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Social and Economic Factors that Influence Health Outcomes in Family Medicine

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Article History

Abstract

Over the last twenty years, the social determinants of health (SDOH) have gained more and more attention in the public health community. SDOH are non-medical elements that may be significantly impacted by social policies and have an impact on health. The increasing variety that exists within our societies makes it absolutely necessary for us to incorporate into undergraduate medical education social determinants of health such as racial factors, financial instability, partner violence, insufficient accessibility to transportation, and inadequate social supports, as well as the crucial role of health education. Nonetheless, a growing body of research indicates that a variety of health outcomes are fundamentally caused by socioeconomic variables including wealth, income, and education together. In this review we highlight the influence of socio-economic factors on health outcomes, approaches to incorporate social determinants of health in family medicine practice, and we also talk about challenges and solutions in addressing social determinants in family medicine. The objective of this research was to assess the impact of social determinants of health on family medicine practice in which socioeconomic determinants of health might have an effect on health

	outcomes and healthcare delivery within the context of a family medicine clinical environment.
CC License CC-BY-NC-SA 4.0	***Keywords: Family medicine, SDOH, social determinants of health***

Introduction

The majority of health disparities are caused by social determinants of health, which are described as "the conditions in which people are born, grow, work, live, age, and the wider set of forces and systems defining the conditions of daily life" (1). Social determinants impact variables at the local, national, and international levels and are mostly based on the distribution of resources (2). There is strong data, accumulated over the last three decades, that nonmedical variables have a significant impact on one's general physical and mental well-being. Approximately 245 000 adult deaths in 2000 were related to low education, 176000 to racism, 162000 to low social support, 133000 to poverty, and 119000 to low disparities in income, according to an analysis of studies measuring deaths related to social factors (3). The yearly mortality toll from insufficient social support was comparable to that from lung cancer (n = 155521). The data suggests that medical care has a limited impact on health compared to previously believed, especially when it comes to determining who gets sick or injured in the first place. It does not refute the influence of medical care on health; rather, it shows that it is not the only factor [4-6]. The Office of Disease Prevention and Health Promotion's Healthy People 2020 program divides the State Department of Health (SDOH) into five primary categories: economic stability, education, healthcare access, built environment and neighborhood, and social and community context as shown in figure 1 [7, 8].

Figure 1

In the Middle East, substantial adoption of addressing patients' socioeconomic determinants of health is still ongoing [9], and the Eastern Mediterranean area has produced very few publications advocating for the implementation of an approach in medical education and advancing the role of health professionals in addressing the SDOH more widely [10-12]. With a heavy emphasis on health promotion, the Saudi health care system has developed into one of the most sophisticated in the Middle East [13, 14]. However, there is still a lack and limited research on the impact of SDOH on family medicine practice in Saudi primary healthcare settings.

Despite having one of the highest per capita incomes in the world, the United States has significant health inequalities among its population that are caused by social, economic, and environmental variables. Place of birth has a stronger correlation with life expectancy in the US than race or genetics [15]. The life expectancy gap between the wealthiest and poorest inhabitants is, on average, fifteen years [16]. This discrepancy is linked to regional traits and health-related behaviors that are impacted by social and historical variables [2]. Every year, population-level health care disparities cost the economy $309 billion and disproportionately impact underprivileged groups [17]. In addition, future generations that are born into settings that lead to poor health outcomes may be impacted by a lack of economic or social mobility. Studies indicate that allocating resources towards interventions aimed at addressing socioeconomic determinants of health, such housing, financial assistance, and care coordination, results in favorable consequences [18].

In order to tackle health outcomes linked to social determinants of health, medical professionals, legislators, communities, and individuals themselves must recognize the part these factors play in both individual and community health. They must also work to enact public policies that address the daily needs of people in their communities while reaching the greatest number of people possible. By addressing these problems, we can lower health inequalities and advance population-wide health equality. Understanding the socioeconomic determinants of health is crucial to a doctor's duty as a patient advocate and fellow of medical treatment, even if it may not necessarily result in improved health results.

In recognizing and resolving patient concerns that extend outside the therapeutic context, family doctors play a leading role. Community vital signs may be utilized in patient treatment to address socioeconomic determinants of health, as previously discussed in an editorial published in American Family Physician [19]. According to data, the majority of family physicians agree that they ought to pinpoint important SDOH that set off actions, empower and involve communities in addressing health disparities and socioeconomic factors impacting health outcomes, and support legislative initiatives. An essential initial step is integrating an SDOH evaluation tool into patient treatment [20]. Screening helps people stay healthier in conventional medical care by enabling early illness identification, which enables rapid treatment to avoid negative effects [21]. Likewise, as SDOH may affect a patient's ability to receive health care and treatment, screening for it may help patients' general health [22]. The efficacy of SDOH screening in clinical practice will be shown nationally when data on the creation of a payment model that addresses social needs is gathered by the Centers for Medicare, Medicaid Services, and healthcare authorities [23]. To find out what steps family doctors have done to address the SDOH and perceived obstacles, a survey was done in 2019 and implied that family doctors are using clinical and population-based measures to address the SDOH. Family physician advocates may be more likely to work in a federally qualified health center (FQHC) or in a lower socioeconomic area, also fresher family doctors and those employed in FQHCs are potential candidates for clinical engagement to address SDOH [24].

A limitation we faced when doing our research was disappointedly that there was not enough data or studies relating impact of social determinants of health with family medicine practice, in Saudi Arabia and even worldwide. However, SDOH is a well-spoken-about topic when it comes to other specialties but not family medicine, so more and more studies are welcomed to be done on this specific topic.

Role of Family Medicine in Addressing Social Determinants of Health

The core idea of family medicine is that community factors, such as housing availability, neighborhood safety, social connection, income and educational attainment, and environmental quality, have a significant impact on patient health [25]. The need of screening for socioeconomic determinants of health in primary care and producing actionable, useful data to assist doctors and practices in connecting with community health services is becoming widely acknowledged [26, 27].

Preparing the next generation is one of the medical profession's main responsibilities. A reevaluation of medical education is necessary and needed, as shown by the fact that it took decades for many doctors and healthcare organizations to adopt a social determinants agenda. Medical education for doctors should be redesigned from the base with an emphasis on creating and ensuring overall health rather than merely treating patients. This would place an awareness of the fundamental ffactors that influence health at the center of medical education as opposed to making it a course that receives little attention. This shift in emphasis will better prepare doctors for what might be their greatest long-lasting contribution: making the world healthy [28]. Simultaneously, a wider range of physicians practicing might contribute to the medical profession's primary objective of addressing socioeconomic determinants of health. At best, poverty, inequity, social, and racial factors are abstractions to those who have never encountered them. It is true that a varied physician population may guarantee that medical professionals are more equipped and more eager to speak out on the

social determinants of health and to influence public opinion. This is in line with the growing diversity and inclusion initiatives at almost all of the nation's medical schools [29].

Influence of Socio-Economic Factors on Health Outcomes

Several studies have highlighted the significant impact of social determinants of health on health outcomes. According to a study by McGinnis et al., medical treatment accounts for only 10%–15% of avoidable deaths in the United States [30]. However, other research indicates that socioeconomic factors such as money, education, and employment significantly influence health-related behaviors [31, 32]. Following a meta-analysis, Galea et al. found that the number of deaths in the United States in 2000 related to low social support, racial segregation, and low education levels was similar to the number of deaths related to myocardial infarction, cerebrovascular disease, and lung cancer, respectively [33].

Evidence supports the idea that social and economic conditions have a profound influence on health, disease, and the practice of medicine. Moreover, it is important to view health and disease from a holistic perspective, taking into account the historical and social context in which healthcare is delivered. Understanding the impact of social determinants of health is crucial for family medicine practitioners. They need to recognize that health conditions are not solely determined by biological factors but are also influenced by a range of psychosocial factors The Affordable Care Act has also put an emphasis on improving patient care while reducing costs, making it imperative for family medicine practitioners to consider the financial impact associated with social determinants of health [34].

Identifying and Utilizing Individual-Level Data

Patient-specific information, such as medical, social, and family history, is gathered directly from them. Public data sources including vital statistics records, disease surveillance reports, and census reports are the sources from which community-level data are gathered. Community-level data are referred to as community vital signs when they are processed and connected to individual data. Community vital signs inform patients about the health concerns associated with their area, including crime rates, walkability, and the presence of environmental contaminants. Family doctors may have a better understanding of the health hazards and advantages of living in a given location by learning about these illnesses and how they influence patients [35]. How are vital signs from the community utilized to treat patients? In order to offer a more comprehensive picture of patients' health state, it is preferable to combine contextual data from the area with specific electronic health record data. With more information about patients' living, learning, working, and recreational environments, doctors may better focus on clinical services and make suggestions that will have the greatest possible effect. Care teams may refer patients to low-cost exercise options or neighborhood walking clubs, in addition to suggesting that they improve their diet and exercise routine. To provide another example, a doctor may decide to proactively test for lead exposure based on heightened community risk if they are aware that a patient lives in an area with older homes. It is not necessary for physicians to be the only providers of community vital signs in clinical practice [36, 37].

An in-action community vital signs e-prescribing project (HealtheRx) is now present in University of Chicago, USA; patients at participating clinics get a personalized map of social and health services in their area after every visit. The map is created using the electronic health record and is specific to the patient's location and diagnosis. Recommendations for community resources are taken from a database that covers mental health, physical and nutritional health, housing and transportation, and drug programs. Over 250,000 community resource prescriptions were created for over 113,000 patients getting treatment at 33 locations across Chicago in the program's first three years. Results data are not yet available; however an early research conducted during the project's introduction revealed that 19% of these patients used a service they had learnt about via HealtheRx [38].

Approaches to Incorporate Social Determinants of Health in Family Medicine Practice

Family medicine plays an essential role in addressing social determinants of health by considering the socioeconomic factors that influence individuals' health outcomes.
According to our research this can be achieved through various approaches, such as:
1. Integrating social determinants of health screening and assessment into routine patient care.

2. Collaborating with community organizations and social workers to provide comprehensive care that addresses social and economic factors impacting health.
3. Engaging directly with communities and developing effective community engagement strategies to address social, structural, and political determinants of health [39].
4. Utilizing evidence-based interventions and resources to support individuals in addressing the social determinants of health.
5. Advocating for policies and practices that address health disparities and promote health equity.
6. Fostering partnerships with public health agencies, local government, and community organizations can contribute to a comprehensive and integrated approach in addressing social determinants of health
7. Ensuring that future training and practice of family medicine include a focus on social determinants of health and effective community engagement strategies is crucial in providing comprehensive care
8. Establishing partnerships with local organizations to provide resources and support for individuals affected by social determinants of health.
9. Promoting education and awareness among healthcare providers and patients about the impact of social determinants of health and how they can be addressed.
10. Developing research initiatives to further understand the relationship between social determinants of health and health outcomes, leading to evidence-based interventions in family medicine practice.
11. Implementing population health approaches that address the social determinants of health at a community level.
12. Creating a supportive and inclusive healthcare environment that is sensitive to the social and economic needs of patients.
13. Promoting interprofessional collaboration among healthcare providers, social workers, community organizers, and other stakeholders to address the multifaceted nature of social determinants of health.
14. Continuing professional development and training opportunities for healthcare providers to enhance their understanding and skills in addressing social determinants of health in family medicine practice.

Impact of Social Determinants on Patient Care and Health Services

Over the last twenty-five years, there has been a huge development in our understanding of the biological processes and pathways linking social determinants with health, despite the several unsolved concerns. Growing research demonstrates the connections between a wide range of social—including socioeconomic—factors and various health outcomes. These connections occur not just via direct interactions but also through more intricate channels that often include biopsychosocial processes [40]. Certain socioeconomic characteristics are linked to health outcomes via relatively immediate and direct exposures. For example, children exposed to lead in inadequate housing have impaired cognitive function and delayed physical development [41]; pollution and allergens, which are often more prevalent in impoverished communities, may aggravate asthma [42]. Socioeconomic and other social variables may also lead to deteriorate health via pathways that occur over small time periods (months to years). One example of this is the factors that influence the societal acceptance of dangerous health practices. For example, exposure to violence may make young people more likely to commit gun violence [43]; the availability of alcohol in underprivileged communities can impact young people's usage of alcohol, which in turn can affect the rates of traumatic injury caused by alcohol [44]. Sleep may be influenced by socioeconomic variables. Sleep can have short-term health impacts and be impacted by job, home, and neighborhood contexts [45]. The way people work may influence their health-related behaviors, which can then affect others. For instance, employees who aren't allowed sick days are more likely to report to work while unwell, which raises the risk of a disease spreading to clients or colleagues [46].

Challenges and Solutions in Addressing Social Determinants in Family Medicine

Family doctors were asked to respond to a survey on their perceived obstacles and the steps they had made to address the SDOH, and out of all the choices that were offered, the participants' most significant barriers were organizational capacity (personnel, time, and incentives) [24]. Although many of these procedures are presently not supported by enough data, a change in payments may provide the financing mechanisms needed to encourage SDOH in primary care [47]. To confirm the efficacy of these kinds of efforts to alter payment systems, further study is required. Additionally, participants said that their communities lacked the tools necessary to provide their patients with practical remedies. The recent cuts in financing for public health, housing, and other social assistance programs may have made this issue worse [48]. For these kinds of

organizations to grow in size, become more efficient, and make cooperation simpler, they need a steady stream of funding [49, 50]. Compared to their more experienced peers, family doctors with less experience were more involved in clinical activities. This might indicate that younger family doctors are more competent and motivated to address the SDOH because of modifications made to medical school [51]. Due to increased access to healthcare, the Affordable Care Act may possibly have contributed to the demand for these therapies. As the use of electronic health records (EHRs) has increased, technology advancements may also have contributed to the success of these interventions. For example, the introduction of Aunt Bertha and 211 has made it easier to link patients to community-based services [52, 53].

Additionally, the results of the previously mentioned survey demonstrated that family doctors employed in lower socioeconomic neighborhoods participated in population-based initiatives at a higher rate than their counterparts employed in more affluent regions [24]. Community features, however, had little effect on clinical participation. This was unexpected since family medicine places a lot of emphasis on the connection between the patient and the doctor [54]. Family medicine should take responsibility for population health, according to editorials by Hollander-Rodriguez and DeVoe, Sikora and Johnson, and others [55, 56]. This is because family medicine puts patients' health in the context of their families and communities, and also because the health of the larger community has an impact on the health of individuals. This highlights the issue of how family doctors who serve underprivileged populations see the relative value of additional population-based initiatives vs therapeutic treatments for SDOH. Family doctors working in underprivileged areas may not have the resources necessary to carry out therapeutic treatments due to differences in health insurance and access to care [57]. It can also indicate that they believe tackling the underlying structural causes of health disparities is more important [58]. To better understand how to include family doctors, further study on this subject could be required.

Conclusion

The huge improvements in knowledge and awareness over the last 25 years leave no doubt that social and econimic factors are important determinants of health, despite challenges, disputes, and unsolved concerns. Even though tackling the social determinants of health necessitates a wide range of initiatives involving cooperation between various government agencies at the local, provincial, and national levels as well as several sectors (such as education, justice, and employment), family doctors and other allied health professionals who provide direct patient care are nonetheless significant actors and strong influencing agents. They are in a good position to assist their patients in overcoming social obstacles, advocate for improved living conditions to lessen health disparities and more responsive healthcare, and draw attention to the human cost and suffering caused by poverty, discrimination, violence, and social exclusion. Finally, we recommend more comprehensive studies to be done on this specific topic, as through our research we only jumped to couple of related topic.

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