Social Determinants or Non-Medical Factors Affecting Health

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Abstract:

Background: Social determinants of health and non-medical factors of health are key aspects of how patients access and use the healthcare system and experience health outcomes. Non-medical determinants greatly impact health, and these consist of social determinants of health and the provision of health and healthcare. Understanding these issues is crucial to understanding how to improve health and wellness for patients. Exploring these factors is important in the overall structure of addressing health and health outcomes.

Materials and Methods: A careful review of the literature identified the key issues present that comprise the non-medical and social determinants of health. This review provided keen insight into the factors that the healthcare system should address to improve healthcare.

Results: Non-medical factors are important to consider. Additional factors to consider are lifestyle factors, including living conditions, income or social status, social relationship and networking, and education. Additionally, environmental factors are important to consider. These include hygiene issues, poor working conditions, composition of household, nutrition, and food insecurity. These factors must be considered when addressing health issues.

Conclusion: It is important to begin with developing policies that caters to all segments of the society irrespective of the social status, race, ethnicity, and gender. Additionally, improved policies for infrastructure and housing facilities can ensure improvement in the living standards of people, and therefore, health. The focus must be on enabling the population to live in healthy environmental areas to address health. Healthcare professionals should work to advocate for these issues in practice to improve health.

Key Word: non-medical factors of health, social determinants of health, access to care

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I. Introduction

Access to healthcare is one of the most critical determinants of human health. There are many other factors, however, less discussed, that significantly impact health. Further, five explicit domains underpin the priorities of health policy priorities in the United States of America. The five domains include economic stability, education, health and healthcare, neighborhood and built environment, and social and community context. There are many other factors, however, less discussed, that significantly impact health. These factors are usually non-medical contributors, including education, income, social support, unemployment rate, housing affordability, race, and lacking social policies, existing especially within the same country. The primary focus of policy makers remains on health policies and access to healthcare facilities only, while many other factors affect overall health status.¹. Any country that values its people's welfare must improve access to healthcare while also alleviating those non-medical issues contributing to overall health decline so that all segments of the society receive adequate treatment. This paper aims to review the existing literature on non-medical determinants of human health and understand the level of impact, and present recommendations to inform practice and policy in public health.

II. Non-Medical Determinants

Social determinants are the non-medical influences on health, which plays a key role on the quality of life and the functioning of individuals. Social determinants are associated with the social environment, including gender, social class, income, socioeconomic status, education, ethnicity, culture, and neighborhood. These determinants are classified at the group level however social determinants at the population level are neglected and such determinants includes opportunities regarding job, education, safety, health, food or nutrition, built environment, infrastructure, transportation, social services and race/ethnicity context.¹. The provision of basic resources and environmental stability lies in the hands of the policy makers. The policies that governments make can have a significant effect on the way people live their lives, their consumption level and opportunities and

ability to afford a better and improved lifestyle. The following sections will elaborate on each pillar and illuminate the importance with respect to human health.

III. Lifestyle

Lifestyle is the situation or condition in which a person spends life. Rapidly changing technological trends affect lifestyle choices, which is not only impacting psychological decisions but also has a significant physical impact on the health status of people.². One of the recognizable lifestyle changes resulting from technology is a significant increase in obesity leading to more diabetic patients. Research suggests that the problems of diabetes and obesity were not as common two to three decades ago as they are now.². Further, they are not only prevalent among young adults but they are widely spreading among children as well. Thus, often ignored, lifestyle is an important health determinant because the provision of a better lifestyle has a positive impact on the mental and physical wellbeing of people and they can contribute positively towards a better society.

Living Conditions

The conditions in which human beings live, work or conduct everyday activities, are significant health determinants. This includes the infrastructural design that determines the level of physical activities performed within the community and society. For instance, lacking availability of parks, jogging and cycling tracks, walking lanes and outdoor gyms contribute towards a sedentary lifestyle, poor health conditions and leading to various diseases such as diabetes, obesity and anxiety.³. It is reported that in America, two-third of the population is overweight partly due to the unhealthy lifestyles developed as a result of urban development leading to congested living spaces and convenience of junk food outlets at convenient distances. An estimated 2 million Americans live in places that are more than a quarter-mile away from healthy food outlets. Such areas are known as food desserts and for the rural population, the distance is almost 10 miles. In most cases, people living in food deserts are economically weak and often fall below the poverty level.⁴. This disparity has led to serious health impacts including hypertension, diabetes and cardiovascular diseases. Researchers report that in Baltimore regarding the impact of food swamps and food desert locations have on young/adolescent girls indicated that higher intake of snacks or unhealthy diet are creating early adolescence and higher obesity rates among African-American girls as compared to Caucasian or higher income class girls.⁵. Further, Researchers proposed that there is a serious shortage of healthy food options available in the African American communities.⁵. In comparison, the white communities have better availability of healthy food stores.⁵. Better housing facilities also lead to healthier human beings because they are safe from the intake of harmful substances in the atmosphere. For instance, the people living closer to the industrial areas are more prone to exposure of industrial waste and lead.

Income or Social Status

Social status or income has a strong correlation with the health condition of an individual. According to researchers, these two factors are considered to be the fundamental aspects of health status because the gap among the people of higher income class and the people of lower income class creates higher health disparities.⁶.Similarly, access to healthy food, better housing, and education is not possible without having stronger financial position. Along with the unequal distribution of wealth comes the lack of resources as well. Moreover, healthy and organic food is more costly than less healthy or unhygienic food items and therefore the people living on meager financial support are less likely to spend on their food consumption, as they have to pay for other necessity as well. Research shows that the income level influences the individuals' decision of opting for healthier food and lifestyle. Similarly, education opportunities available for people as well as the employment and access to proper healthcare facilities are important when making food choices.⁷. The income level also includes the disposable income which is directly linked to the lower level of mortality among people that have a high level of disposable income and vice versa.⁷.

Social Relationship and Networking

Historically, social networking in the context of health promotion is a term understood to harness groups and networks for a shared community and benefit. Social networking has moved to the digital space, and virtual spread of information through online social networking provides unprecedented access to information that can influence health. The importance of social relationships and networking cannot be undermined as healthy communal relationships decrease the possibility of drug abuse, as substance abuse is among the major causes of mental illnesses and violence issues. Researchers revealed that the individual's behaviour and habits are significantly influenced by the social and networking framework.⁸. The people who are surrounded by health-conscious social circles are more likely to adopt a healthy lifestyle along with having significant support dimensions including emotional aspect, tangible, informational and self-esteem dimensions.⁸.

Education

Researchers explain that education is the most modifiable social determinant of health.⁹. The importance of education cannot be ignored in terms of healthcare and the interrelated nature to other determinants. Researchers shed light on the fact that access to better education empowers the individual, creates awareness and provides better employment opportunities resulting in an improved lifestyle.⁹. Similarly, researchers stated that education affects the entire life of individuals. Undereducated people are less healthy and prone to drug abuse and violence.¹⁰. Education encourages healthy behavior among people. There is an abundance of evidence regarding education and the prevalence of healthy lifestyle because education makes people better informed about health-related issues. On the contrary, people who do not pursue higher education are likely to have a lower social level in society; most likely leading to an unhealthy lifestyle due to their surroundings and company in which they spend leisure time.¹⁰.

IV. Ecological Factors

Hygiene Issues

Research demonstrated that lack of clean drinking water, unhygienic living standards and sanitary conditions, air pollution and extreme weather conditions contribute significantly towards diseases.¹¹. Such disparities are not just measured between countries but within the country as well. Even the urban and rural communities witness such disparities especially among the people of various ethnicity, race, and social position. Researchers shed light on various other studies conducted that have revealed the presence of harmful substances in the air leading to respiratory issues and therefore increasing the mortality rate.¹¹. It has also been identified that from the end of the 1990s to mid-2000s, various studies conducted to understand the relationship between the birth weight and airborne particles in countries such as Canada, France, Netherlands, United States, South Korea, and the United Kingdom.¹¹. Results revealed consistency across these countries with respect to the health determinants.¹¹.

Poor Working Conditions

Similarly, researchers are of the view that poor working conditions is also an important social determinant of health as it leads to the unavailability of safety and preventive services that could assure the security of the workers.¹². Above all, these factors contribute significantly to increasing the stressful work environment with a low reward system. The unfavorable physical environment and stress factors lead to dissatisfaction and can result in chronic diseases and poor mental health outcomes.¹². Poor working conditions are a very real threat to health, and hazardous work and occupation-related diseases kill approximately 1,500 workers daily across the globe.

Composition of Household

The composition of households can have a significant effect on human health. Children in single-parent and low-income households are more likely to develop food insecurity, experience uncomfortable living conditions and live sedentary lives. Moreover, the low-income households have a high rate of adolescent marriages and childbearing which affects the life of the children as well as the mother because she is unable to complete her formal education and therefore has fewer opportunities for a decent income and support her children accordingly.¹³. As a result the children do not receive adequate health care resources and often fail to develop maternal attachment with the mothers because the latter has to divide her time between earning, paying bills and looking after children. The worst scenario is that the children of single parents are prone to have early marriages as well and therefore the cycle continuous at least for two to three generations.

The negative behaviour of parents towards each other and children also have a significant impact on the health of each individual. Constant fights, incidents of violence and other such factors increase the likelihood of children turning towards violence, use of drugs or may develop heart disease, asthma or face delay in reaching milestones.¹⁴. The authors further indicated that such children have higher tendency to can mental and physical health-related issues from a very tender age, yet, the inability of parents to understand the situation and help their children add to the severity of the matter.¹⁴.

Nutrition

As mentioned above, human beings have complete control over their nutritional habits. The increasing number of obesity cases encouraging developed countries to develop dietary guidelines to create awareness among communities and on the national level. The patterns of food consumption have also changed due to the availability of convenient and cheaper food options. Dietary habits can be useful in protecting the health outcomes.¹⁵. The nutrition factor differs with respective family and community framework. For instance, people residing in the less developed or rural areas face calorie deficiency and protein malnutrition as compared to

urban communities where there is an increase in calorie consumption due to less physical activity. Similarly, the disparity in nutrition among the lower segment of the society contributes significantly towards the rest of low weight babies and even certain types of cancer.¹⁶. Importance of nutrition has been prominent during the war time food rationing when a significant cases of nutritional deficiencies have been reported in the past.

Racism

Not surprising, factors including ageism, sexism and racism also drive the health of the people in a way that the operational societies have unequal distribution of wealth, power and facilities therefore, the dominant groups devoid the society of the privileges.¹⁷. A conceptual framework to claim racism as a social determinant of health is important to consider.¹⁷. This discusses the concepts and relationships of racial discrimination; denial of goods, resources, or services; psychological stress; assault; poorer living conditions; decreased quality of or access to health care; psychological symptoms; negative coping behaviors; physiological stress response; mental health outcomes including anxiety, depression, and substance abuse; and physical health outcomes including cardiovascular disease, decreased birth weights, increased blood pressure, and physical injury.

From the production of agriculture goods to the control and distribution, oppression can have an adverse impact on the availability of basic food items for the diverse population. A very common example is of the developing countries where the landlord system is quite prevalent; especially among the rich consisting of vast pieces of land maintained by the farmers. The crops are then sold off to earn profit and a small amount is distributed among the farmers.

Food Insecurity

The concern of food security among the people is increasing stress levels, resulting in anxiety, hypertension, and depression. According to the behavioral risk factor surveillance system, a survey of 95000 American residents from various States has revealed that more than half of the respondents said that they have become increasingly worried if they would have enough money to buy healthy food. The cases of food insecurity were reported more amongst the Hispanic and African Americans as compared to the non-Hispanic whites.¹⁸. Another study conducted by the Feeding America revealed that 1 in 9 Americans worry about the availability of food and this includes 11 million children as well.¹⁹. The population residing in disadvantaged neighborhoods shows an increased level of food insecurity.¹⁹.

V. Recommendations

To mitigate the problems associated with the non-medical determinants of health, it is important to begin with developing policies on the national level that caters to all segments of the society irrespective of the social status, race, ethnicity, and gender. These policies may include incentives for more healthy food stores in the less privileged or middle-class residing areas where people have to travel a distance for healthy food items. Improvements in factors other than housing, such as transportation and education must also be considered to address overall health and barriers to health.²⁰.

Secondly, improved policies with regards to infrastructure and housing facilities can ensure improvement in the living standards of people. The focus must be on enabling the population to live away from the industrial areas so that the risk associated with air pollution and the intake of harmful substances can be reduced. An example of such development initiative is witnessed in San Francisco where the collaboration of nonprofit and for-profit companies is working towards improving the poor housing conditions and Sunnydale, a community that consists of 1700 residents is developed.²¹. Therefore, it is recommended to include healthy housing schemes with having a plan of adding green areas, fitness facilities and availability of healthy food markets. Moreover, improved outdoor facilities such as the Park Prescription Programs can also assist in increasing awareness among the prevailing diseases as well as encourage and motivate people to work towards their wellbeing as a community.²².

VI. Conclusion

Various social and environmental determinants of health exist globally; however, the focus has mostly been on the limited access to healthcare and relevant policies having a significant impact on the well-being of human beings. The importance of non-medical factors or social determinants cannot be ignored as they are well integrated and often interdependent. While people have control over their nutrition and lifestyle habits, effective policies at the national level can help improve the environment and social determinants. Improving non-medical contributors to health is essential to sustain a healthy society and relieve the government from the increasing significant monetary burden of providing emergency care. Therefore, it is vital to consider the non-medical factors, including the built environment and social determinants, as important as the medical determinants as the foundation of public health interventions aimed at preventing illness and disease.

References

- [1]. Singh GK, Daus GP, Allender M, et al. Social determinants of health in the United States: addressing major health inequality trends for the nation, 1935-2016. International Journal of MCH and AIDS. 2017;6(2): 139–164. doi: 10.21106/ijma.236
- [2]. Grey M. Lifestyle determinants of health: isn't it all about genetics and environment? Nursing Outlook. 2017;65(5): 501-505. doi: 10.1016/j.outlook.2017.04.011
- [3]. CDC. Impact of the built environment on health. 2011. Retrieved from https://www.cdc.gov/nceh/publications/factsheets/impactofthebuiltenvironmentonhealth.pdf
- [4]. Smith IH. From cultivation to consumption: linking urban agriculture, nutritional sciences, environmental sciences, and telehealth to food deserts and the social determinants of health. Journal of Agriculture and Environmental Sciences. 2016;5(1): 20-24.
- [5]. Hager ER, Cockerham A, O'Reilly N, et al. Food swamps and food deserts in Baltimore City, MD, USA: associations with dietary behaviours among urban adolescent girls. Public Health Nutrition. 2017;20(14): 2598-2607. doi: 10.1017/S1368980016002123
- [6]. Amit S. What are the determinants of health? n.d. Retrieved from https://www.colleaga.org/article/what-are-determinants-health
 [7]. WHO. Social and environmental determinants of health and health inequalities in Europe: fact sheet. 2012. Retrieved from
- http://www.euro.who.int/__data/assets/pdf_file/0006/185217/Social-and-environmental-determinants-Fact-Sheet.pdf [8]. Oh HJ, Lauckner C, Boehmer J, et al. Facebooking for health: an examination into the solicitation and effects of health-related
- social support on social networking sites. Computers in human behavior. 2013;29(5): 2072-2080.
- [9]. Islam MM. Social determinants of health and related inequalities: confusion and implications. Frontiers in public health. 2019;7: 11. doi: 10.3389/fpubh.2019.00011
- [10]. Shankar J, Ip E, Khalema E, et al. Education as a social determinant of health: issues facing indigenous and visible minority students in postsecondary education in western Canada. International journal of environmental research and public health. 2013;10(9): 3908-3929.
- [11]. Woolf SH, Aron L, & National Research Council. Social Factors. In US Health in International Perspective: Shorter Lives, Poorer Health. National Academies Press (US). 2013.
- [12]. Benach J, Muntaner C, Solar O, et al. Introduction to the WHO Commission on Social Determinants of Health Employment Conditions Network (EMCONET) study, with a glossary on employment relations. International journal of health services. 2010;40(2): 195-207.
- [13]. Woolf SH, Aron L, & National Research Council. Physical and social environmental factors. In US Health in International Perspective: Shorter Lives, Poorer Health. National Academies Press (US). 2013.
- [14]. Chung EK, Siegel BS, Garg A, et al. Screening for social determinants of health among children and families living in poverty: a guide for clinicians. Current problems in pediatric and adolescent health care. 2016;46(5): 135-153. doi: 10.1016/j.cppeds.2016.02.004
- [15]. Chin VYW, & Noor NAM. Sociocultural determinants of health and illness: A theoretical inquiry. Geografia: Malaysian journal of society and space. 2017;10(1).
- [16]. Taylor LA, Tan AX, Coyle CE, et al. Leveraging the social determinants of health: what works? PLoS One. 2016;11(8): e0160217.
- [17]. Paradies Y. Racism and health. International encyclopedia of public health (2nd ed.). 2017:249-259.
- [18]. HIMSS. Social determinants of health: breaking down the barriers. 2019. Retrieved from https://www.himss.org/resources/social-determinants-health-breaking-down-barriers
- [19]. Feeding America. No one can thrive on an empty stomach. 2020. Retrieved from https://www.feedingamerica.org/
- [20]. Donkin A, Goldblatt P, Allen J. Global action on the social determinants of health. BMJ global health. 2018;3(Suppl 1): e000603. doi: 10.1136/bmjgh-2017-000603
- [21]. Cassidy A. Community development and health. Health Affairs. 2011. Retrieved from https://www.healthaffairs.org/do/10.1377/hpb20111110.912687/full/
- [22]. Jennings V, Larson L, & Yun J. Advancing sustainability through urban green space: cultural ecosystem services, equity, and social determinants of health. International Journal of environmental research and public health. 2016;13(2): 196. doi: 10.3390/ijerph13020196

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