



## Health equity and inequality. Does social determinants matter?

Dr. Gogos Christos<sup>1\*</sup>, Gogou Maria<sup>2</sup>

<sup>1</sup>Public School of Higher Vocational Training of Veria, School of Spatial Planning and Development, Faculty of Engineering, Aristotle University of Thessaloniki, General Hospital of Veria, Greece.

Orcid ID: <https://orcid.org/0000-0002-8658-5980>

<sup>2</sup>School of Early Childhood Education, Faculty of Education, Aristotle University of Thessaloniki, Greece. Orcid ID: <https://orcid.org/0009-0005-4821-8345>

**ABSTRACT:** Equality in health does not require the elimination of all differences, but rather the reduction of unfair and preventable inequalities that arise from socio-determined conditions. Social determinants of health play a central role in understanding health equity as factors that contribute positively or negatively to health, as well as in the social processes that shape inequalities in the distribution of resources among groups with different levels of power and social influence. The investigation of health inequalities resulted in the development of specific theories. The relevant literature was searched in the PubMed, Scopus, and Google Scholar databases using search terms such as: 'health inequalities', 'health disparities', 'health equity', 'social determinants of health', 'socioeconomic gradient in health', and 'access to healthcare services'. The literature search was conducted in English for the period 2015 to 2025. The issue of inequality is linked to complex social and economic processes, which means we need to adopt targeted policies to promote social justice and universal health coverage.

**Corresponding Author:**

**Dr. Gogos Christos**

### **KEYWORDS:**

Equality, Inequality, Interpretive approaches, Theories, Social determinants of health

## **INTRODUCTION**

The issues of equality and inequality in health are pressing challenges in modern public health and healthcare delivery. The field has now evolved from early epidemiological studies that merely documented health level differentiations among population groups to a more sophisticated interdisciplinary area that examines the interconnection of factors contributing to injustice and avoidable health disparities. Research in this area has expanded rapidly since the 1980s, (McKinlay, 1975; McKeown, 1979; Rose, 1985) driven by growing evidence that health outcomes show dramatic differentiation between different social groups, even in countries with advanced health systems.

The international literature comprises surveys from the fields of public health, medicine, sociology, economics, political science, and psychology, thus reflecting the multidimensional nature of health inequalities. Initially, research focused mainly on documenting inequalities, but interest is now focusing on understanding the causes and developing interventions that address the determinants of health (Krishnamoorthy, 2024). This development is related to the growing recognition that achieving health equity requires interventions not only to improve access to healthcare but, above all, to address the fundamental social, economic, and environmental conditions that shape health outcomes throughout the human life course.

The present narrative review was conducted with the purpose of synthesizing theoretical and related findings on health equity and inequality. The narrative review allows for interpretative flexibility and the integration of diverse sources, which is necessary for understanding the multidimensional factors that produce health inequalities. Focused research was done in PubMed, Scopus, and Google Scholar, using search terms like "health inequalities," "health disparities," "health equity," "social determinants of health," "socioeconomic gradient in health," and "access to healthcare services." The literature search was conducted in English for the period 2015 to 2025. In addition, repositories of international organizations (WHO, OECD, EU, ECDC) were used, and backward/forward snowballing was applied to complete the literature.

### **Equality in health: conceptual approach**

The preamble to the WHO Constitution (WHO, 1946, p.1) states that "*The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition... Unequal development in different countries in the promotion of health and control of disease, especially communicable*

*disease, is a common danger”.*

The concept of health equity refers to the absence of unfair and avoidable differences in health status, given the large scale of health inequalities between different social groups (Scholz, 2020). This concept embodies social justice and serves as a moral principle that is closely linked to human rights standards, focusing on the distribution of resources and other processes that may lead to inequalities (WHO, 2013b).

Health equity is achieved when everyone can fully realize their potential for health and well-being, and when no one is disadvantaged in achieving this goal because of their social position or other socially determined circumstances (WHO, 2021). With this definition, the goal of health equity is not to eliminate all differences in health among individuals but to eliminate those factors that lead to inequalities and that can be avoided.

From this perspective, health equity means (Manti & Tselepi, 2000):

- equal access to care for the same need
- equal utilization for the same need
- equal quality of care for all

A key objective of ensuring equity in many governments' health care policies is to provide equitable access (or use) (Mostafavi et al., 2020), so that all individuals have equal access to essential healthcare services based solely on their health needs (Dei & Sebastian, 2018). In order to evaluate the extent of equity, it is customary to consider indicators of need when utilizing health care services (Joe et al., 2015). Outka (1975) asserts that needs should be the foundation for allocating healthcare resources. This idea suggests a clear separation between basic needs and desires, which can include personal preferences unrelated to survival or livelihood concerns and occasionally influenced by circumstances of growing prosperity.

Progress towards equality in healthcare services is a challenge facing policymakers, as it requires minimizing avoidable health inequalities among social groups with different levels of privilege and wealth. The shift to Universal Health Coverage (UHC)(WHO, 2013a) entails several intricate issues, highlighting the allocation of health benefits and the responsibility for financing these benefits, with particular attention to the 'extent,' 'depth,' and 'height' of financial coverage. In other words, 'Who will be covered?', 'What services will be provided?', and 'How much of the cost is covered?'

Concepts such as 'horizontal' and 'vertical' equity are used to better understand how healthcare is used (Sutton, 2002). In a fair system, those with equal needs will have equal rates of use (horizontal equity), and those with fewer needs will have lower rates of use (vertical equity) (Aday, 1993).

The definition of horizontal equity relates to the equal use and utilization of health resources for equal health needs, under conditions of equal access and opportunity. Horizontal equity requires that the same set of health services, of comparable quality, should be available to all individuals with similar health needs, regardless of socio-economic status, ability to pay, or social or personal background (Joe et al., 2015). According to the complementary definition of vertical equality, the unequal must be treated appropriately and specifically (O'Donnell et al., 2008). In other words, it is linked to the fair treatment of differences that arise in health (Mooney, 2000). It is related to 'positive' discrimination, as the availability and quality of health services are contingent upon the health status of each individual. In other words, a distinct approach to the treatment of common conditions in comparison to critical and rare ones. At this point, Aristotle's approach to equality could be cited: "*Justice is understood to be equality, and indeed it is, but not among all, but among equals; and inequality is understood to be justice, and indeed it is, but not among all, but among unequals*" (Lypourlis, 2007, p.133).

The definition of equity recognizes the influence of factors affected by preferences, perceptions, and biases of both the patient and the healthcare provider and takes into account health inequalities resulting from the level of available resources, housing conditions, exposure to environmental risks, behaviors, and different lifestyles (Mackenbach, et al., 2011). It is primarily an ideal rather than a functional term, as both avoidable and unavoidable factors affect our health (McCartney, 2019).

'Health inequality' is a descriptive term that has no moral connotations (Kawachi et al., 2002), and is used to identify variations and differences in the health status of individuals and groups. These are deviations and variations that can be measured by standard health statistics (Arcaya et al., 2015).

Genetic and chromosomal variations, immune function, and hormonal factors result in differences in individuals' health levels, as is the case with any other physical characteristic (Crimmins et al., 2010). Age-related changes in health are seen at the population level. The natural process of aging causes older people to have higher rates of morbidity and mortality than younger people. Men also have higher morbidity and mortality rates at all points in history and in all countries (Austad & Fischer, 2016; Crimmins et al., 2019). Furthermore, luck is a factor in the lives of all individuals, as it can occasionally determine which individuals will avoid a specific infectious disease and which will contract it. At the same time, differences in the health profiles of different nations and different groups within the same country have also been highlighted (Keenan et al., 2022; Singata et al., 2014; United Nations, 2019).

For a majority of scholars, the issue of health inequalities is an important issue in the sociology of health and public health more broadly. Social scientists study inequalities in the context of social structure and cultural framework (Clarke et al., 2019),

epidemiologists are interested in the determinants of the occurrence and prevalence of disease in a given population, in a specific place and time (Brachman, 1996), while the prioritization of the distribution of health resources is the subject of health economics. The study of health inequalities has instigated a variety of questions and debates, alongside analytical strategies, interpretations of outcomes, and explanatory models, (Lago et al., 2018; Marmot et al., 2010; Marmot et al., 2020; Oliver & Cookson, 2000; Stringhini et al., 2017; Whitehead, 1992), all aimed at gaining insight into the intricate and interdependent processes that give rise to such disparities between social groups.

Occasionally, the term 'inequality' is used to indicate systematic, avoidable, and significant disparities (Marmot et al., 2020), as health inequality is not always inevitable and can be considered as an injustice (Berwick, 2020). However, there is some ambiguity surrounding the term, as it is sometimes used to mean injustice or inequity, while others use it as a purely mathematical term (Kawachi et al., 2002). Additionally, it is important to consider that certain languages may encounter translation challenges, as they provide only a single word to represent both 'inequality' and 'inequity.' (Whitehead, 1992).

The main issue in distinguishing between inequality and inequity is that identifying inequalities in health involves normative judgment (Sturgeon, 2007) based on an individual's theories of justice and reasoning related to the creation of health inequalities. Braveman and Krieger (2000) assert that for a researcher focused on equity, it is essential to examine inequalities derived from normative judgments, given that individuals exist and operate within distinct social environments, fostering particular social relationships.

According to the WHO (WHO, 2007), health inequalities refer to those systematic differences in health status among different socioeconomic groups that are not attributable to biological factors or behaviors that may affect health at the individual level. The term inequality has a moral and ethical dimension. The integration of three unique attributes results in the transformation of simple health variations or differences into social inequality and inequity. They are systematic, socially produced (and therefore avoidable), and unfair (Arcaya et al., 2015).

Of course, not all inequalities are unfair. However, all inequalities are the product of unfair inequalities (Hasty et al., 2022). Based on the systematic pattern of health disparities, these disparities are not randomly distributed but follow a consistent pattern across the entire population, worldwide. One of the most striking examples is the systematic health disparities among different socioeconomic groups. Disparities linked to variables that are indicators of social conditions affect and influence people's social status (Islam, 2019). This social pattern of disease is universally present, although its magnitude and extent vary both among and within different countries (Ruger, 2004).

Social processes produce health inequalities, although these are not biologically determined (Keenan et al., 2022). Theoretically, therefore, if social processes are identified as the principal source of these differences in a country, it should be possible to reduce or eliminate them through coordinated efforts and specific policies.

The third characteristic is that health inequalities are differences that are widely considered unfair because they are created and maintained by what Evans and Peters (2001) have called 'unjust social arrangements' that are contrary to common notions of justice. According to Plato, 'justice' refers to the benefit provided in a proper manner, based on specific knowledge (Jeanniere, 2008). By extension, we can understand that injustice is the product of conscious choices and the implementation of specific policies. Undoubtedly, while the understanding of injustice is often shaped by diverse evaluative criteria, there are several commonly accepted assumptions that prevail. For example, most, if not all, people in the West share the view that all children, regardless of social group, should have the same opportunities for survival (WHO, 2007). On the other hand, some extreme views would deny any role of social injustice in contributing to health inequalities. This debate predominantly focuses on the issues of free will and the responsibility of individuals for their self-care practices (Kawachi et al., 2002).

### **Theoretical approaches to health inequalities**

Theories related to health disparities are of significant importance, as accurately identifying the underlying causes of any issue is essential for developing effective strategies to tackle that issue. The '*Black Report*' (Black et al., 1988) attempted a thorough investigation of the issue of health inequalities by focusing on the definition of the concepts of health and inequality, researching data on health inequalities, and policies for reducing inequalities, concluding that the main cause of these inequalities was economic inequality (Brocklehurst & Costello, 2003).

At the same time, this Report attempts a theoretical, interpretative approach to the issue of the interconnection between socio-economic conditions and health inequalities, with an emphasis on social class, classifying these interpretations into four basic theoretical approaches (McCartney et al., 2013): the artefact theory, structural theory, selection theory (natural and social selection) and cultural - behavioral theory.

Although these theories have been refined and perfected, the core conclusion - that health inequalities are caused by underlying structural inequalities in societies - remains intact (CSDH, 2008; Navarro et al., 2006).

#### ***Artefact theory***

According to this approach, to analyze the relationship between health and social class, emphasis is placed on the 'artificial' character of the correlated variables (McCartney et al., 2013). It is argued that both health and social class are artifacts of the measurement process, and it is implied that their observed relationship itself may be an artifact of minor, incidental significance.

The variations presented are due to measurement problems of these phenomena due to the absence of valid and reliable research tools (Jatta et al., 2022). It is challenging to study and monitor the correlation between morbidity and socio-professional status because both the nature and types of occupations, as well as the procedures for diagnosing and certifying diseases, change and vary over time.

### ***Structural theory***

The relationship between economic status and various causes of diseases and death is now well established (Wang & Geng, 2019). This theoretical framework underscores the importance of economic and related socio-structural factors in determining health and well-being. The basic idea is that different social hierarchical positions in socio-economic stratification are associated with different exposure to the material world, which can be either health-promoting or health-damaging (e.g., noise, pollution, working conditions)(Sundmacher et al., 2011).

### ***Selection theory***

This approach focuses on social mobility, indicating that health determines socioeconomic status, so that healthier individuals will be able to move to better socioeconomic positions than less healthy individuals (Jayasinghe, 2015).

The correlation between health and social class is strictly reflective. Low health status implies social disadvantage and remaining in or falling into a lower socio-professional class (Bartley, 2016). Health is a distinctive factor, just like intelligence and cleverness. In this framework, social class becomes a dependent variable, as physical weakness or poor health results in low social value and low economic reward.

### ***Cultural and behavioral theory***

In contrast to the selection theory, the cultural approach maintains that culture shapes patterns of behavior, which tend to become intergenerational and are unlikely to be modified or changed, thereby catalyzing differences in health levels between social groups (Bibi et al., 2023).

With reference to the ‘culture of poverty’ (Lewis, 1966) or Murray's theory (Buckingham, 1999) culture is identified as a factor that shapes a framework of behaviors and choices. Less privileged social classes adopt higher-risk lifestyles, which may include drinking, smoking, or unhealthy eating, and express low expectations for high levels of health. In contrast, the more advantaged social classes, having a broader concept of health, adopt attitudes and behaviors aimed at preventing disease and promoting their health (Bibi et al., 2023).

Cultural and behavioral characteristics are often interrelated and, frequently, implicitly incited by ‘habitus’ according to Bourdieu (2018). Habitus refers to the deeply rooted habits and predispositions that people acquire according to their social position. Habitus is created through a social, rather than an individual, process, leading to patterns that endure over time and shape decisions. These decisions are reflected in everyday lifestyles, biases, and even consumption patterns. Consequently, a thoroughly documented correlation is emerging between elevated socio-educational levels and behaviors conducive to health promotion (Hoeeg, et al., 2020; Oncini, 2020).

### **Social determinants of health**

Social determinants of health is a vaguely defined concept mainly focusing on those social factors that have a positive or negative impact on people's health (Krishnamoorthy, 2024). These social influences were considered to affect both individuals and the population as a whole. As Evans states (1974), they have a catalytic effect on how healthy we are as individuals and societies, explaining both the health of populations and why some people are healthy while others are not. It is notable that in these early critiques, the argument that medical care is not the main determinant of people's health is integral. The reference to the concept of social determinants of health is directed more at those factors that help people to be healthy than at the health services sector (Krishnamoorthy, 2024).

### ***Conceptual framework***

In recent decades, social determinants of health have received considerable attention as a fundamental concern in population health and public health (Islam, 2019), recognizing the primary importance of social forces in determining population health (Idler et al., 2017).

It is no coincidence that the United Nations’ 2030 Agenda for Sustainable Development (United Nations, 2015), all of the 17 Sustainable Development Goals (SDGs), focuses on addressing the determinants of health and health inequalities through targeted actions on poverty, hunger, inequality, climate change, environmental degradation, peace, and justice. Specifically, SDG3- ‘Good Health and Well-being’, focuses directly on health, recognizing that ensuring healthy lives and promoting well-being at all ages is essential for sustainable development.

Graham (2004) argues that the social determinants of health have acquired a dual meaning, referring both to the social factors that promote or undermine the health of individuals and populations and to the social processes that favor the unequal distribution of resources among groups of different social classes. Thus, the key concept of social determinants of health refers simultaneously both to the determinants of health and to the determinants of health inequalities (Graham, 2004). Consequently, the term ‘social determinants of health’ can potentially cause confusion, implying that everything has to do with determinants, supporting the assumption that health inequalities can be reduced by policies that focus only on social determinants of health (Frohlich & Potvin,



2008; Solar & Irwin, 2010).

There is a wide range of evidence, spanning across time (centuries, not just decades) and space, which has demonstrated a clear correlation among income, poverty, socioeconomic status (along with other factors including educational attainment), and a similarly broad range of different health outcomes and determinants (Augustin et al., 2023).

The list of social determinants of health is long and growing (Islam, 2019). Among the most significant factors mentioned in the literature represent education (Bowen, 2023), housing and/or living environment (Rolfe et al., 2020), income and its distribution (Schenkman & Bousquat, 2021), early life (Shi & Wu, 2020), social exclusion and marginalization (Van Bergen et al., 2019), employment or unemployment (Siegrist, 2020), social support (Popay et al., 2021), substance abuse and addiction (Nielsen & Lubman, 2022), food (WHO, 2003) and transportation (Reid, 2019). Moreover, the list includes the respective healthcare system (Ford et al., 2021), gender (Matthews, 2015), sexual orientation (Booker et al., 2017), the social safety net (WHO, 2016), the cultural context and social norms (Thomson et al., 2021), social stigma and discrimination (Van Le et al., 2019), social capital (Fiorillo & Sabatini, 2015), migration (Malmusi, 2015), family (Blume et al., 2021) and religion (Idler et al., 2017).

WHO (2003) identifies the social determinants of health as the circumstances or conditions in which people are born, grow up, live, work, and age, so that illness and health are not only understood as biological phenomena (Scholz, 2020), but also as manifestations of social inequalities and the policies designed and implemented to prevent disease and promote health. Such disparities are manifest in all aspects of social life, spanning primitive, agricultural, and industrial societies. They should be regarded as social phenomena, as they do not originate from inadequate abilities, skills, qualifications, or talents, but instead arise from the uneven distribution of opportunities available to individuals for the development of their existing skills (McCartney, 2019). As a result, aside from particular primary health services, the vast majority of health services are primarily concerned with addressing diseases and restoring health, significantly influenced by the social determinants of health, since there is a clear consensus that factors beyond the healthcare system predominantly affect health positively or negatively (Berwick, 2020).

The WHO Commission on Social Determinants of Health, established in 2005, identified achieving health equity as the primary goal in the health sector to address the social determinants associated with poor health and health inequalities.

The Commission drew the attention of governments and society to social determinants and the improvement of social conditions for health, particularly among the most vulnerable populations.

The final report, '*Closing the Gap in a Generation*' (CSDH, 2008) outlined three key recommendations: a) improving everyday living conditions, with a marked emphasis on early childhood development and education for girls and boys, improving living and working conditions, and creating a framework for political and social protection of life; b) addressing the inequitable distribution of power, money, and resources, both through a strong, capable, and adequately funded public sector and through the contribution of strengthened governance; and c) measuring and acknowledging the problem and evaluating the impact of action, investing in the education of policymakers and health professionals, and in citizens' understanding of the social determinants of health.

In May 2009, the 62nd World Health Assembly (WHO, 2009) endorsed the CSDH report and requested the WHO to convene a global event to consider renewed projects to address the worrying trends in health inequalities by addressing the social determinants of health. As a result, the Rio Global Conference was convened in October 2011 and endorsed the Rio Political Declaration on Social Determinants of Health (WHO, 2011). The declaration reflected political support for priority actions addressing the social determinants of health, affirming people's right to the enjoyment of the most elevated achievable level of health and emphasizing the importance of cross-sectoral mechanisms such as the Health in All Policies (HiAP) approach (Rudolph, et al., 2013). An approach to public policies in all sectors that systematically takes into account the health impact of decisions, seeks synergies, and prevents harmful effects on health in order to improve population health and health equity (WHO, 2014).

## CONCLUSIONS

Based on the aforementioned, it can be concluded that the correlation between socioeconomic conditions and health is not a simple phenomenon that can be interpreted in a one-dimensional manner. Given that the social determinants of health relate, on the one hand, to the broader range of forces and systems that shape the circumstances of daily life and influence individuals' health status and, on the other hand, to the social processes that govern access to health care, it is considered useful to investigate the correlation between specific social factors and the level of access to health services.

First of all, it would be useful to investigate individuals' behavior in terms of seeking health services, taking into account specific factors such as the responsiveness of the health system and attitudes and behaviors towards health, illness, and health services, combining geographic, social, and health data. Understanding behavior in seeking and using health care would provide information relevant to the design and implementation of improvements in healthcare services delivery.

Some policy recommendations could concern a) increasing funding for public health services so that they can provide quality care to all and improving infrastructure by upgrading health facilities in accordance with emerging needs; b) implementing community transport programs by providing subsidized or community-supported transportation systems for non-emergency medical visits; and c) supporting disadvantaged population groups and developing and strengthening prevention, promotion, and health education programs in collaboration with local communities to address their specific needs; d) community involvement with the participation

of local populations in decision-making to ensure that policies are aligned with their needs; e) operation of mobile units providing primary health care and primary and secondary disease prevention; f) promoting the use of telemedicine and other digital solutions to improve access to health care.

Alongside this, with regard to the location of health facilities, practices are suggested that are considered beneficial and relate to a) studying and evaluating transport networks, location regulations, and ensuring compliance with local land use policies; b) focusing on vulnerable populations by ensuring equitable distribution of services among all socioeconomic groups; c) forecasting demand by studying population growth trends using demographic data; d) analyzing disease patterns prevalent in the region and adapting services accordingly; and e) ensuring access to public transport services.

## REFERENCES

1. Aday, L. A. (1993). Equity, accessibility, and ethical issues: is the U.S. health care reform debate asking the right questions? *American Behavioral Scientist*, 36(6), 724–740. <https://doi.org/10.1177/0002764293036006005>
2. Arcaya, M. C., Arcaya, A. L., & Subramanian, S. V. (2015). [Inequalities in health: definitions, concepts, and theories]. *Revista Panamericana de Salud Publica = Pan American Journal of Public Health*, 38(4), 261–271. <http://www.ncbi.nlm.nih.gov/pubmed/26758216>
3. Augustin, J., Andrees, V., Walsh, D., Reintjes, R., & Koller, D. (2023). Spatial Aspects of Health—Developing a Conceptual Framework. *International Journal of Environmental Research and Public Health*, 20(3). <https://doi.org/10.3390/ijerph20031817>
4. Austad, S. N., & Fischer, K. E. (2016). Sex Differences in Lifespan. *Cell Metabolism*, 23(6), 1022–1033. <https://doi.org/10.1016/j.cmet.2016.05.019>
5. Bartley, M. (2016). *Health Inequality: An Introduction to Concepts, Theories and Methods*. Cambridge (UK), PolityPress.
6. Berwick, D. M. (2020). The Moral Determinants of Health. *JAMA - Journal of the American Medical Association*, 324(3), 225–226. <https://doi.org/10.1001/jama.2020.11129>
7. Bibi, E., Mubashir, A., Khalid Ghor, A., & Bibi, A. (2023). Understanding the Concept of Health Inequality. *IntechOpen*. doi: 10.5772/intechopen.1003038
8. Black, D., Morris, J.N., Smith, C. Townsend, P. (1988). *The black report*. In Townsend, P. and Davidson, N. (eds) *Inequalities in health*. Penguin Books.
9. Blume, M., Rattay, P., Hoffmann, S., Spallek, J., Sander, L., Herr, R., Richter, M., Moor, I., Dragano, N., Pischke, C., Iashchenko, I., Hövener, C., & Wachtler, B. (2021). Health inequalities in children and adolescents: A scoping review of the mediating and moderating effects of family characteristics. *International Journal of Environmental Research and Public Health*, 18(15), 1–33. <https://doi.org/10.3390/ijerph18157739>
10. Booker, C. L., Rieger, G., & Unger, J. B. (2017). Sexual orientation health inequality: Evidence from Understanding Society, the UK Longitudinal Household Study. *Preventive Medicine*, 101, 126–132. <https://doi.org/10.1016/j.ypmed.2017.06.010>
11. Bourdieu, P. (2018). Social Space and the Genesis of Appropriated Physical Space. *International Journal of Urban and Regional Research*, 42(1), 106–114. <https://doi.org/doi.org/10.1111/1468-2427.12534>
12. Bowen, F. R. (2023). Education is a Social Determinant of Health: School Nurses Level the Playing Field. *Journal of School Nursing*, 39(5), 343–344. <https://doi.org/10.1177/10598405231191283>
13. Brachman, P. (1996). *Epidemiology*. In: Baron S, (ed). *Medical Microbiology*. 4th edition. University of Texas Medical Branch at Galveston.
14. Braveman P, Krieger N, L. J. (2000). Health inequalities and social inequalities in health. *Bulletin of the World Health Organization*, 78, 232–234.
15. Brocklehurst, R., & Costello, J. (2003). *Health Inequalities: the Black Report and Beyond*. In: *Public Health and Society*. Palgrave, London. [https://doi.org/10.1007/978-1-4039-3744-5\\_3](https://doi.org/10.1007/978-1-4039-3744-5_3)
16. Buckingham, A. (1999). Is there an underclass in Britain? *British Journal of Sociology*, 50(1), 1–173. <https://doi.org/10.1111/j.1468-4446.1999.00049.x>
17. Clarke, B., Ghiara, V., & Russo, F. (2019). Time to care: Why the humanities and the social sciences belong in the science of health. *BMJ Open*, 9(8), 1–4. <https://doi.org/10.1136/bmjopen-2019-030286>
18. Crimmins, E., Kim, J. K. I., & Vasunilashorn, S. (2010). POPULATION HEALTH AND MORTALITY: Theoretical Incorporation of Biological Information. *Health (San Francisco)*, 47, 41–64.
19. Crimmins, E. M., Shim, H., Zhang, Y. S., & Kim, J. K. (2019). Differences between men and women in mortality and the health dimensions of the morbidity process. *Clinical Chemistry*, 65(1), 135–145. <https://doi.org/10.1373/clinchem.2018.288332>
20. CSDH. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health*. Final report of the commission on social determinants of health (CSDH).

21. Dei, V., & Sebastian, M. S. (2018). Is healthcare really equal for all? Assessing the horizontal and vertical equity in healthcare utilisation among older Ghanaians. *International Journal for Equity in Health*, 17(1). <https://doi.org/10.1186/s12939-018-0791-3>
22. Evans, T., & Peters, F. (2001). Ethical dimensions of health equity. In E. T. Et & Al. (Eds.), *Challenging inequities in health: from ethics to action*. New York, Oxford Press., University.
23. Evans, R. G. (1974). Supplier Induced Demand: Some Empirical Evidence and Implications. In M. Percman (Ed.), *The Economics of Health and Medical Care*. London: Mc Millan.
24. Fiorillo, D., & Sabatini, F. (2015). Structural social capital and health in Italy. *Economics and Human Biology*, 17, 129–142. <https://doi.org/10.1016/j.ehb.2015.02.004>
25. Ford, J., Sowden, S., Olivera, J., Bambra, C., Gimson, A., Aldridge, R., & Brayne, C. (2021). Transforming health systems to reduce health inequalities. *Future Healthcare Journal*, 8(2), e204–e209. <https://doi.org/10.7861/fhj.2021-0018>
26. Frohlich, K. L., & Potvin, L. (2008). Transcending the known in public health practice: The inequality paradox: The population approach and vulnerable populations. *American Journal of Public Health*, 98(2), 216–221. <https://doi.org/10.2105/AJPH.2007.114777>
27. Graham, H. (2004). Social determinants and their unequal distribution: Clarifying policy understandings. *Milbank Quarterly*, 82(1), 101–124. <https://doi.org/10.1111/j.0887-378X.2004.00303.x>
28. Hasty, J., Lewis, D. G., & Snipes, M. M. (2022). *Introduction to Anthropology*. [https://openstax.org/details/books/introduction-anthropology?Book details](https://openstax.org/details/books/introduction-anthropology?Book+details)
29. Hoeeg, D., Christensen, U., Grabowski, D. (2020). Intrafamilial health polarisation: How diverse health concerns become barriers to health behaviour change in families with preschool children and emerging obesity. *Sociology of Health and Illness*, 42, 1243–1258.
30. Idler, E., Blevins, J., Kiser, M., & Hogue, C. (2017). Religion, a social determinant of mortality? A 10-year follow-up of the Health and Retirement Study. *PLoS ONE*, 12(12), 1–15. <https://doi.org/10.1371/journal.pone.0189134>
31. Islam, M. M. (2019). Social determinants of health and related inequalities: Confusion and implications. *Frontiers in Public Health*, 7(FEB), 11–14. <https://doi.org/10.3389/fpubh.2019.00011>
32. Jatta, S., Ian, B. S., & Robert, M. (2022). Inequalities in recovery or methodological artefact? A comparison of models across physical and mental health functioning. *SSM - Population Health*, 17. <https://doi.org/10.1016/j.ssmph.2022.101067>
33. Jayasinghe, S. (2015). Social determinants of health inequalities: Towards a theoretical perspective using systems science. *International Journal for Equity in Health*, 14(1), 1–8. <https://doi.org/10.1186/s12939-015-0205-8>
34. Jeanniere, A. (2008). *Plato*.
35. Joe, W., Rudra, S., & Subramanian, S. V. (2015). Horizontal inequity in elderly health care utilization: Evidence from India. *Journal of Korean Medical Science*, 30, S155–S166. <https://doi.org/10.3346/jkms.2015.30.S2.S155>
36. Kawachi, I., Subramanian, S. V., & Almeida-Filho, N. (2002). A glossary for health inequalities. *Journal of Epidemiology and Community Health*, 56(9), 647–652. <https://doi.org/10.1136/jech.56.9.647>
37. Keenan, K., Kulu, H., & Cox, F. (2022). Editorial introduction: Social and spatial inequalities in health and mortality: The analysis of longitudinal register data from selected European countries. *Population, Space and Place*, 28(3), 1–10. <https://doi.org/10.1002/psp.2411>
38. Krishnamoorthy, Y. (Ed.). (2024). *Health Inequality - A Comprehensive Exploration*. IntechOpen.
39. Lago, S., Cantarero, D., Rivera, B., Pascual, M., Blázquez-Fernández, C., Casal, B., & Reyes, F. (2018). Socioeconomic status, health inequalities and non-communicable diseases: a systematic review. *Journal of Public Health (Germany)*, 26(1). <https://doi.org/10.1007/s10389-017-0850-z>
40. Lewis, O. (1966). The culture of poverty. *Scientific American*, 215(4), 19–25. <https://doi.org/10.1080/15595692.2020.1733960>
41. Lypourlis, D. (2007). *Politics III, IV Volume II (Tzioka Evangelou, P. Trans.)*. Zitros.
42. Mackenbach, J.P., Meerding, W.J., & Kunst, A.E. (2011). Economic Costs of Health Inequalities in the European Union. *Economic Costs of Health Inequalities in the European Union.*, 65(5), 412–419.
43. Malmusi, D. (2015). Immigrants' health and health inequality by type of integration policies in European countries. *European Journal of Public Health*, 25(2), 293–299. <https://doi.org/10.1093/eurpub/cku156>
44. Manti, P., Tselepi, H. (2000). *Sociological and Psychological Approach to Hospitals and Health Services (Social and Cultural Aspects of Health and Illness) Volume A (in Greek)*. Hellenic Open University, Patra, Greece.
45. Marmot, M., Allen, J., Boyce, T., Goldplatt, S. Morrison, J. (2020). *Health equity in England: the Marmot review 10 years on*. The Health Foundation. 368. [https://www.health.org.uk/sites/default/files/upload/publications/2020/Health Equity in England\\_The Marmot Review 10 Years On\\_full report.pdf](https://www.health.org.uk/sites/default/files/upload/publications/2020/Health+Equity+in+England_The+Marmot+Review+10+Years+On_full+report.pdf)

46. Marmot, M., Allen, J., Goldblatt, P., Boyce, T., Di McNeish, M., Grady, I. G. (2010). *Fair Society Healthy Lives. The Marmot Review. Strategic review of health inequalities in England/post-2010.* e Local Government Association. <https://doi.org/10.7748/ns2010.10.25.6.30.p4603>
47. Matthews, D. (2015). PART 2 of 5: SOCIOLOGY IN NURSING. Social class and its influence on health. *Nursing Times*, 111(42), 20–21.
48. McCartney, G., Collins, C., Mackenzie, M. (2013). What (or who) causes health inequalities: theories, evidence and implications? *Health Policy*, 113(3), 221–227. <https://doi.org/doi: 10.1016/j.healthpol.2013.05.021>.
49. McCartney, G. et al. (2019). Defining health and health inequalities. *Public Health*, 172, 22–30. <https://doi.org/10.1016/j.puhe.2019.03.023>
50. McCartney, G., Collins, C., & Mackenzie, M. (2013). What (or who) causes health inequalities: Theories, evidence and implications? *Health Policy*, 113(3), 221–227. <https://doi.org/10.1016/j.healthpol.2013.05.021>
51. McKeown, T. (1979). *The Role of Medicine: Dream, Mirage or Nemesis?* Basil Blackwell.
52. McKinlay, J. B. (1975). *A Case for Refocussing Upstream—The Political Economy of Illness.* In *Applying Behavioral Science to Cardiovascular Risk*, (A.J. Enelow and J.B. Henderson (Ed.)). American Heart Association.
53. Mooney, G. (2000). Vertical equity in health care resource allocation. *Health Care Analysis*, 8(3), 203–215. <https://doi.org/10.1023/A:1009439917796>
54. Mostafavi, F., Pirooz, B., Mosquera, P., Majdzadeh, R., & Moradi, G. (2020). Assessing horizontal equity in health care utilization in Iran: A decomposition analysis. *BMC Public Health*, 20(1), 1–9. <https://doi.org/10.1186/s12889-020-09071-z>
55. Navarro, V., Muntaner, C., Borrell, C., Benach, J., Quiroga, Á., Rodríguez-Sanz, M., Vergés, N., & Pasarín, M. I. (2006). Politics and health outcomes. *Lancet*, 368(9540), 1033–1037. [https://doi.org/10.1016/S0140-6736\(06\)69341-0](https://doi.org/10.1016/S0140-6736(06)69341-0)
56. Nielsen, S., & Lubman, D. I. (2022). Time to address addiction treatment inequality in hospital settings. *The Lancet Public Health*, 7(1), e6–e7. [https://doi.org/10.1016/S2468-2667\(21\)00260-7](https://doi.org/10.1016/S2468-2667(21)00260-7)
57. O'Donnell O, van Doorslaer E, Wagstaff A, L. M. (2008). Analysing health equity using household survey data: a guide to techniques and their implementation. In *Southern Medical Journal* (Vol. 72, Issue 5). The World Bank. <https://doi.org/10.1097/00007611-197905000-00031>
58. Oliver A Cookson R. (2000). Towards Multidisciplinary Research. *Health Economics*, 9(7), 565–566.
59. Oncini, F. (2020). Cuisine, health and table manners: food boundaries and forms of distinction among primary school children. *Sociology*, 54(3), 626– 642.
60. Outka, G. (1975). Social justice and equal access to health care. *Perspectives in Biology and Medicine*, 18(2), 185–202. <https://doi.org/10.1353/pbm.1975.0008>
61. Popay, J., Whitehead, M., Ponsford, R., Egan, M., & Mead, R. (2021). Power, control, communities and health inequalities I: Theories, concepts and analytical frameworks. *Health Promotion International*, 36(5), 1253–1263. <https://doi.org/10.1093/heapro/daaa133>
62. Reid S. (2019). The rural determinants of health: using critical realism as a theoretical framework. *Rural Remote Health*, 19(3), 5184. <https://doi.org/doi: 10.22605/RRH5184>.
63. Rolfe, S., Garnham, L., Godwin, J., Anderson, I., Seaman, P., & Donaldson, C. (2020). Housing as a social determinant of health and wellbeing: Developing an empirically-informed realist theoretical framework. *BMC Public Health*, 20(1), 1–19. <https://doi.org/10.1186/s12889-020-09224-0>
64. Rose, G. (1985). Sick Individuals and Sick Populations. *International Journal of Epidemiology*, 14, 32–38.
65. Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). *Health in all Policies. A Guide for State and Local Governments.*
66. Ruger, J. P. (2004). Ethics of the social determinants of health. *Lancet*, 364(9439), 1092–1097. [https://doi.org/10.1016/S0140-6736\(04\)17067-0](https://doi.org/10.1016/S0140-6736(04)17067-0)
67. Schenkman, S., & Bousquat, A. (2021). From income inequality to social inequity: impact on health levels in an international efficiency comparison panel. *BMC Public Health*, 21(1), 1–17. <https://doi.org/10.1186/s12889-021-10395-7>
68. Scholz, N. (2020). *Addressing health inequalities in the European Union : concepts, action, state of play : in-depth analysis* (Issue February). <https://doi.org/10.2861/567478>
69. Shi, Z., & Wu, C. (2020). Early life adversity and health inequality: a dual interaction model. *Journal of Chinese Sociology*, 7(1). <https://doi.org/10.1186/s40711-020-00121-y>
70. Siegrist, J. (2020). Health inequalities: The role of work and employment. *European Journal of Public Health*, 30(4), 620. <https://doi.org/10.1093/eurpub/ckaa006>
71. Singata, M., Tranmer, J., & Gyte, G. M. L. (2014). *Europe PMC Funders Group.* 11, 1–59. <https://doi.org/10.1002/14651858.CD003930.pub2.Restricting>



72. Solar O. Irwin A. A. (2010). *Conceptual Framework for Action on the Social Determinants of Health. Social Determinants of Health Discussion Paper 2 (Policy and Practice)*. (2010).
73. Stringhini, S., Carmeli, C., Jokela, M., Avendaño, M., Muennig, P., Guida, F., Ricceri, F., D'Errico, A., Barros, H., Bochud, M., Chadeau-Hyam, M., Clavel-Chapelon, F., Costa, G., Delpierre, C., Fraga, S., Goldberg, M., Giles, G. G., Krogh, V., Kelly-Irving, M., ... Tumino, R. (2017). Socioeconomic status and the 25 × 25 risk factors as determinants of premature mortality: a multicohort study and meta-analysis of 1·7 million men and women. *The Lancet*, 389(10075), 1229–1237. [https://doi.org/10.1016/S0140-6736\(16\)32380-7](https://doi.org/10.1016/S0140-6736(16)32380-7)
74. Sturgeon, S. (2007). Normative Judgement. *Philosophical Perspectives*, 21, 569–587. <https://www.jstor.org/stable/>
75. Sundmacher, L., Scheller-Kreinsen, D., & Busse, R. (2011). The wider determinants of inequalities in health: A decomposition analysis. *International Journal for Equity in Health*, 10(1), 30. <https://doi.org/10.1186/1475-9276-10-30>
76. Sutton, M. (2002). Vertical and horizontal aspects of socio-economic inequity in general practitioner contacts in Scotland. *Health Economics*, 11(6), 537–549.
77. Thomson, L. J., Gordon-Nesbitt, R., Elsdon, E., & Chatterjee, H. J. (2021). The role of cultural, community and natural assets in addressing societal and structural health inequalities in the UK: future research priorities. *International Journal for Equity in Health*, 20(1), 1–15. <https://doi.org/10.1186/s12939-021-01590-4>
78. United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>
79. United Nations. (2019). *World Population Prospects 2019: Highlights (ST/ESA/SER.A/423)*. [https://population.un.org/wpp/Publications/Files/WPP2019\\_Highlights.pdf](https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf)
80. Van Bergen, A. P. L., Wolf, J. R. L. M., Badou, M., De Wilde-Schutten, K., IJzelenberg, W., Schreurs, H., Carlier, B., Hoff, S. J. M., & Van Hemert, A. M. (2019). The association between social exclusion or inclusion and health in EU and OECD countries: A systematic review. *European Journal of Public Health*, 29(3), 575–582. <https://doi.org/10.1093/eurpub/cky143>
81. Van Le, T., Vu, T. T. M., Mai, H. T., Nguyen, L. H., Truong, N. T., Hoang, C. L., Nguyen, S. H., Nguyen, C. T., Nguyen, B. C., Tran, T. H., Tran, B. X., Latkin, C. A., Ho, C. S. H., & Ho, R. C. M. (2019). Social determinants of stigma and discrimination in vietnamese patients with chronic hepatitis B. *International Journal of Environmental Research and Public Health*, 16(3). <https://doi.org/10.3390/ijerph16030398>
82. Wang, J., & Geng, L. (2019). Effects of socioeconomic status on physical and psychological health: Lifestyle as a mediator. *International Journal of Environmental Research and Public Health*, 16(2). <https://doi.org/10.3390/ijerph16020281>
83. Whitehead, M. (1992). The concepts and principles of equity and health. *International Journal of Health Services*, 22(3), 429–445. <https://doi.org/10.2190/986L-LHQ6-2VTE-YRRN>
84. WHO. (1946). *Constitution of the World Health Organization*. <https://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf>
85. WHO. (2003). *Social determinants of health: the solid facts. 2nd edition*. <https://apps.who.int/iris/bitstream/handle/10665/326568/9789289013710-eng.pdf?sequence=1&isAllowed=y>
86. WHO. (2007). *Concepts and principles for tackling social inequities in health: Levelling up Part 2*. WHO Regional Office for Europe.
87. WHO. (2009). Sixty-second World Health Assembly. In 2009 (Issues 18-22 May). [http://apps.who.int/gb/ebwha/pdf\\_files/WHA62-REC1/WHA62\\_REC1-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA62-REC1/WHA62_REC1-en.pdf)
88. WHO. (2011). *Rio Political Declaration on Social Determinants of Health*. [http://www.who.int/sdhconference/declaration/Rio\\_political\\_declaration.pdf](http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf)
89. WHO. (2013a). *Arguing for Universal Health Coverage*. [https://apps.who.int/iris/bitstream/handle/10665/204355/9789241506342\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/204355/9789241506342_eng.pdf?sequence=1&isAllowed=y)
90. WHO. (2013b). *Health 2020 A European policy framework and strategy for the 21st century*. <https://www.drugsandalcohol.ie/20480/1/Health2020-Long.pdf>
91. WHO. (2014). *What you need to know about Health in All Policies*. [https://cdn.who.int/media/docs/default-source/mca-documents/rmncah/health-in-all-policies-key-messages-en.pdf?sfvrsn=a4982d1\\_](https://cdn.who.int/media/docs/default-source/mca-documents/rmncah/health-in-all-policies-key-messages-en.pdf?sfvrsn=a4982d1_)
92. WHO. (2016). *Social protection, income and health inequities. Final report of the Task Group on GDP, Taxes, Income and Welfare Review of social determinants of health and the health divide in the WHO European Region*. <http://www.euro.who.int/pubrequest>
93. WHO. (2021). *It's time to build a fairer, healthier world for everyone, everywhere*. [https://cdn.who.int/media/docs/default-source/world-health-day-2021/health-equity-and-its-determinants.pdf?sfvrsn=6c36f0a5\\_1&download=true](https://cdn.who.int/media/docs/default-source/world-health-day-2021/health-equity-and-its-determinants.pdf?sfvrsn=6c36f0a5_1&download=true)