

PREVENTIVE MEDICINE AND SOCIAL INEQUALITY IN TIMES OF COVID (*)

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The health prevention model elaborated by Leavell and Clark (Figure 1) and adopted by the World Health Organization (WHO) for the public health management of UN member states from the 1960s to the 1970s attributes specific importance to the role of preventive medicine, whose epistemological vigor derives from the idea of expanding medical practice to encompass society's collective health.

The "natural history of diseases" is the methodological reference for Leavell and Clark's preventive model (1978). The combined nature of agent, host, and environment compose an epidemiological triad on which the model is based. Its time/space range of action is presented in two categories for the analysis of: medical actions (individual); and public health actions (collective). The first category represents the pre-pathogenic period, during which preventive action is taken at individual and collective levels in two domains: interventions to prevent diseases; and the promotion of the general health of the population (for example, vaccines would be an asset of high

scientific value for the benefit of public health). The second category is the pathogenic period, during which the disease, already contracted, is treated, with five possible outcomes: cure, rehabilitation, convalescence, disability and death.

In the 1970s, Sérgio Arouca criticized Leavell and Clark's preventive model, exposing the shortcomings in its application to peripheral countries such as those in Latin America (Arouca 2008). Arouca argued that the question of disease prevention should first be approached with consideration to factors of social inequality. In this regard, the idea of health care as a human right upheld by state policy served as a counterbalance to free market approaches to the provision of health care goods and services. Under these circumstances, in addition to working as a physician and a public health expert, Arouca became an organic intellectual (in the Gramscian sense). As a congressman, he was active in creating the Unified Health System (SUS) in Brazil, which has played an important role in fighting against social injustice in Brazilian society for 40 years. It was also in this historical context

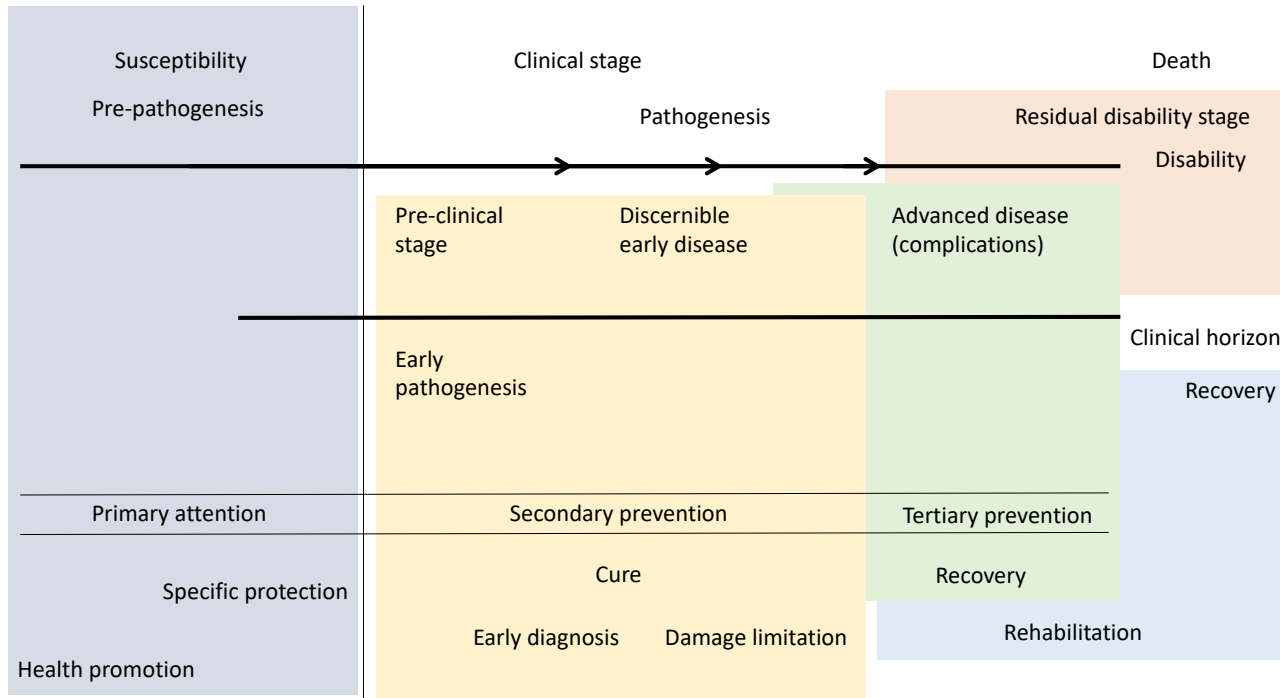


Figure 1. Natural History of Disease Model (Pereira 2018, p. 35, adapted from Leavell and Clark 1978)

that Arouca helped structure the field of Collective Health in Brazil, expanding the possibilities of a critical understanding of the health sciences. Departing from the traditional core fields in the study of public health (epidemiology, biostatistics, among other prominent subfields in the health sciences), professionals in the study of humanities (principally sociology and philosophy) began to investigate healthcare from the perspective of their respective fields, and produced new approaches to knowledge production in the area of the health sciences⁽¹⁾.

In the modern history of medicine and public health, since the creation of the UN in 1945, various health crises have tested the reliability of health care models in their ability to direct the public policy of its member states. The AIDS epidemic, for example, offered a revolutionary moment in the history of public health in Brazil, bringing about new and updated health care models, where social scientists were (and have been ever since) called to participate in adjusting these models to adhere to the SUS's commitment to social justice, considering the provision of humane care, as well as access to medication and other health assets and services. Through that epidemic, the consideration of risk for specific groups within society was brought to the forefront, forcing a recognition of biases within the scientific field.

At the same time, the unprecedented public health crisis of the COVID-19 pandemic has tested the reliability of the two presented models. Even in a time of great biotechnological advancement, health systems have failed to contain the virus. In 2020, these models have been tested in their efficiency in controlling the spread of the disease and, more specifically, this outbreak has tested their usefulness in a preventive approach to medicine.

Leavell and Clark's model of preventive medicine shifts the focus away from particular aspects of treatment toward a broader understanding of the natural history of the disease. Preventive interventions were compromised when social distancing had to be imposed through political intervention. Arouca's model accepts some of the guidelines of Leavell and Clark's model in regard to the treatment of infectious diseases but further presents the consideration that, in highly unequal countries such as Brazil, social distancing must be adjusted to social determinants that impact the risk level when assessing this concept of prevention. For example, a Favela community may be more vulnerable than specific at-risk groups such as the elderly. The social history of patients, and other social determinants outside of the health care system, can be more important than biological determinants assessed by biomedicine in calculating relative risk. While the control of the spread of disease itself falls into the realm of the life sciences, social sciences and the humanities are necessary in determining the real needs of the population in the context of the pandemic – socially, politically, and economically.

Notes

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(1) In this direction, see Puttini et al (2010).

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