

IFMSA Policy Document

Health Equity and Determinants of Health

Proposed by Team of Officials

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Policy Statement

Introduction:

Health equity is defined as the state in which all individuals have a fair and just opportunity to attain their highest level of health. It involves the elimination of unfair disparities among different social groups, ensuring equal access to healthcare and the reduction of barriers that prevent individuals from achieving optimal health. Health equity recognizes that everyone should have the opportunity to reach their full health potential, without being disadvantaged based on social, economic, or other forms of stratification. Achieving health equity requires addressing social determinants of health (SDoH), which encompass a range of social factors that directly or indirectly influence individuals' health outcomes. These determinants include education, income, housing, and other social conditions that must be addressed to achieve equitable health outcomes for all.

IFMSA position:

The IFMSA, representing future healthcare professionals and medical students worldwide, calls for coordinated and effective action towards achieving health equity, and ensuring its integration into the healthcare system. We firmly believe that health equity can only be achieved by understanding and tackling the SDoH and adopting an inclusive approach to ensure no-one is left behind. The IFMSA demands multi-sectoral, multi-level action from all relevant stakeholders to address the SDH, promote social justice, and work towards health equity. Health equity must be established as a global priority.

Call to Action:

IFMSA Calls for:

Governments to:

- Taking a Human-Rights Based Approach to healthcare - Emphasise the necessity to ensure the right to health for every individual, regardless of their socio-economic status, race, or geography.
- Fund and program healthcare effectively across sectors, to ensure all populations have equitable access to health.
- Implement healthcare policies, applying the principle of proportionate universalism, allocating resources based on the specific needs of different populations.
- Use a "One Health" approach when formulating strategies to address health inequities promoting multi sector collaboration.
- Collaborate with the healthcare sector in solidifying health systems with respect to the differences in SDoH and priorities between rural urban settings to prevent future health inequities.
- Use a "health in all policies" approach to tackle health inequities, including all determinants of health including social, commercial, economic in formulating policies.
- Improve health outcomes by incorporating principles of good governance, including transparency, consensus, equity, inclusiveness, effectiveness, efficiency, and accountability into health policies.
- Promote a decision-making process that is open, inclusive, and responsive, placing a high priority on addressing the health needs of all individuals, particularly those who are most vulnerable.
- Promote and support youth-led initiatives to address health determinants and work towards health equity.
- Implement monitoring systems and evaluation tools to accurately assess the impact of healthcare policies in achieving health equity.

United Nations, WHO and Non-Governmental Organisations (NGOs) to:

- Strengthen international collaboration to encourage the implementation of strategies on health equity that are effective and sustainable at an international and local level.
- Recognise and support the crucial role of youth in achieving health equity and foster youth inclusion in spaces, activities and decision making that works on health equity and sustainable development.
- Engage vulnerable groups in decision-making processes, policies, and services to ensure that the health sector meets their needs.

Private Sector to:

- Collaborate with the public sector in decreasing economic, social and physical barriers in access to healthcare.
- Give preference to health over revenue, understanding the interlinking nature between health and all other systems within the private sector and in the community.
- Provide financial assistance to increase impact and sustainability of youth-led initiatives working towards health equity.
- Adopt economic and labour policies to prevent social exclusion of vulnerable populations to decrease mental health inequities.

Non-Governmental Organisations (NGOs) to:

- Advocate health equity hand-in-hand with IFMSA and all NMOs in each country.
- Collaborate with local healthcare providers to improve access for marginalised communities.
- Implement community outreach programs to reach vulnerable populations.
- Conduct research to identify health disparities and develop targeted interventions.
- Collaborate with public and private sectors in taking a multidisciplinary and community led approach in removing the inequalities linking SDoH with health inequities.

Healthcare facilities to:

- Commit to continuous professional development on health equity and improving health determinants.
- Recognise and address different health needs of vulnerable populations.
- Develop resources and advocate for policies to reduce health inequities faced by vulnerable populations, especially in health emergencies.
- Implement capacity building initiatives to train employees to provide affordable, timely, comprehensive, inclusive, and quality healthcare services to all populations.
- Promote health literacy among the general population for greater autonomy in decision making and enabling efficient and timely use of healthcare services.

Universities and Educational Institutes to:

- Include health equity and the social health determinants into all curricula as well as training to develop specific skills, such as communication and service coordination.
- Develop research on the impacts of health determinants and the role of collaboration and education in achieving health equity.
- Promote, support and implement initiatives for the community, especially student-led campaigns, that aim to enhance the progress toward achieving the SDGs.
- Develop population specific monitoring and evaluations tools that enable governments and other agencies to objectively evaluate health inequities.
- Conduct research to identify health disparities and develop targeted interventions.

The IFMSA, National Member Organisations (NMOs) and Medical Students to:

- Empower students to advocate for health equity and the social determinants of health.
- Advocate for inclusion of the social determinants of health in local and national policy making processes.
- Advocate for the inclusion of health equity and social health determinants concepts into medical education curricula.
- Conduct and enrol activities that play a role in assessing and solving health inequity in NMOs and promoting health literacy in the general population.

Position Paper

Background information:

The CDC defines Health Equity as “the state in which everyone has a fair and just opportunity to attain their highest level of health.” [1] Achieving the state of health equity requires eliminating any unfair or prejudiced differences amongst different groups of people (socially, economically, or other forms of stratification) and allowing them to access and attain the highest level of healthcare, and in turn, health. It implies that everyone should have the opportunity to attain the full potential of health, and no-one should be disadvantaged from this. [2]

In order to advance towards health equity, we need to address the different determinants of health. The determinants of health are complex and interconnected, and they can have a significant influence on health and well-being. Multiple factors, including genetic, biological, lifestyle, and societal factors, contribute to health outcomes [3]. Health is not solely determined by medical care or individual lifestyle choices, but also by the social and environmental conditions in which people live [4]. Social inequalities, such as poverty, can have a profound impact on health and well-being, with the poor being more likely to face health risks due to exposure to adverse conditions. The World Health Organization established the Commission on the Social Determinants of Health, which identified various topics, including addiction, early life, food, stress, social exclusion, social gradient, social support, unemployment, work, and transportation, as important areas for policy and intervention [3].

Discussion:

1. Introduction to health equity and Determinants of health

1.1 Definition of health equity

A paper published in 2014 defines Health equity as “the principle underlying a commitment to reduce— and, ultimately, eliminate—disparities in health and in its determinants, including social determinants. Pursuing health equity means striving for the highest possible standard of health for all people and giving special attention to the needs of those at greatest risk of poor health, based on social conditions.” The social determinants of health and health equity are interlinked, and the determinants must be addressed to achieve equity in health [5].

In other words, health equity is also defined as “the state in which everyone has a fair and just opportunity to attain their highest level of health.” It involves valuing everyone equally and addressing avoidable inequalities, historical and contemporary injustices, and the elimination of health and healthcare disparities. Health equity also requires addressing social determinants of health and acknowledging and addressing racism as a threat to public health [1].

There are multiple definitions of health equity, but they all emphasise the importance of valuing everyone equally and addressing avoidable inequalities. One example is the definition by the World Health Organization which is “the absence of unfair, avoidable or remediable differences among groups of people” [6].

1.2 Social determinants of health

Social determinants of health are the range of social factors (including economic, commercial, environmental and social conditions) that influence and impact the health status of individuals and populations. They are factors that directly or indirectly determine our overall access to health care, both in

terms of accessibility and quality. They include factors like gender, race, ethnicity, education, support systems, Unemployment and job insecurity, working conditions, housing, childhood development, structural conflict, Access to affordable health services of decent quality, etc. [7]

These social determinants are further moulded and structured by public policies, and political systems, on top of established systems like caste, religion, customs, stereotypes. These social determinants combine in complex ways to form social gradients which contribute to the inequity in health. Hence, to achieve health equity, social determinants must be addressed at a political, geopolitical, societal and community level within policies. Policies must address and recognise the ways health is shaped by these factors, and target their mitigation [8, 9].

In conclusion, we can refer to social determinants of health as the conditions in which people are born, live, learn, work, play, worship, and age that affect a wide range of health outcomes and risks [10]. These determinants are the non-medical factors that influence health outcomes and include factors such as socioeconomic status, education, neighbourhood and physical environment, employment, and social support networks [11]. Social determinants of health are considered the result of a variety of forces and systems that shape the conditions of daily life, including economic policies and systems, development agendas, social norms, social policies, and political systems. They can have a significant impact on health inequities, which are the unfair and avoidable differences in health status seen within and between countries. For example, research shows that social determinants can be more important than health care or lifestyle choices in influencing health, accounting for between 30-55% of health outcomes [12].

1.3 Commercial Determinants of Health

The concept of commercial determinants of health refers to the influence that commercial actors, particularly those in the private sector, have on public health. These actors can impact health outcomes through their products, practices, and policies [13]. Commercial determinants of health encompass a wide range of factors, including unhealthy commodities (such as tobacco, alcohol, and unhealthy food), harmful business and market practices, and global drivers of ill-health [14].

To dive into details, commercial determinants of health are defined as the systems, practices, and pathways through which commercial actors drive human health and health inequity [15]. Commercial determinants of health can influence various risk factors and health outcomes. They can affect risk factors such as smoking, air pollution, alcohol use, obesity, and physical inactivity. They can also impact health outcomes, including noncommunicable diseases, communicable diseases, injuries, violence, and epidemics [16].

Commercial determinants of health can have both positive and negative impacts on public health. On one hand, commercial actors have been instrumental in developing and delivering essential health goods and services. On the other hand, some of their products and practices are responsible for escalating ill-health and health inequity worldwide. Therefore, in order to address the negative impacts of commercial determinants of health, there is a need for regulations and policies that can mitigate harm and enable positive health outcomes. This includes creating new policies and systems for regulating harmful practices and incentivizing pro-health commercial practices. This should also take into consideration that commercial determinants of health extend beyond industries like tobacco, alcohol, and unhealthy food. They also encompass other sectors such as fossil fuels, mining, gambling, automobile, pharmaceuticals, new technologies, and social media. These industries can have both positive and negative impacts on health and health equity [15].

The concept of commercial determinants of health challenges the dominant paradigm in public health, which often focuses on individual behaviours and inadequate environments. It emphasises the role of commercial actors and the broader environment in shaping health outcomes. Understanding commercial determinants of health offers an opportunity to shift the focus towards addressing the root causes of ill-health, environmental damage, and health inequalities [14].

1.4 Political determinants of health

The concept of political determinants of health is now gaining recognition as a framework that goes beyond social determinants of health to understand the structural and institutional barriers to health equity. Political determinants of health involve the systematic process of structuring relationships, distributing resources, and administering power, which operate simultaneously and mutually reinforce each other to shape opportunities that either advance health equity or exacerbate health inequities [17].

The political determinants of health refer to the policies, procedures, and power dynamics that influence population health practices within a community. They create the social drivers, such as poor environmental conditions, inadequate transportation, unsafe neighbourhoods, and lack of healthy food options, that affect all other dynamics of health [17]. While social determinants of health focus on the non-clinical factors that impact overall well-being, political determinants of health delve deeper into the forces that have led to social determinants of health. They examine how the systematic process of structuring relationships, distributing resources, and administering power shape the opportunities and resources that can either advance health equity or exacerbate health inequities. [18]

Political determinants of health play a significant role in shaping health equity or inequities. They are deeply intertwined with social determinants of health and can perpetuate health disparities if not addressed. Understanding the political determinants, their origins, and their impact on the distribution of opportunities and resources can help develop actionable solutions to close the health gap [17].

1.5 Economic determinants of health

To date, public health researchers have begun to map out the interconnected pathways and linkages between economic conditions/policies and health outcomes. For example, the links between poverty and poor health are wide-ranging and well-documented with lower income being associated with both behavioural risk factors, such as smoking, and a range of negative health outcomes. These determinants include income levels, employment status, education, social class, and housing, among others. They can either enhance or restrict an individual's ability to secure the necessary resources for a healthy life [19].

Income is one of the most significant economic determinants of health. People with higher income levels have more opportunities to access health-promoting resources, such as nutritious food, safe housing, and high-quality medical care. Conversely, individuals with lower income levels may face difficulties in accessing these resources, leading to poorer health outcomes. According to the World Health Organization, poor and disadvantaged populations often have worse health outcomes, a higher burden of disease, and shorter lifespans. This income-health relationship indicates the crucial role of economic resources in health equity [19].

Employment status also significantly impacts health. Unemployment and underemployment can cause financial insecurity, stress, and poor mental health, leading to negative health outcomes. A study demonstrated a strong association between unemployment and poor health, with unemployed people having a 63% higher mortality rate compared to those employed [20].

1.6 Environmental Determinants of health

The environment we are surrounded with is an important health determinant [21]. Green and blue areas, understood as the exposure to vegetation-filled spaces and visible water surfaces respectively, have a positive impact on health [22]

Built environment has direct and indirect effects on physical [23] and mental health [24] and so does its design [25]. Many elements from which architecture and design are crucial do have important consequences on human's health: sunlight, temperature, ventilation, etc. [21, 26, 27]. Several diseases have been associated with environmental factors: air pollution [28, 29] and fine particles in the air [30], walkability [31], water sanitation and hygiene [32] and even the distance from the closest health facility [33], especially in children [34, 35].

Climate change also does affect health, not only human but also animal and planetary health [36] by providing significant damage to the health of people of all ages, genders, income levels and ethnicities by impacting the determinants of health [37]. It also is a crucial determinant for vector-transmitted infections and diseases [38], an aggravator for non-communicable diseases [39] and a major threat to food security [40, 41]. Changing climate conditions on land-based and maritime ecosystems has put the basics of life sustainment and the continuity of essential health services at risk, depriving people of their shelter, food, drinkable water, medical assistance and treatment of communicable and non-communicable diseases [42].

Finally, it is important to highlight the work environment's crucial role in health. High levels of job support and workplace justice were protective for emotional exhaustion; while high demands and work load, low job control, low reward and job insecurity increased the risk for exhaustion symptoms to appear [43]. Combinations of high demands with low decision latitude and high efforts with low rewards are risk factors for mental health disorders [44]. Enhancing the state of occupational health requires the implementation of broad and targeted measures aimed at reducing inequalities, augmenting funding for health and environmental initiatives, enforcing legislation, and extending social security coverage to all individuals. These measures should be integrated into public policies [45].

2. Global Status

The global statistics regarding health equity and Social Determinants of Health (SDoH) present a troubling picture. Health outcomes, as discussed above, are determined not merely by biological or individual behavioural factors but also by a confluence of social, economic, and environmental conditions that people live and grow in [46]. Literature has revealed that the SDoH accounts for between 30-55% of health outcomes [12] - accounting for systemic differences in the opportunities populations and communities have to achieve optimal health and wellbeing. Inequities in these conditions contribute to a social gradient in health, meaning that the lower an individual's socioeconomic position, the poorer their health is likely to be, reflecting the inverse care law [47]. This is most prominently highlighted in the burden of disease and mortality comparing HICs and LMICs. Children are 14 times more likely to die before the age of five in sub-Saharan Africa compared to the rest of the world, from preventable infectious and viral diseases, whilst children from the poorest 20% of households are nearly twice as likely to die before their fifth birthday as compared to the children from the richest 20% [48]. Literature has consistently supported the link between the cycles of poverty, infectious disease, and disadvantage - with diseases such as malaria, diarrhoea, and tuberculosis largely correlated with poverty and social disadvantage [49]. Global distribution of all- causes and communicable, maternal, neonatal, and nutritional diseases is consistently more concentrated in low-Human development Index (HDI) countries, compared to high-HDI countries [50].

Moreover, geographic disparities in healthcare access continue to be a significant challenge, particularly for individuals residing in rural, remote, and regional areas [51]. These populations often find themselves underserved due to a confluence of systemic issues [52]. A persistent lack of robust healthcare infrastructure, coupled with a dire shortage of healthcare professionals in these areas, curtails access to quality care [53]. Logistical issues, including extended distances to healthcare facilities and inadequate

transportation options, compound these problems, leading to delayed care, unmet health needs, and worsening health outcomes [52]. Globally, extreme poverty continues to be overwhelmingly rural, with almost 80% of people living in extreme poverty [53]. With over 90% of the world's rural population in Africa and Asia, there is a concerning portion of individuals receiving substandard care - one that varies significantly with their urban counterparts. Discrepancies in mortality between rural and urban residents have been referred to as the 'rural mortality penalty' [54] - to illustrate this, of over the 9.7 million deaths recorded in India (2017), 75% occurred in rural areas [55].

Furthermore, vulnerable populations, such as refugees, asylum seekers, LGBTQI+ communities, women and children, Indigenous peoples, and migrants, face a constellation of additional barriers that hinder their access to healthcare. These barriers are not solely geographic but also encompass social, economic, and political factors. They might face discriminatory practices, language barriers, financial constraints, and a lack of culturally sensitive care [56, 57, 58].

3. Impact of the determinants of health

3.1 Impact on health equity

The social determinants of health (SDoH) are closely interlinked with the health inequities that are found in the global arena. Research shows that, at times, the physical and social environments that people live in can have a greater influence on health outcomes than genetic factors [11]. As the healthcare system operates in a complex network with other systems, a person's health outcomes and the SDoH interact to influence each other. Factors such as poverty, housing and lack of mobility impedes access to healthcare services while access to education has been shown to drastically improve health indicators, and health outcomes then impact factors such as completion of education and economic participation [59,11]. Considering this cycle of influence, inequitable provision of resources and exclusion from socioeconomic and political processes results in unequal access to healthcare and poorer health outcomes in vulnerable populations that are discriminated against on the basis of their ethnicity, employment or immigrant status [60,61,62]. To address these issues, it is vital to adopt an inclusive and multidimensional approach to health in public health policies that are according to the needs of different communities, to foster intersectoral partnerships for effective implementation, and develop accurate and sensitive monitoring and evaluating systems to ensure that all populations achieve good health [11,63].

3.2 Impact on physical health

Numerous studies have shown that these social determinants have a profound impact on physical health outcomes. For example, individuals living in poverty often experience worse health outcomes than their wealthier counterparts. They have higher rates of chronic disease, higher mortality rates, and lower life expectancies. These disparities can be attributed to a variety of factors including limited access to quality healthcare, inadequate nutrition, increased exposure to environmental toxins, and higher levels of stress [64].

Education is another significant determinant of health. Higher levels of education are associated with better health outcomes. Studies have found that individuals with more education had lower morbidity rates from the most common acute and chronic diseases. Education provides individuals with more opportunities for good jobs, raises their income potential, and reduces the likelihood of living in poverty, thus creating a healthier living environment [64].

Neighbourhoods and physical environments also play a crucial role in health equity, and impact physical health. For instance, living in a neighbourhood with pollution from industries or heavy traffic can expose

individuals to toxins which can lead to chronic respiratory problems such as asthma. Also, neighbourhoods with limited access to fresh fruits and vegetables, often called "food deserts," contribute to poor nutrition and obesity among their residents [65].

Employment, too, has a significant impact on physical health. Unemployed individuals have been found to have poorer physical health, higher mortality rates, and higher rates of mental health issues compared to those who are employed. Insecure and poor-quality employment also contribute to poor health outcomes. Access to healthcare is perhaps the most immediate social determinant of health. Barriers to healthcare, such as lack of insurance, long travel distances to providers, or inability to take time off work, prevent many individuals from receiving preventive care, timely diagnosis, or effective treatments. This can result in poorer management of chronic diseases, greater complications, and shorter life spans [66].

3.3 Impact on mental health

In the quest to achieve SDG 3, Good Health and Well-being, mental health needs to be considered a critical component in ensuring healthy communities [67]. Just like physical health, mental health issues are disproportionately faced by vulnerable populations due to multiple SDoH which was brought to the forefront in the COVID-19 pandemic [68]. In the economic sphere, children of parents with economic constraints, adults with poor employment prospects and elderly populations after retirement are more vulnerable to mental health disorders [69]. Social support networks are also shown to have a drastic influence on the mental health of children, in the form of parental relationships, and for the elderly where loneliness and social exclusion are major causes [69,70,71]. In the physical environment, reduced exposure to nature is also negatively associated with mental health [69]. Moreover, populations living in areas facing conflict, disasters and human rights abuses are inherently vulnerable to mental health issues. Data from multiple countries also shows mental health trends associated with gender due to specific sociocultural contexts [69,71]. To tackle these disparities, it is important to take a "life-course" approach, where efforts to improve mental health must begin from the antenatal period and last throughout an individual's life as social determinants affect their mental health in all stages of a person's life [69,71].

3.4 Impact on social wellbeing

An individual's social wellbeing is dependent upon the value of the role they play in the community and thus, is connected to the SDoH as these roles are determined by social, economic, physical and healthcare systems [60]. Involvement in economic processes is a key factor in forming the social dimensions in which an individual operates. Policies that are aimed to reduce the economic burdens of disadvantaged groups have been shown to improve familial relationships, reduce the human rights abuses faced by women and empower women in gaining autonomy in their lives [72]. Efforts to engage elderly populations in communal activities and gain access to social networks counters the sense of isolation faced after retirement [71]. Physical barriers to participating in societies can impede vulnerable populations, like those with mental health disorders separated in institutes, in being connected to their communities and feel valued in the roles they possess [60]. Interventions to socially integrate individuals with these disabilities have shown to decrease negative perceptions regarding them and improve social cohesion by promoting inclusivity. Lack of access to mobility, due to transportation issues, can also limit individuals from activities that allow access to social networks and removing these obstacles can improve the social wellbeing of both children and the elderly [59].

4. Relevance to public health

In the past few decades, significant strides have been made in global efforts to address health equity and the social determinants of health. These initiatives recognize that health and wellbeing are influenced by a constellation of factors beyond biology and individual lifestyle choices, and that achieving health equity

requires addressing these broad determinants [73].

A pivotal moment in these efforts was the establishment of the Commission on Social Determinants of Health by the World Health Organization (WHO) in 2005 [74]. This marked a crucial step towards galvanising global action to reduce health inequities [75]. The Commission's mandate was to gather evidence on social determinants of health and their impact on health inequities, and to make recommendations for policies and interventions to address them. Its work not only brought greater attention to health inequities but also provided a blueprint for how they can be systematically addressed through action on social determinants [74].

The significance of health equity in the global health discourse has been further cemented by a series of international health promotion conferences. Starting with the Ottawa Charter in 1986, these conferences have progressively broadened the concept of health promotion to incorporate considerations of health equity. The Ottawa Charter introduced the idea of enabling people to have control over, and to improve, their health. It highlighted the necessity of making the environments in which people live and work conducive to health, thus setting the stage for the social determinants of health approach [76].

Subsequent conferences built on this foundation and echoed this sentiment. The 2nd International Conference on Health Promotion (Adelaide 1988) stressed the need for healthy public policy, recognizing that health is influenced by policies beyond the healthcare sector. This broad perspective emphasises that health is not only a product of healthcare services but is also deeply intertwined with social policies, economic arrangements, and environmental factors. The Sundsvall Statement in 1991 underscored the role of supportive environments in promoting health, expanding the health promotion discourse to include considerations of sustainable development [77]. It tied health promotion to sustainable development, underscoring the necessity of safe, stimulating, satisfying and sustainable environments for health. This approach situates health within a broader context of social equity and environmental sustainability, recognizing that efforts to promote health and reduce health inequities need to address these broader issues of population wellbeing [78].

In the Sixth Global Conference on Health Promotion in Bangkok in 2005, the call to address the social determinants of health was further amplified. This conference emphasized that health promotion is not just about lifestyle changes but also involves tackling the underlying social, economic, and environmental conditions that influence health outcomes. More recent international efforts have included the Rio Political Declaration on SDoH (2011) [79], Astana Declaration on Primary Health Care (2018) [80], and Global Action Plan for Healthy Lives and Well-being for All (2019) [81] – all reaffirming principles of addressing the social determinants of health and health inequities.

More importantly, the United Nations' Sustainable Development Goals (SDGs), established in 2015, reflect an ambitious global commitment to address various dimensions of sustainable development, including health [82]. A central tenet of the SDGs is the commitment to "leave no one behind," underlining a profound dedication to equity. This commitment explicitly connects the SDGs to the concept of health equity and the social determinants of health. The SDGs' breadth and interconnectedness acknowledge the multi-dimensional nature of these determinants [83]. For instance, SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities) target economic and social determinants, SDG 4 (Quality Education) addresses educational determinants, while SDG 11 (Sustainable Cities and Communities) relates to the built environment and its impact on health. Furthermore, SDG 3 is explicitly dedicated to ensuring healthy lives and promoting wellbeing for all at all ages, underlining the emphasis on health equity [82]. By aiming to tackle these critical determinants, the SDGs offer a comprehensive and intersectoral approach to improving health outcomes and achieving health equity worldwide [84,85].

5. Interlinkage with vulnerabilities and vulnerable populations

In the context of determinants of health, vulnerable groups are populations that are at a higher risk for poor health due to the barriers they face in accessing resources and opportunities. According to the National Collaborating Centre for Determinants of Health, vulnerable populations are groups and communities that are at a higher risk for poor health due to the barriers they experience in accessing social, economic, political, and environmental resources. These barriers can include factors such as discrimination, poverty, limited access to healthcare, and social exclusion [86].

Socioeconomic disadvantage is one of the key factors that contribute to health disparities among vulnerable populations. Individuals who are socioeconomically disadvantaged may face challenges in accessing healthcare, education, and employment opportunities, which can have a negative impact on their health outcomes. It is important for medical organizations and advocacy groups to raise awareness about the health effects of socioeconomic disadvantage and work towards policy recommendations that address these issues [87].

In addition, certain populations are particularly vulnerable in healthcare settings due to social factors [4]. These vulnerable populations may experience greater risk factors, limited access to care, and increased morbidity and mortality compared to the general population. Examples of vulnerable populations include individuals experiencing homelessness, older adults, individuals with disabilities, racial and ethnic minorities, and individuals with low socioeconomic status [88].

Interlinkage with vulnerabilities denotes the complex interaction between the social determinants of health and the vulnerabilities that some groups face. The social determinants of health often co-occur, creating an intertwined set of circumstances that contribute to health disparities. For instance, an individual who is born into a low-income family (a social determinant) might not have access to quality education, leading to low literacy rates (another social determinant) and subsequently limited employment opportunities (yet another social determinant), thus creating a vicious cycle of poverty and ill-health. Additionally, these vulnerabilities and social determinants do not act in isolation; they can compound and exacerbate one another. For instance, a person with a disability (a vulnerability) who also lives in poverty (a social determinant) may face greater health challenges due to limited access to healthcare, substandard living conditions, and potentially fewer opportunities for healthy lifestyle choices [89].

Moreover, systematic social, economic, and environmental disadvantages can create a 'syndemic' – a term used to describe the synergistic interaction of two or more coexistent diseases and the social and environmental factors that promote and enhance the negative effects of disease [90]. A classic example is the interaction between tuberculosis and HIV/AIDS, exacerbated by social conditions such as poverty, malnutrition, and stress. Therefore, addressing health disparities involves more than just improving access to healthcare [91]. It requires multi-dimensional, cross-sectoral interventions to address the social determinants of health and the vulnerabilities faced by different populations. Policies need to be formulated considering these interlinkages, taking a holistic approach that includes elements like poverty reduction, education, decent work, gender equality, reducing inequality, and climate action [92].

6. Health in all policies

It has been widely recognized, since the 1978 Alma Ata declaration, that intersectoral collaboration is required to promote health. Building on this fundamental principle, came about the concept of Health in All Policies (HiAP) [93].

HiAP is simply justified by the fact that decisions, political measures, and interventions made in different sectors can have direct and indirect impact on health and its determinants – and this impact could be

positive or negative. This could include sectors like agriculture, transport, industry, education, housing, etc. [94]. HiAP, hence, is a measure to address the determinants of health that are outside the direct control of the health sector, by identifying and influencing the health and health equity impacts of policy decisions, to enhance health benefits and avoid harm [95].

Via intersectoral collaborations and joint efforts, HiAP seeks to build healthy public policies. It relies on capacity building, governance and accountability, partnerships, and sharing resources across sectors. It aims to promote evidence-based decisions so that negative impacts on health and well-being are avoided or mitigated, and positive impacts are enhanced. Its ultimate outcome is that of healthier public policies. HiAP is important in this context as it impacts all determinants of health [93].

7. Health Equity in the context of health systems

Health systems reformation is essential to make Universal Health Coverage a reality as structural and social inequities transform into health inequities leading to poor health and wellbeing. These inequities were exacerbated in the COVID-19 Pandemic where migrants, due to poor social and economic SDoH, and women, who were a greater part of the health workforce, were more vulnerable to poorer health outcomes [96,97]. It is necessary to create policies that allow access to healthcare services within limited economic means and mobility for vulnerable populations [96]. One way to erase these inequities is to use "proportionate universalism" where implementation of policies is across the entire population with those more vulnerable receiving greater provision of resources [69]. This promotes improvement in quality of services as feedback from only vulnerable populations may be ignored due to their low influence despite being major stakeholders [69]. It is vital to promote public private partnerships in policy making and resource generation as they are shown to have enabled the creation of robust, accessible healthcare services whereas lone efforts can become overburdened in high demand and low resource settings [98,99]. In the aftermath of the COVID-19 Pandemic, it is clear that healthcare systems need to be restructured for health emergencies keeping in mind that rural and urban populations have different needs and priorities where urban settings consist of multiple communities with diverse characteristics [100].

8. Global efforts on health equity and determinants of health

Health equity remains a primary focus within global public health discourse. The World Health Organization (WHO) has been at the forefront of global efforts to improve health equity. Its "Health for All" campaign advocates for universal health coverage with the aim of ensuring that everyone, regardless of their background or socioeconomic status, has access to quality health services without facing financial hardship [101].

There are numerous factors contributing to health disparities, from economic stability, education, and social and community context to health and healthcare accessibility. The goal is to understand and address these social determinants to improve health outcomes and promote health equity. The WHO's Commission on Social Determinants of Health (CSDH) set forth an international action plan to reduce health inequities. This plan takes a multi-pronged approach, addressing not just health services but also the root causes of health inequities, including income inequality, social protection, and living conditions [102].

Various non-profit organisations and international coalitions are also active in promoting health equity, focusing on both local and global scales. Their efforts range from advocacy, education, and research to practical initiatives such as improving access to clean water and sanitation, quality education, and sustainable income sources [103]. These efforts are critical in addressing the broad range of determinants of health and the systems that contribute to health inequities.

In recent years, the concept of 'Health in All Policies' has been increasingly promoted. It recognizes that health is influenced by factors that extend beyond the realm of traditional healthcare and health policy. In summary, health equity is a global goal that requires multifaceted and multinational efforts. By focusing on the determinants of health and implementing inclusive policies, it is possible to make significant strides towards a world where everyone has a fair and just opportunity to be as healthy as possible [104].

In addition, the WHO has recently adopted the Operational Framework on social determinants of health equity, which has been requested by Member States in resolution 74.16 of the 2021 World Health Assembly: "...to prepare, in consultation with Member States and other relevant stakeholders, an operational framework, building on the work of the WHO Commission on Social Determinants of Health, and building on existing resources and tools and subsequent work, for the measurement, assessment and addressing, from a cross-sectoral perspective, of the social determinants of health and health inequities, as well as their impact on health outcomes, and to submit it for consideration by the Seventy-sixth World Health Assembly in 2023, through the Executive Board at its 152nd session." [105]

There is an agreement that the monitoring of social determinants of health equity is vital to track progress and be able to prioritise actions to advance health equity. For several years, the WHO, other international agencies, researchers and countries have initiated and led work to progress with the monitoring of social determinants of health equity. Despite previous monitoring work, institutionalising robust monitoring of social determinants of health equity and ensuring the meaningful impact of policymaking with this data that can close health gaps has proved elusive in most countries [105].

WHO's new Operational Framework proposes a framework for the measurement, assessment and addressing social determinants of health equity. Moreover, it shares key challenges, and ways to overcome them, that countries face in monitoring and transforming monitoring into action to tackle social determinants of health equity [105].

9. Health equity and determinants of health in medical curriculum

Understanding and awareness of health equity could be improved if added into curricula [106]. Underrepresented groups of students have been reporting that including these concepts in their education does make a change [107]. Medical schools are increasingly integrating content and experiences throughout their curricula to raise awareness of social inequities and structural drivers of health [108]. Students who are educated through a more holistic and health equity-centred approach self-report more knowledge about social determinants of health [109].

There are several initiatives which work towards the inclusion of these values in the medical and health-related professions' curricula [110,111]. The Medical School Curriculum Initiative started in the US in 2004 and since then has not only improved the studies of students across their country, but also has expanded to include webinars and presentations to undergraduate students and opened the possibility for students who experienced discrimination to file complaints with the Office for Civil Rights (OCR) for investigation [112].

Medical schools should not only incorporate health equity and determinants of health in the curricula, but also fight against discriminations against students themselves. Minority race students regularly report having faced microaggressions which prevented them from learning during their studies [113].

10. Health Equity and Determinants of health for post pandemic recovery

The COVID-19 pandemic has brought to light the enduring structural factors that contribute to health inequities, including unstable and unfavourable work environments, widening economic disparities, and undemocratic political systems. These significant determinants of health have become intertwined with social factors such as class, ethnicity, gender, and education level, exacerbating pre-existing vulnerabilities in society during the pandemic [114]. The response to the pandemic has also exposed the inadequacy of health and social systems in addressing equity and social justice [115].

The pandemic has also highlighted the need for a transformation instead of returning to normal [116]. It is recognized at the highest political levels that recovery and preparedness require investment in public health systems and social conditions with equity at the centre [117]. The role of the state and community solidarity-driven responses have been emphasised [118].

A reset should be a different approach rather than business as usual, considering concerns about whose interests will drive the reset. Building trust and addressing issues of fairness, transparency, competency, and accountability are crucial [119]. Healthcare workers, youth, and social movements have voiced concerns over poor working conditions and vulnerable economic and social choices [120].

To achieve an equitable recovery, there are three critical dimensions. First, invest in universal primary health care and comprehensive public health services [120,121]. Second, establish or strengthen redistributive, rights-based social protection systems that address gender equity and vulnerability across the life course [122]. Third, recognize and invest in people, especially young people, as drivers of the recovery [116].

Meaningful public engagement is essential for an equitable reset, with diverse actors and affected individuals shaping decision-making. The ambition for recovery should extend beyond international restructuring to include democracy, collective security, and socioeconomic equity within countries. Participatory and integrated approaches, investments in public health services, social protection, and support for children, youth, families, and communities are vital for connecting international values and changes with substantive changes for an equitable recovery within society [123].

The **Global Action Plan for Healthy Lives and Wellbeing for all** commits WHO and 12 other multilateral agencies to work together on the health-related targets of the SDGs from 2019 [124]. This action plan recognizes the importance of health equity and social determinants of health in achieving its objectives and emphasises the need for policies, interventions, and actions that address these determinants and promote equitable access to health services, social protection, and living conditions. Consequently, to the COVID-19 pandemic, several of the action points were aligned to give response to the health emergency but it was also taken as an opportunity to work towards the achievement of the SDGs [125,126].

Following this line, one group of healthcare professionals from Canada proposed a roadmap to achieve an **equitable post-pandemic recovery**, which included the 10 points based on their local and national learnings. Income, housing, intimate partner violence, childhood, access to healthcare and racism were focus areas of their proposal, showing how the determinants of health are about every aspect of an individual's life [127].

11. Health Equity and Post Pandemic Recovery

In order to ensure health equity in the centre of post pandemic recovery, we must ensure the existence of fair and equitable strategies in post-pandemic recovery measures that aim to promote economic,

environmental, and health benefits. This requires that addressing health disparities and ensuring equitable access to resources and opportunities should be an integral part of the recovery process [128].

In addition, there is a critical need for redesigning training programs and workforce strategies to ensure equity in the post-pandemic recovery. This entails that training and education programs should be reimagined with equity at the forefront, ensuring that they benefit everyone equally and should involve providing targeted support to vulnerable populations, offering reskilling opportunities, and creating partnerships between industry and education institutions [129,130].

Moreover, it is also important to reshape critical policies and investments to help workers and learners weather the pandemic and rebuild a strong economy for all. This suggests that policy interventions and targeted investments can play a crucial role in promoting health equity during the recovery process. For example, investing in infrastructure projects that prioritise underserved communities or implementing policies that address income inequality can contribute to a more equitable recovery [129].

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