# SOCIAL DETERMINANTS OF CARDIOVASCULAR DISEASES

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# **Current State of Knowledge**

In the "Universal Declaration of Human Rights," there is a reference to a fundamental principle that every individual has the right to an adequate standard of living that ensures, for themselves and their family, health, and well-being. This includes provisions for nutrition, clothing, housing, medical care, and necessary social services. Additionally, individuals have the right to social security in situations such as unemployment, illness, disability, widowhood, old age, or other circumstances leading to a loss of livelihood beyond their control<sup>1</sup>.

In the year 1974, Marc Lalonde, the Minister of Health of Canada, published "New Perspectives on the Health of Canadians," a document commonly known as "The Lalonde Report"<sup>2</sup>. This publication established the social determinants of health and brought about a transformative shift in healthcare systems, transitioning from the traditional model to the bio-psycho-social model. The document introduces a dependency on health in four dimensions: human biology, the environment in which we live (the environment), lifestyles, and the organization of healthcare. Furthermore, it prioritizes health promotion and primary prevention over secondary and tertiary prevention, now encompassing quaternary prevention as well.

The "United Nations Resolution on Universal Health Coverage" of 2013, point 4, invites Member States to adopt a multisectoral approach and address the determinants of health within each sector, incorporating health in all policies, and taking into consideration the social, environmental, and economic determinants of health, with a view to reducing health inequalities3. The resolution acknowledges universal health coverage, placing particular emphasis on access for the most vulnerable populations and the capacity to implement comprehensive public health measures, ensure health protection, and consider health determinants through policies across different sectors, notably promoting health education among the population<sup>3</sup>. It also states that universal health coverage entails non-discriminatory access for all to a set of basic medical services for promotion, prevention, cure, and rehabilitation that align with the needs. It also includes essential,

affordable, effective, and quality medications, ensuring that utilizing these services does not impose significant economic difficulties on users, especially vulnerable and marginalized population sectors<sup>3</sup>.

The World Health Organization (WHO) defines "universal health coverage" as a situation where all individuals and communities receive the health services they need without experiencing financial hardships to pay for them<sup>4</sup>. It encompasses the entire spectrum of essential quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care.

The WHO defines social determinants of health as socio-economic, political, cultural, and environmental conditions in which people live and develop, as established in the "World Conference on Social Determinants of Health" in Rio de Janeiro, Brazil, in October 2011<sup>5</sup>.

Ultimately, social determinants generate risk factors that influence the onset of chronic diseases, including cardiovascular disease (CVD), and these, in turn, contribute to the burden of illness, disability, and mortality. Therefore, social determinants should be incorporated into medical histories, alongside data on human biology, such as genetic studies, for example, in familial hypercholesterolemia, and the environment and lifestyles of individuals.

Health exclusion is a part of social exclusion and is defined as "the lack of access of certain groups or people to goods, services and opportunities that improve or preserve their state of health and which other individuals or groups enjoy"<sup>6</sup>.

There are various indices for measuring population poverty or social exclusion, and in addition to local or regional measures, the most widely used in Europe is the At Risk of Poverty or Social Exclusion rate (AROPE). In the updated 2021 definition, it is characterized as the population experiencing at least one of the following three situations:

Risk of poverty, serious material and social lack, low intensity of employment.

In developing countries, the Multidimensional Poverty Index is used<sup>7,8</sup>.

The educational level directly influences life expectancy and health.

Loneliness has significant implications with several mental and physical illnesses that negatively influence CVD.

Socioeconomic status is a largely unrecognized risk factor in the primary prevention of cardiovascular diseases.

# **Risks**

There exists a social gradient in CVD, linking individuals with unfavorable social conditions to a higher risk of developing CVD and, consequently, experiencing a poorer prognosis once the disease has occurred. Studies assessing cardiovascular risk factors across low, middle, and high-income countries have revealed that, at an equal risk score, patients in low and middle-income countries had higher mortality from CVD<sup>9</sup>.

Being in an unfavorable social context or experiencing discrimination negatively impacts cardiovascular health, affecting treatment adherence, worsening heart failure, impairing blood pressure control, and increasing the likelihood of heart attacks<sup>10</sup>.

Recent evidence shows that low socioeconomic status, adverse childhood experiences, lower social support, reduced health literacy, and limited access to health care are associated with increased CVD risk and poorer health outcomes<sup>11</sup>.

# **Recommendations**

 During the clinical interview, inquire the educational level of the person being treated, as it directly influences life expectancy and health; Moreover, educational level holds significance in the context of therapeutic adherence<sup>12,13</sup>.

 Assess self-perception of health: One month before your current care, you would say that your perception of health is: Excellent, very good, Good, Fair, Poor, Very poor.

Self-perceived health stands as an independent predictor of poor prognosis. Thus, people with "bad" self-perception of health have a higher risk of mortality compared to those who perceive it as "excellent"<sup>14</sup>.

- Ask about Health Coverage:

Do you have health coverage? Public Health System, Assistance Provider Company, etc. Universal health coverage is defined by the WHO as ensuring that all people and communities receive the health services they need without having to suffer financial hardship to pay for them. It covers the entire spectrum of health services<sup>4</sup>.

Ask about access to prescribed medications.

Do you have access to the medications that have been prescribed for you?

Do you have economic possibility for your purchase? Do you have an economic deduction for the purchase?

The United Nations Resolution recognizes that everyone has access to essential, safe, affordable, effective, and quality medicines, while ensuring that the use of these services does not entail serious economic difficulties for users, in particular poor, vulnerable and marginalized sectors of the population<sup>3</sup>.

 Assessing loneliness is crucial, as it has implications for various physical and mental health conditions, including depression, alcoholism, cardiovascular problems, sleep difficulties, immune system disruption, Alzheimer's disease, overall health status, and premature mortality<sup>15, 16</sup>.

– Consider socioeconomic factors that identify populations with greater vulnerability in order to implement appropriate social interventions and provide ongoing care for patients with chronic diseases in this context<sup>17, 18</sup>.

Addressing the social determinants of health through public policies is a priority and should be integrated into the agendas of different countries. This includes addressing issues related to poverty, the development of universal health coverage, and access to education, including health education, among other aspects.

In conclusion, social determinants of health play a crucial role in influencing risk factors, the development of diseases, and cardiovascular outcomes. Effectively addressing these determinants poses challenges that necessitate a multidisciplinary and multi-level approach, involving public health measures and implementing changes in health systems<sup>11</sup>.

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