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Social Determinants of Health and How They Affect a Small Rural Community (Case Study) Eastern Shore of Maryland

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Abstract

The Eastern Shore of Maryland is rural and is characterized by prevalent poverty, housing instability, lack of access to healthcare, chronic diseases, substance abuse, and issues with transportation to access healthcare services. The same problems exist for the population in Maryland and the United States. Understanding the challenges experienced by rural communities in Maryland is critical to addressing the vulnerable population. This study is an explanatory case study that examines the social determinants of health and how those affect small rural communities on the Eastern Shore of Maryland by examining literature published between 2016 and 2024. The literature reviewed resulted in three themes: the social determinants of health in rural communities, partnerships to address the social determinants of health in rural communities, and advocacy and the social determinants of health. Key issues identified in the literature include the critical nature of addressing the social determinants of health in the Eastern Shore's rural communities and how that must be undertaken by developing partnerships with a broad range of actors within the community and with stakeholders outside of the community, such as policymakers and funding organizations. Hospitals play a unique role in building community-based interventions and partnerships, and they have been shown in previous studies to be vital to initiatives addressing the social determinants of health and increasing better health and well-being outcomes for community members in rural areas. Advocacy, a focus on transportation, and education are essential to address the social determinants of health.

Keywords

Community Health Workers (CWHs), Eastern Shore, Healthcare, Insurance, Maryland, Partnerships, Rural Communities, Social Determinants of Health (SDOH)

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Running Head: SDOH IN RURAL EASTERN SHORE OF MD

Social Determinants of Health and How They Affect a Small Rural Community (Case Study) Eastern Shore of Maryland

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Abstract

The Eastern Shore of Maryland is rural and is characterized by prevalent poverty, housing instability, lack of access to healthcare, chronic diseases, substance abuse, and issues with transportation to access healthcare services. The same problems exist for the population in Maryland and the United States. Understanding the challenges experienced by rural communities in Maryland is critical to addressing the vulnerable population. This study is an explanatory case study that examines the social determinants of health and how those affect small rural communities on the Eastern Shore of Maryland by examining literature published between 2016 and 2024. The literature reviewed resulted in three themes: the social determinants of health in rural communities, partnerships to address the social determinants of health in rural communities, and advocacy and the social determinants of health. Key issues identified in the literature include the critical nature of addressing the social determinants of health in the Eastern Shore's rural communities and how that must be undertaken by developing partnerships with a broad range of actors within the community and with stakeholders outside of the community, such as policymakers and funding organizations. Hospitals play a unique role in building community-based interventions and partnerships, and they have been shown in previous studies to be vital to initiatives addressing the social determinants of health and increasing better health and well-being outcomes for community members in rural areas. Advocacy, a focus on transportation, and education are essential to address the social determinants of health.

Keywords: *Community Health Workers (CWHs), Eastern Shore, Healthcare, Insurance, Maryland, Partnerships, Rural Communities, Social Determinants of Health (SDOH)*

Social Determinants of Health and How They Affect a Small Rural Community (Case Study) Eastern Shore of Maryland

Introduction

Residents in small rural communities on Maryland's Eastern Shore cope with adverse living conditions, affecting their health, have a higher chronic disease rate, and require ongoing care [1]. Substance abuse exacerbates the problems with poor health outcomes, driving housing instability, poverty, and co-occurring conditions, resulting in a generational cycle of poor health and poverty [1]. Housing, transportation, access to services and goods, education, race-based discrimination, and poor diet and social stressors impact rural residents [1]. The population is less likely to be insured [1]. Adults in Maryland who are Hispanic, Latino, and African American experience the lack of health insurance at much higher rates than White individuals, stated at 4.7 and 1.7 times higher, respectively [2]. Health disparities arise from poor quality care, diagnosis delays, and few healthcare resources [2]. The Social Determinants of Health (SDOH) play a critical role in health disparities in Maryland and exist "across a range of clinical settings, including public and private hospitals and teaching and non-teaching hospitals," increasing mortality [2, p. 4].

The U.S. experiences the same problems with the SDOH because racial and ethnic disparities exist since minority groups are more likely to have lower incomes, live in disadvantaged communities, be uninsured, and have lower access to healthcare [3]. Rural populations have higher unemployment, lower educational attainment, and access to social services [4]. Transportation barriers increase disparities, and the lack of access to technology and broadband in approximately 40 percent of rural communities limits the opportunities of that population for education, work, and healthcare [4]. Rural communities are exposed to unsafe

drinking water and other dangerous substances [4]. The study examines the Social Determinants of Health (SDOH) in Eastern Shore, Maryland, and how and why those impact the population's health.

This study addressed the PICOT question, asking how and why the SDOH affects the population of Eastern Shore, Maryland. The Eastern Shore of Maryland has experienced rapid immigration population growth in recent years [6]. The Eastern Shore has Maryland's poorest health status and highest poverty levels [6].

A study with 33 participants, including immigrant clients and individuals who provide health and social services providers in rural healthcare programs, revealed the struggle to care for immigrant clients due to lack of economic resources and the loss of grant funding [6]. Services providers lacked since no new staff had been hired [6]. Immigrant participants revealed that they faced significant barriers to service access and use, particularly around timely access, quality, and care continuity [6]. Immigrants lacked insurance and did not seek services unless it was an emergency [6]. Providers indicated the likelihood of immigrants having a high rate of diabetes and other illnesses [6]. Translation services were lacking [6].

Approximately 450,000 people live on the Eastern Shore [7]. Table 1 shows the growth of diversity in Eastern Shore counties, Maryland, and the United States since 2010.

Table 1.

Diversity Index: Eastern Shore Counties, Maryland, and the United States

County	Diversity Index 2010	Diversity Index 2020
Wicomico	50%	58%
Somerset	55%	58%
Dorchester	49%	55%
Caroline	37%	45%
Talbot	36%	42%
Kent	37%	41%
Worcester	34%	36%
Cecil	23%	34%
Queen Anne's	23%	29%
State of Maryland	61%	67%
United States	55%	61%

Source: [7]

The diversity index in the Eastern Shore, Maryland, counties is lower than in the states of Maryland and the United States.

In Eastern Shore counties, approximately 75 percent of the residents are Caucasian. African Americans represent 17 percent, and Latinos represent five percent [7]. Somerset County has a 42 percent African American population [7]. Poverty rate statistics are shown in Table 2.

Table 2.

Eastern Shore of Maryland Poverty Statistics

Categories	Eastern Shore	State of Maryland	United States
Poverty Ratio	9.8%	9.6%	11.5%
Individuals at or Below Poverty	9.3%	9.6%	9.3%
Children at or Below Poverty	11.8%	13.3%	13.3%

Data Sources: [8], [9], [10], [11]

Housing affordability is a problem for the population of the Eastern Shore. Table 3 compares the wages and amount needed to rent a two-bedroom home for Eastern Shore counties, Maryland, and the United States.

Table 3.

Wages Earned and Amount Needed for Rent

Location	Worker's Minimum Wages	Wage Needed to Rent Two Bedroom Home
Queen Anne's County	$9.44	$26.62
Cecil County	$13.19	$24.45
Talbot County	$11.63	$20.69
Wicomico County	$13.89	$20.15
Kent County	$12.63	$19.42

Worcester County	$10.09	$18.42
Caroline County	$13.30	$18.02
Dorchester County	$12.60	$17.35
Somerset County	$11.60	$14.69
State of Maryland	$11.75	$36.70
United States	$7.25	Ranges between $18.38 and $47.38

Data Sources: [13], [12], [14]

The minimum wage for all Eastern Shore counties, the state of Maryland, and the United States falls short of the wages needed to secure stable housing, increasing homelessness [15]. The National Alliance to End Homelessness found that there were approximately 5349 individuals homeless each night in 2022, an 8.7 percent homeless rate among 10,000 of the population [15].

Housing instability is a barrier to employment. The lack of investment in low-income and racially segregated communities results in low-quality school and community infrastructure [16]. Currently, 72 percent of the low-income population is burdened by housing costs, spending more than 50 percent of their income on housing [16]. Those households cannot afford healthy foods or pay rent, increasing eviction risks [16]. There is a shortage of nearly 100,000 rental units in Maryland, and combined with high materials costs for construction, zoning regulations, and missing infrastructure, the population cannot afford to build homes, and the lack of housing inventory has increased the cost of homes [16]. Maryland must establish a trust fund for housing to expand affordable options and the state's emergency renter's assistance programs [16]. A need

exists to expand housing that promotes connections with mental health and behavioral services for those who are homeless and pass new protection laws for tenants so they can access legal services, information, and mediation, along with other supports [16].

Although the number of insured among the Eastern Shore population has been reduced since 2013 due to Medicaid expansion, there were still approximately 24,000 residents without health insurance as of 2016 [16]. However, health insurance does not ensure meaningful access to care. Table 4 compares the providers per patient population for the Eastern Shore, the State of Maryland, and the United States.

Table 4.

Providers Per Patient Population

Categories	**Eastern Shore**	**State of Maryland**	**United States**
Primary Care	One per 3,200	379 per 100,000	2.6 per 1,000
Dentists	One per 2,700	70.56 per 100,000	61.06 per 100,000
Mental Health Providers	One per 2,500	15.1 per 100,000	46.6 per 100,000

Data Sources: [16], [17], [18],

On the Eastern Shore, 25 percent live approximately ten miles from the hospital, and some live fifteen miles or more [16]. Problems include the need for more healthcare funding and workforce development [6]. Healthcare practitioners are overworked from seeing such a large population of patients [6]. A significant percentage of the population needs insurance, and more economic resources and providers are needed [6]. The gap in interpreters forms a barrier to

healthcare [6]. Although 39 percent of providers in Maryland conducted SDOH screening, this needs to be more widespread [19].

A digital divide exists on the Eastern Shore [20]. Table 5 shows the percentage of households that lack home computers and broadband in Eastern Shore counties compared to the state of Maryland and nationally.

Table 5.

Households Lacking Home Computers and Broadband Access

Counties/Location	Lack Home Computers	Lack Broadband
Caroline, Dorchester, Kent, Queen Anne's, Talbot	23 percent	36 percent
Somerset, Wicomico, Worchester	23 percent	35 percent
Cecil	20 percent	27 percent
Maryland	23 percent	18 percent
United States	41 percent	43 percent

Data Sources: [20], [21]

A large population of the Eastern Shore does not have home computers or broadband access, which is a problem since telehealth can address the SDOH. Telehealth outcomes are comparable to in-person appointments, including efficacy, patient engagement, and satisfaction [22]. Digital literacy and access are essential to support quality of life [22]. The digital divide exacerbates the economic and social factors that present barriers to healthcare [22]. The American Medical Informatics Association seeks government acknowledgment of broadband as

an SDOH because other internet connections do not offer the connection and speed to access telehealth [22].

A study examined how the SDOH influenced the adoption and acceptance of telehealth during the pandemic and included 215 participants, stating findings that the built environment must be addressed to ensure patients can access telehealth [23]. The digital divide on the Eastern Shore is primarily in low-income areas, the same as in the U.S. [23], [20]

Methods and Data Set

This explanatory case study examines the SDOH and its effect on small rural communities on the Eastern Shore of Maryland. The researcher chose only literature published between 2016 and 2024. After searching the Google Scholar and PubMed databases, 158 articles were identified. After screening for duplicate records, 98 studies were excluded, leaving 44 articles. The 44 articles were assessed for eligibility, and 24 were excluded due to lack of relevance, leaving 20 studies for the final analysis. Specific inclusion and exclusion criteria were utilized in screening as follows:

Inclusion Criteria

The inclusion criteria are listed in Table 6.

Table 6.

Inclusion Criteria

Articles published in the past eight years unless older articles contribute significant information to the study.
Articles published by a credible author.
Articles published in a peer-reviewed journal article, governmental publication, or a credible healthcare organization or body.

Exclusion Criteria

The exclusion criteria are listed in Table 7.

Table 7.

Exclusion Criteria

Articles older than eight years unless it is a seminal study.
Blogs without a credible author.
Articles not published in a peer-reviewed journal article, governmental publication, or an accredited healthcare organization or body.

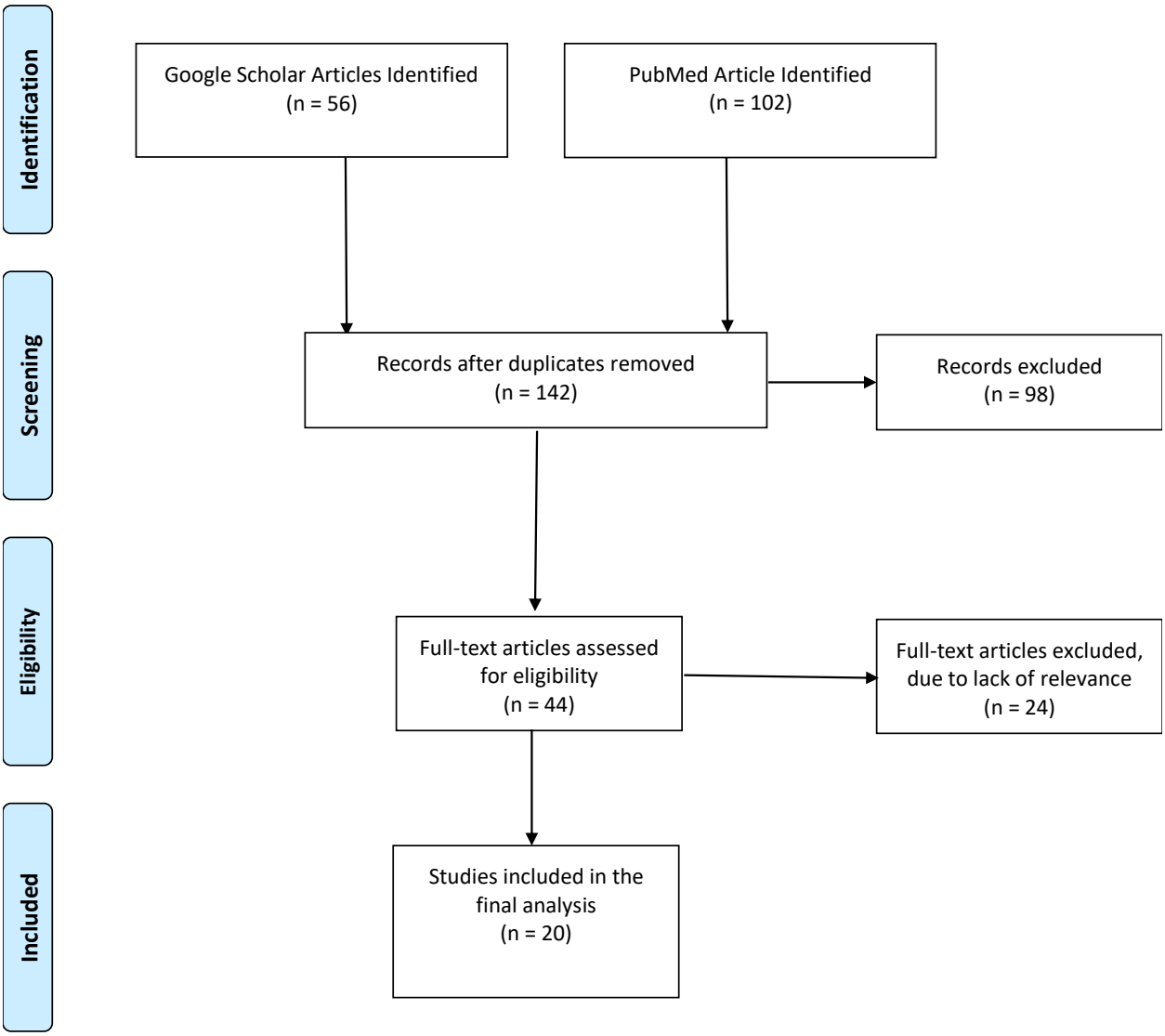
Search strings were used to identify the articles chosen for inclusion using the Boolean operator 'AND' as follows:

- SDOH AND rural populations
- SDOH AND Eastern Shore, Maryland
- SDOH AND health outcomes

Figure 5 shows the Prisma diagram and the results from the search and screening of articles.

Figure 1.

PRISMA Diagram



Literature Review

SDOH in Rural Communities

The SDOH characterizes the circumstances and conditions "in which people are born, grow, live, work, and age" [24, p. 1]. Those conditions are affected by social, economic, and political forces [24]. The disparities between rural and urban communities have been identified for mortality and morbidity [25], [26]. Rural communities experience a higher burden of obesity, diabetes, and other preventable diseases than urban populations [25]. Inequities arise from systemic differences due to an unfair distribution of wealth, power, and resources [27]. Rural populations face challenges in accessing healthcare, costs, healthcare professional shortages, and transportation [28]. Rural communities have lower health literacy, socioeconomic status, and care access [25]. Barriers in rural areas include the rural population's acceptance of seeking healthcare [29]. Healthcare providers revealed barriers to rural populations, including friction between the rural identities of patients and the healthcare system, fragmentation in communication, and the priority on profits [29]. One study identified the need for partnerships and screening activities to address the SDOH and found that buy-in and workflow are needed at the organizational level, precisely a systematic workflow method that includes systematic screening [30]. Screening facilitates referrals and partnerships in the community, which are crucial to addressing the SDOH [30].

Partnerships to Address the SDOH in Rural Communities

Partnerships in rural communities can improve the SDOH [31], [32]. New care models are value-based and incentivize health to reduce health inequities [33]. The value-based approach is an upstream approach, which identifies the root causes of inequities and addresses the SDOH [33]. Community development focuses on "a range of financial resources and capital with the potential to coordinate with many rural healthcare organizations to meet community investment

goals" [33, p. 8]. Collaborative partnerships involve relationship-building and partnerships to move toward meaningful change [33].

Key strategies to improve healthcare access in rural communities include (1) community-directed interventions and programs, (2) outreach services, and (3) telemedicine [31]. There is a need for medical providers and non-profit partnerships [31]. Community health programs (CHPs) are the best possible strategy to meet the rural populations' needs [31]. CHP health programs in local areas are formulated on disease prevention and health promotion in community-directed partnerships [31]. Community health workers (CHWs) are key players in the partnerships due to their ability to reach members of rural communities [31]. Science and medical students in rural areas can assist with healthcare services [31]. Community-based health insurance (CBHI) can help as healthcare service access increases and the rural population pools funds to offset healthcare costs [31].

Children and adults in the Eastern Shore counties experience hunger [34]. More network partners and initiatives are needed to increase access to food and remove food deserts [34]. Transportation presents a barrier to healthy food access [34]. Although food pantries exist on the Eastern Shore, they are not enough to end hunger among the population [34]. September is Hunger Action Month in Maryland, presenting an opportunity for advocacy around hunger [34]. CHWs can participate in this initiative to increase awareness and drive initiatives addressing the Eastern Shore's food deserts [35]. Advocacy efforts are focused on dismantling the policies, systems, and practices that hold families in an ongoing cycle of hunger and poverty [35]. The initiative involves partnerships [35]. Nutritious foods improve health outcomes, which is critically vital for Eastern Shore Maryland's vulnerable, low-income, and rural population [36].

One study highlighted the need for partnerships for the SDOH and how healthcare organizations can partner with the agricultural industry and local food enterprises to ensure residents can access healthy and fresh foods [32]. Many rural communities cannot afford fresh foods due to the elevated level of poverty and the high costs of those foods due to the transportation costs associated with the delivery of the foods to rural areas [32]. The work of community-based organizations and various initiatives guided by the demands of consumers has resulted in the Appalachian region's ability to increase the availability of fresh foods for rural residents [32]. The study revealed that hospitals are uniquely suited to partner with other organizations to address the SDOH, such as initiatives focused on fresh food access [32].

Advocacy and the Social Determinants of Health

Advocacy is critical to addressing the SDOH [37]. Advocacy requires social cohesion, wherein a population or group works to ensure the well-being of all individuals while fighting against marginalization and promoting trust and a sense of belonging [38]. Social cohesion has been defined as "the degree of connectedness, solidarity, and trust across various community groups and between individuals" [39, p. 1]. Social cohesion is critical to building community capacity and combining the members' strengths to overcome challenges and barriers and identify and formulate opportunities to improve the health and well-being of community members [39].

Currently, the SDOH is becoming increasingly integrated into education in the healthcare field, and the same is valid for medical residency curricula [40]. Research indicates a positive correlation exists "between time spent on advocacy training and engaging in activities related to policy change [40, p. 138]. A study examined how CHWs could be trained to address the SDOH and noted that "healthcare providers are increasingly becoming involved in addressing SDOH" and that the SDOH are being further integrated into educational provision in the medical field

[40, p. 138]. A 36-hour training program was offered to CHWs in two communities characterized by health inequities [40]. The classes were interactive, guided by pre-planned activities and group discussions [40]. Trainers were experienced CHWs, instructors, or experts in community health research and interventions [40]. The training program helped CHWs have more confidence in their ability to advocate and interact with others in the community, both at the state and national levels [40]. The trainees revealed how they had attempted to address the SDOH across all the social-ecological model levels [40], as shown in Table 8.

Table 8.

SDOH Addressed at all Social Ecological Levels

Policy	Community	Organizational	Interpersonal	Individual
Increased knowledge about contacting policymakers	Growth in knowledge surrounding health disparities and SDOH	A growth in leadership activities in the community and its organizations	Sharing of resources for training with those in the community	Behavioral health changes
Growth in contacting policymakers at the federal, state, and local levels via phone, email, and letters	Growth in the desire to address SDOH via community classes offering education	Stimulated involvement with other coalitions addressing the SDOH	Engaging community members in various activities at the civic and community levels	Increased community resources and knowledge
Increases in the desire to participate in the processes of policymaking	Growth in involvement in local laws concerning rental properties	The creation of a new non-profit organization		Growth in confidence for community advocacy, volunteer activities, and leadership participation, as well as seeking out more educational resources

Source: Created by Writer (2024): Adapted [40]

The training program enabled CHWs to engage in policy issues and extend their community work to new venues [40]. The training program increased knowledge concerning policy action and knowledge about the SDOH in the community, stimulated new leadership activities in community organizations, and increased community engagement [40]. Changes occurred in community-based organizations, and more engagement occurred with health organizations and leaders [40].

The participants were able to develop familiarity with different people and what they do in the community [40]. One participant revealed how they had begun working with a program "where I work with 53 other people across eight different states…and we discuss different policy issues, infrastructure, transportation, healthcare, education, tourism, policy, governance" [40, p. 143]. In the area of interpersonal engagement with others in the community, one participant noted, "I had a lady yesterday that came in for food assistance, but she was also saying that she was homeless and…I don't know exactly how to deal with that, but I put her in touch with someone who's a social worker and who could help her to get what she needed" [40, p. 143). At the organizational level, participants noted they were taking on new roles, joining a health education program, taking new leadership classes, and volunteering in the community [40]. The participants noted how they had become involved with various coalitions they did not collaborate with before the training and became involved in more community initiatives focused on the SDOH [40]. The community mapping helped understand the food deserts in the community, and participants created support groups for various patients concerning nutrition [40]. The participants also organized community events and took action to address the SDOH, such as housing and transportation problems, and contacted lawmakers and policymakers about the

issues [40]. The follow-up in this study was not lengthy enough to understand whether any fundamental policy changes had arisen from the training of CHWs; however, the increased involvement of various actors and stakeholders is a requirement to move toward any policy change [40].

A study examined the role of CHWs in the SDOH with 49 CHWs using a focus group study, followed by interviews with 15 participants from the State of Indiana, 62 interviews with healthcare providers in Texas, and 252 interviews with immigrant families. Indiana and Texas were chosen due to the population's health having significantly poor indicators. The study found that CHWs "fill gaps in the provision of care for rural communities experiencing health disparities" in Texas and Indiana [37, p. 11].

A study that examined the outcomes of CHWs advocacy training revealed that training was conducted by the National CHWs Advocacy Study (NCHWAS), described as a participatory and community-based research project that examined the effect of CHWs' advocacy on the engagement of the community in addressing health disparities [41]. The study sought to understand how training, leadership qualities, and the work environment affected the advocacy of CHWs [41]. Findings included that approximately three-fourths of the respondents were engaged in advocacy, including agency change, civic change, and political change, as well as changes in social services and local health departments, which also involved engaging various actors in the community such as school boards, law enforcement, state representative, and the local city council, the state governor, and the county board of supervisors [41].

CHWs with five years or more of experience were likelier to engage in advocacy than those with fewer years of experience [41]. CHWs employed in non-community-based clinics or hospitals were much less likely to engage in political advocacy when compared to those working

in community-based clinics and organizations [41]. CHWs who had received advocacy training were up to four times more likely to be engaged in advocacy than those who had not received training [41]. The CHWs whose employers had provided training were twice as likely as those whose employers failed to provide training to engage in advocacy [41].

Advocacy efforts should be focused on "addressing the root causes of disparities" [42, p. 3487]. Initiatives should include enhancing economic stability, improving education opportunities, and creating environments that promote well-being and health [42]. Adopting a comprehensive approach is needed to address the SDOH so that health practitioners and other actors in the community can deliver targeted strategies for mitigating health inequities [42].

Transportation and the SDOH

The Eastern Shore lacks transportation in rural areas, creating disparities [2]. Transportation-related barriers are distributed ununiformly and vary based on poverty status, ethnicity, race, and age [43]. Adults who live in poverty, have disabilities, and those relying on Medicaid are at the most significant risk for transportation-related barriers to healthcare [43]. Transportation-related barriers are exceedingly high for the Eastern Shore, Maryland [2], [43]. Transportation is a vital priority in addressing the SDOH [43].

Older people in rural areas have problems with transportation and cannot access health services when public transportation is lacking [44]. Any initiatives for restructuring healthcare must address the issue of transportation, a vital SDOH [44]. The shift of the population back to rural areas makes addressing transportation critical [45].

Education and the Social Determinants of Health

Education is an aspect of the SDOH concerning health literacy and training and education of providers, education of the public, and the needed interaction and partnerships between

healthcare facilities and schools [46], [47], [48]. Research has shown that the "level of educational attainment is increasingly being recognized as an important social determinant of health" [46, p. 1].

Significant evidence supports that quality of life and health are socially determined and that health inequities arise from much more than the availability of community-based and hospital services [46]. The population must realize educational attainment because they will possess more knowledge to make better decisions in various areas of their lives [46]. Educational attainment helps individuals achieve a higher socioeconomic status and is linked to more positive outcomes [46]. Among healthcare providers, training on the SDOH has resulted in better documentation of risk factors in electronic health records, increased patient reporting about SDOH-related risks, and bolstered interventions for patients in many areas, including food insecurity [47].

Medical educators should commit to ensuring rigorous and meaningful SDOH evaluation among patients [47]. Added to education is the necessary action that must be taken to understand the structural factors that affect the SDOH, which can be implemented in an interdisciplinary educational environment [47]. When healthcare providers are trained on the SDOH, it promotes their ability to increase health literacy among patients about how health is linked to the SDOH, further increasing patient reporting of risks and identifying what the health system can do to address removing barriers to well-being and good health [48].

Summary

The SDOH, or the conditions where people exist from birth to death, are impacted by various social, economic, and political forces [24]. The same is true for the Eastern Shore of Maryland, specifically related to the disparities in those rural communities, increasing the

population's mortality and morbidity [25], [26]. However, community-based interventions and initiatives can assist in addressing the SDOH, particularly initiatives guided and supported by hospitals in rural areas [32]. Hospitals and health systems were shown to be uniquely positioned to implement community-wide partnerships in addressing the SDOH [33]. Addressing the SDOH requires partnerships focusing on changes and interventions to ensure healthy food, transportation, healthcare access, and housing instability. Partnerships should include non-profit organizations, non-governmental organizations, safety and law enforcement organizations, social service agencies, schools and universities, legal assistance organizations, healthcare providers, local and state public health agencies, and faith-based agencies.

The high poverty rate in Maryland means the disease burden is higher than in other areas [25], [27]. The same is true for the Eastern Shore, characterized by a lack of care providers close to where people live, aligning with the literature revealing that rural areas have problems accessing healthcare services and have problems with transportation to receive services [28]. Populations in rural areas with chronic diseases were shown in the research to require ongoing monitoring and follow-up care, particularly the case among individuals with cancer and diabetes [1]. Various organizations' partnerships can help gain funding to address the issues [31]. The Eastern Shore's challenges align with those of other rural populations [28]. The growing diversity of the Eastern Shore requires that cultural differences be considered to ensure the population feels comfortable accessing healthcare [29].

Screening for the SDOH is critically important; however, for the Eastern Shore, only 39 percent of care providers conduct screening [30], [19]. It will be vital that healthcare organizations on the Eastern Shore institute screening for the SDOH, which will require advocacy efforts and community partnerships [37], [42]. Training and education for healthcare

providers on the SDOH will support better screening [47]. Understanding the poverty level and the problems that the population has with housing arising from low wages among the population of the Eastern Shore requires screening for SDOH at a higher rate among healthcare providers and community actors. The population of uninsured people on the Eastern Shore of Maryland is still high [5]. It will take a concerted effort among healthcare providers, community leaders, and actors to institute widespread SDOH screening to ensure the population's needs are better understood before efforts at advocacy will be successful. The shortage of primary care doctors and other care providers is critical, so any advocacy efforts should address that issue and secure funding to increase the number of physicians available to treat the population. There is a need to address the SDOH, such as transportation and education. Education for healthcare providers and the general population will increase the health system's ability to understand the population's needs and providers' ability to identify SDOH factors impacting patients. As patients become more health literate, they can better report the SDOH risks they experience.

Discussion

Due to the many challenges that the population in Eastern Shore faces with the SDOH, policymakers should address affordable housing since wages are low. Policymakers should work to direct funding to the Eastern Shore for that purpose. Eastern Shore residents are spending around 50 percent of their income on housing, making it unsurprising that there are so many homeless individuals without health insurance. Policymakers must take a multi-pronged approach to effectuate change for the population of the Eastern Shore on the SDOH. Policies are needed to address access to health insurance due to affordability, address the problems associated with broadband expansion, and provide in-home computers for the population. The food desert must also be addressed to ensure funding is available to support the expansion of grocery stores

and other businesses that offer whole fresh foods to the population in an area that is rural and lacks public transportation.

An intervention that could assist the population with healthy foods and support funding for food trucks that carry produce to rural areas that the population can purchase. Funding could assist individuals in purchasing their own food trucks. Although the food banks in Maryland have initiatives to assist the population with food, transportation is a serious problem for many who want to get to the food banks. Therefore, funding public buses to provide transportation in rural areas on the Eastern Shore would help the population in many ways that would increase the SDOH positively for the population.

However, funding alone is not enough because various CHWs, local organizations and agencies, and representatives of the population of the Eastern Shore must work collaboratively in an atmosphere of social cohesion to work out the details of any initiatives. CHWs are critical partners in any community initiatives focused on the SDOH because they can gather information from the population, inform policymakers of the population's specific needs, and advocate for the necessary changes.

Conclusion

Rural communities experience more vulnerability and health inequity than urban populations due to systemic differences related to power, wealth, and resource distribution. The rural population has difficulties accessing healthcare services, and providers are scarce. The cultural differences in rural populations must be considered and respected by healthcare providers. The rural population's social needs differ from those in urban areas, and healthcare screening is critical to ensuring that the population receives proper treatment. Information sharing among providers and community partners is required. Community-based partnerships

help build strength within the community and develop partnerships with policymakers and others to increase funding and effectuate change. Hospitals and healthcare systems are uniquely situated to advance community-based partnerships among various actors within the community and build connections outside the community with policymakers and funding organizations that will benefit the community in addressing the SDOH. Community-based partnerships can also work to address transportation barriers to the SDOH. Advocacy is essential to addressing the SDOH among rural populations. Healthcare providers, CHWs, and other organizations in the community must form coalitions to address the SDOH. Training and education are critical to ensure healthcare providers and other organizations are prepared to address the SDOH. Advocacy must necessarily address the root causes of healthcare disparities among rural populations. Each social determinant of health is interrelated and cannot be considered in isolation. A comprehensive approach must be adopted to address the SDOH.

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