with arguments that go against those of biologizing epidemiology, which is still persistent and which bases the practice of medicine as a response to capital, in models centered on the individual, of high technological specialization and in the hospital environment.

Harvey's reference text revisits Marxist theory in a dialogue with authors who ground the origins of political economy and, subsequently, the political economy of health to address the way public health has positioned itself in the twenty-first century in the face of social and health inequalities that persist despite the degree of development achieved. In this sense, Breilh enriches the discussion by differentiating inequity from inequality. He considers that without this distinction, strategic analysis is centered on inequality and its effects, without focusing on its determinants, understanding that inequality is actually the expression of inequality. Inequality is relevant evidence in statistical data, but for its proper understanding it is necessary to unravel the inequality that produces it. He describes this difference in detail:[6]

> [...] inequality is an injustice or inequity (i.e., with i) in access, an exclusion produced in relation to its benefit, a disparity in the quality of life. While inequity (i.e., with and) is the lack of equity, which is an inherent characteristic of a society that impedes the common good, and institutes the unfeasibility of a human distribution that provides for each one according to his need and allows him to develop fully according to his capacity.[6(201)]

The contributions brought by the authors advance by analyzing man as a complex subject who is inserted in a reality that is constantly changing and therefore requires a critical look at his relationships with the other and with the environment. The process of illness, the discussions about public health and its mode of intervention require a critical look to meet the needs that are imposed.

## AUTHORIAL CONTRIBUTION

ANM, BCF, CBS, HHR, LGWA, MAZO and SHA carried out conceptualization, methodology, research, writing – original draft, writing -review and editing and visualization in an equal way.

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