

Four reasons for adopting a life course approach to health in the COVID-19 era and beyond

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ABSTRACT The life course approach effectively responds to pressing health needs and fills critical gaps to improve health outcomes in the era of COVID-19 and beyond. This article outlines four main reasons to adopt and implement the life course approach in public health at national and local levels: (i) the approach effectively responds to new health trends and evidence, (ii) it fills longstanding gaps in care, (iii) it best addresses health inequities, and (iv) it can help achieve more with less.

Keywords Public health practice; equity.

The life course approach (LCA) to health is a multidisciplinary model that offers a comprehensive understanding of health trajectories and transitions, taking into account the changes occurring in individuals and populations within their structural, economic and social contexts. The World Health Organization and the Pan American Health Organization (PAHO) have been leading efforts in incorporating the LCA into institutional mandates, plans of action and technical cooperation strategies. However, these efforts must be translated into local actions to effectively improve health and well-being for all. As a result of these efforts, PAHO released *Building health throughout the life course: concepts, implications and application in public health* (1). This document offers a newfound understanding of the meaning of and concepts underpinning the life course that is essential to recognizing how health develops and changes throughout life, and it serves as a tool to operationalize theory according to local contexts (1).

In the era of coronavirus disease 2019 (COVID-19), implementation of the LCA is more important than ever. The COVID-19 pandemic has placed immense pressure on health systems and has significantly changed the contexts in which individuals live, thus impacting health trajectories. Health interventions guided by the LCA better respond to these changing contexts, working

across the age spectrum to also meet the interrelated needs of families and communities. The impact of the LCA depends on the reliability of the scientific knowledge that sustains it, and on its implementation, to strengthen public health systems and practices. With the aim to encourage incorporating the LCA into public health practice, we outline four main reasons to adopt it into and implement it in public health at national and local levels.

FOUR REASONS TO ADOPT THE LIFE COURSE APPROACH

1. It effectively responds to new health trends and evidence

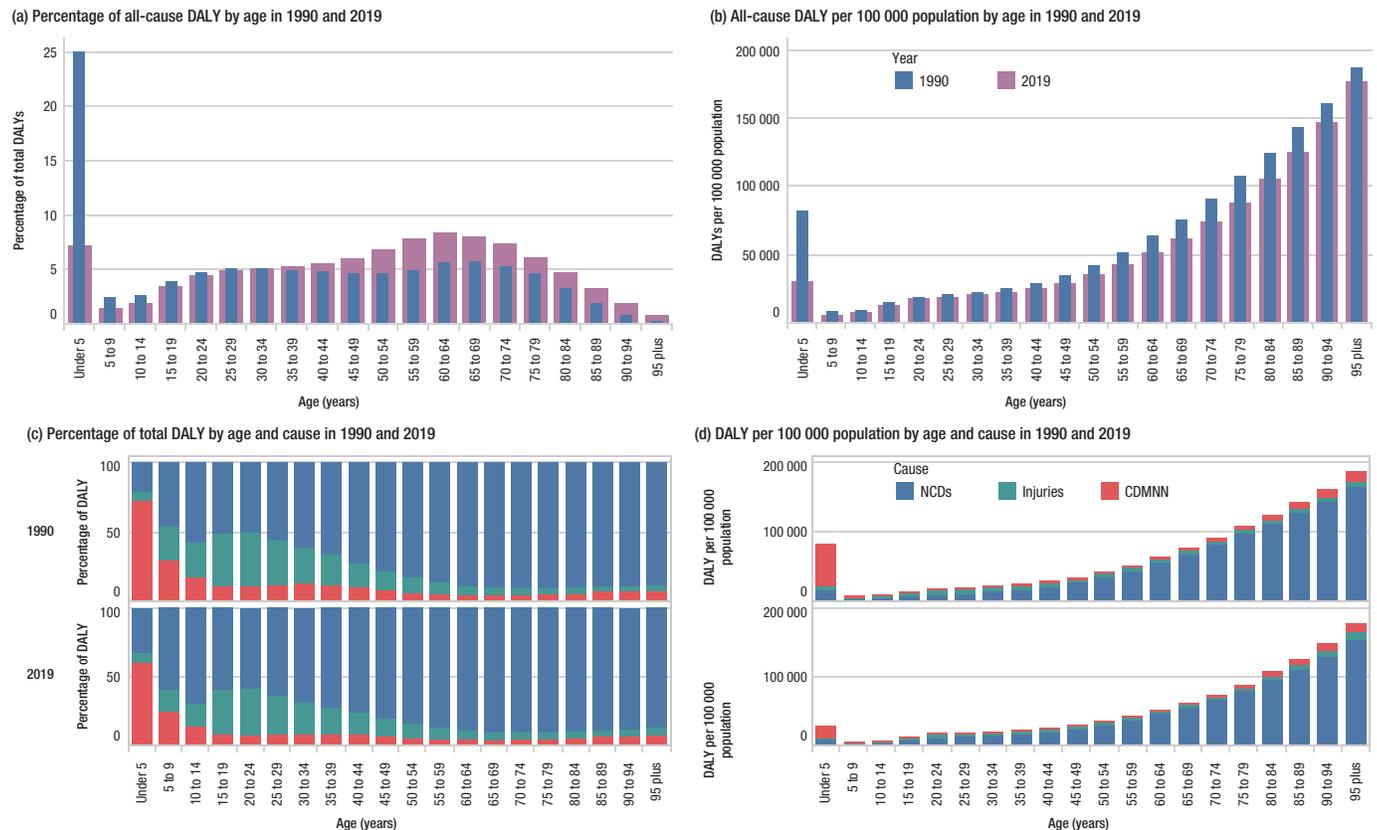
New demographic, epidemiological and social trends have created an intricate set of scenarios that have exposed complex health and social needs. In Latin America and the Caribbean, it is expected that the proportion of the population aged 60 years and older will more than triple between 2010 and 2050 (2). Population ageing, urbanization, commercial determinants of health and changes in lifestyles have contributed to a shift towards chronic disease (Figure 1), and longer

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FIGURE 1. Health burden shifted to adult ages, with a predominance of noncommunicable diseases and chronic conditions: disability-adjusted life years by cause and age for both sexes combined in the Region of the Americas, 1990–2019^a



CDMNN: communicable diseases, maternal, neonatal and nutritional conditions; DALY: disability-adjusted life year; NCDs: noncommunicable diseases.

^a Causes are grouped according to the GBD cause list using the level-1 cause categories: CDMNN, NCDs and injuries. For information by country, visit the interactive visualization available at: <https://www.paho.org/en/topics/healthy-life-course/demographic-and-epidemiological-transition-throughout-life-course>

Source: Figure created by the authors based on data from the Global Burden of Disease Study (GBD) 2019, extracted from the publicly available data from GBD Results (<https://vizhub.healthdata.org/gbd-results/>).

lives and socioeconomic improvements have been accompanied by changing family structures, with more generations now living in the same home (3). These trends have a dynamic relationship with COVID-19, which presents in a severe form in patients with pre-existing chronic conditions and has created disruptions in chronic disease care (4). All of these trends have altered the context in which health is conceived.

Building health throughout the life course presents evidence about how health and disease have evolved alongside these demographic, epidemiological and social trends. Research has revealed a matrix of positive and negative factors that influence trajectories throughout various periods of life and lead to health outcomes later in life. These factors – which range from environmental exposures to social context, and have undergone significant transformation alongside the COVID-19 pandemic – account for 70% of health outcomes and highlight the importance of social epidemiology and the social determinants of health (5). Furthermore, evidence has emerged about the influence that different generations have on one another and how linked lives impact health trajectories and outcomes across the life course (1).

The changing health landscape and mounting evidence of diverse health risk factors necessitate a shift in our public health approach. The LCA offers an improved interpretation of the dynamic health needs of people and populations because it

integrates the notions of biological, developmental and social factors, and their interrelationships throughout life in people and populations. Central to meeting these dynamic health needs are the LCA's proactive methods that work to build capacities rather than simply mitigate disease. For example, policies and programs that equip families with the knowledge, skills, time and resources to provide nurturing care to children, such as paid parental leave or breastfeeding programs, reduce the burden of risk for poor developmental outcomes and support the achievement of the highest levels of intrinsic capacity. Furthermore, interventions that support social development, opportunities for lifelong learning and self-care efficacy encourage active and healthy aging (1). Maximizing intrinsic capacity across the life course provides individuals with the tools to meet their full health potential. Through the LCA, health sciences will shift from understanding disease to understanding trajectories and transitions in life and health.

The principles of the LCA described in *Building health throughout the life course* provide direction on how best to build and maximize intrinsic capacity and promote health. Timing and windows of opportunity tell us that the development of intrinsic capacity is elevated through growth and development during childhood; and prenatal, newborn and early childhood interventions are powerful tools to improve health trajectories

and set the groundwork to acquire the skills and capacities for later development. Life transitions, which can be linked to gain or loss of function, also serve as key times at which to target health programs (1). Furthermore, the prominence placed on family and community health in the LCA considers the development of capacity within the context of multigenerational families and societies, taking into account the influence of familial and societal structures on health.

2. It fills long-standing gaps in care

While the LCA highlights the importance of laying a foundation for health during the early years and during life transitions, it also stresses that attention from public health remains important throughout all periods of the life course. Therefore, this approach addresses large gaps in care that limit the reach of public health interventions. *Building health throughout the life course* reveals how the LCA addresses gaps affecting school-age children, women of postreproductive age and men, and explores variations in health pathways through sociocultural, behavioral, psychosocial, environmental and biological factors. For example, cross-sectoral policies and interventions that promote equal pay, social status and rights for women effectively increase access to preventive medicine and this directly affects the health of women who are past reproductive age. Furthermore, interventions that counter gender norms that are dangerous to men's health – such as male gender norms that suppress the expression of need – help to increase male engagement in preventive health care to improve men's health (1).

In addition to promoting health interventions during life periods that are often overlooked, the LCA's emphasis on optimizing intrinsic capacity through ensuring comprehensive primary health care naturally helps to fill gaps in care that have worsened as a result of the COVID-19 pandemic. An integrated primary health care model in alignment with the LCA incorporates multidisciplinary teams that meet the full range of an individual's needs. Collaboration among general practitioners, health specialists and community health workers and referrals from these providers to social services and community resources ensure that individuals receive sufficient support in all aspects of their life. Integrated models of primary health care require coordination between organizations and health networks, and the functional integration of non-clinical support, such as communication systems and electronic patient records, as well as the integration of various clinical services, guidelines and protocols. It is through implementation of this primary care model and through public health interventions targeted at overlooked populations that the LCA allows practitioners to improve their patients' capacity across all areas of life to effectively achieve greater change.

3. It best addresses health inequities

In addition to filling gaps in care itself, the LCA addresses health disparities across populations. In recent decades, health inequities have risen in Latin America and the Caribbean, and Indigenous and Afro-descendant groups continue to experience dramatic differences in health status and access to health services compared with the general population (6). The COVID-19 pandemic has further exacerbated health inequities and exposed some of their root causes (7). The LCA recognizes

that broader structural forces serve as protective or risk factors for individuals, and it allows us to better understand how social inequalities in health are perpetuated throughout a person's life: the LCA's principles of cumulative impact, transfer of traits and resources, and linked lives demonstrate how inequities are perpetuated across generations (1). Interventions and policies that are driven by the LCA – such as universal health care, social protection programs and access to good-quality housing – contribute to improved resilience, or positive adaptation in the face of adversity, and reduced health inequities.

The LCA can be used as a tool to break the cycle of health inequities that are prevalent in the COVID-19 era to modulate and improve trajectories across generations. Responding to recent sociodemographic trends that have altered family structures and the environments in which individuals develop, the LCA proposes using a multigenerational approach to health that reaches beyond the current generation and shifts the focus to strengthening whole families and communities (8). This “whole-person, whole-family, whole-community” approach is implemented through integrative strategies that combine and build upon successful individual- and population-centered efforts. Under the LCA, these integrative strategies facilitate coordination among different sectors (horizontal integration), and they link primary, secondary and tertiary levels of care (vertical integration) to eliminate barriers to engaging in healthy behaviors and accessing care. Successful horizontal integration eliminates barriers to accessing services and programs by bringing multiple programs and services to individuals where they spend their time, such as churches and schools. Vertical integration efforts include improved referral systems that use community health workers to link individuals to a range of services. Furthermore, longitudinally integrated services that span the life course, as well as intergenerational integration that implies a service focused on the family, are central to implementing the LCA and addressing health inequities (1). It is only through these comprehensive strategies, emphasized by the LCA, that the complex scope of factors that influence health trajectories, including the social determinants of health, can be addressed.

4. It can help achieve more with less

As global inequities and the complexity of public health challenges have grown, so too has the need for robust public health infrastructure. Yet investment in public health capabilities has declined in recent decades (9), and the COVID-19 pandemic has placed further strain on public health resources and created widening resource gaps. While implementing the LCA requires substantial investment, it will ultimately be an efficient use of resources that achieves greater health gains.

The cost effectiveness of the LCA is driven by its emphasis on prevention, community health and equity. By prioritizing interventions that have the greatest potential to improve health trajectories, such as targeting critical and sensitive periods of a person's life, preventive public health interventions that are modeled on the life course are more likely to produce cost savings. For example, evidence shows that investing in early childhood development programs produces favorable financial returns, with one study showing returns for each dollar invested ranging from US\$ 1.26 to US\$ 17.07 (10). Furthermore, the LCA's valuing of individual agency – defined as an

individual's power to act in ways that shape their life trajectory – and community health empowers individuals and communities to make decisions about and seek care that will best address their needs, thus increasing the likelihood of effectively translating successful interventions to new populations. In addition, the LCA's focus on equity and service integration has the potential to bring about change on a larger scale, thus contributing to greater improvements in public health. As resources for public health become even tighter, implementation of the LCA becomes even more important.

CONCLUSIONS

The COVID-19 pandemic has had immense impacts on the way individuals live, their protective and risk factors for health, and the ways in which they access and obtain care. The pandemic has also had effects on the approaches and strategies adopted by ministries of health. The LCA uses evidence to address complex and pressing public health needs in innovative ways. The goal of the LCA is to improve the health trajectories of individuals, their families and their communities to achieve

fair and equitable health for all. While many countries have expressed alignment with this goal through the development of global and regional strategies, progress cannot be achieved without implementing them at the local level. *Building health throughout the life course* can be a helpful tool in operationalizing the LCA in public health practice, which is important in optimizing population health.

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Cuatro razones para adoptar el enfoque del curso de vida en el ámbito de la salud en la era de la COVID-19 y los años posteriores

RESUMEN

El enfoque del curso de vida da respuestas eficaces a las urgentes necesidades de salud y salva brechas críticas para mejorar los resultados de salud en la era de la COVID-19 y los años posteriores. En este artículo se describen las cuatro razones principales para adoptar y poner en práctica el enfoque del curso de vida en la salud pública a nivel local y nacional: este enfoque (i) da respuestas eficaces a las tendencias y la evidencia nuevas en el ámbito de la salud, (ii) salva brechas de larga data en la atención, (iii) aborda de la mejor manera posible las inequidades de salud, y (iv) puede contribuir a lograr más con menos recursos.

Palabras clave Práctica de salud pública; equidad.

Quatro motivos para adotar uma abordagem de curso de vida à saúde na era da COVID-19 e mais além

RESUMO

A abordagem de curso de vida responde de forma efetiva a necessidades urgentes de saúde e preenche lacunas críticas para melhorar os resultados de saúde na era da COVID-19 e mais além. Este artigo descreve quatro motivos principais para adotar e implementar a abordagem de curso de vida na saúde pública em nível nacional e local: (i) a abordagem responde de forma efetiva a novas evidências e tendências em saúde, (ii) preenche lacunas antigas nos cuidados de saúde, (iii) lida melhor com iniquidades em saúde e (iv) pode ajudar a conquistar mais com menos recursos.

Palavras-chave Prática de saúde pública; equidade.
