Moving Toward Health Equity by Addressing Social Determinants of Health

Breanna Lathrop

ABSTRACT: Social determinants of health—the conditions in which people are born, grow, work, live, and age that affect health and quality of life—are strongly associated with disparities in health status and life expectancy. Nurses require a comprehensive understanding of social determinants and their associations with health outcomes to provide patient-centered care. Nurses can be leaders and change agents in advancing health equity by screening for social determinants that affect women and by engaging in cross-sector collaboration to build partnerships outside the health care system to address complex social needs. Nurses can also use their experience and knowledge to advocate for system-level change, which is required to address the upstream factors influencing the health of women.

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Jessica was homeless and sleeping outside when she first started coming to the clinic for management of bipolar disorder. A few months after an initial visit, she returned to the clinic having determined that she was pregnant. Jessica had run away from a dysfunctional and abusive family as an adolescent and had spent the last several years on the street. Her boyfriend, also a runaway youth with anger management issues and ADHD, came with her to her first prenatal appointment. They had no financial resources, no family connections, no knowledge of the Medicaid system, and no housing. During her prenatal care, clinic staff and health care providers helped her obtain Medicaid benefits and referred her to a youth counseling program that provided case management and housing. By the time she gave birth, Jessica and her boyfriend were living together in a rented room of a house through a voucher program.

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CLINICAL IMPLICATIONS

- Social determinants of health—the conditions in which people are born, grow, play, work, live, and age that affect health and quality of life—are a driving force behind health disparities.
- The chronic stress caused by social determinants such as poverty, racism, inadequate housing, unemployment, and food insecurity damages body systems and is linked to chronic disease and premature aging.
- Implementing social determinants screening enables nurses to link women to needed resources and assists in program and intervention planning.
- Addressing social determinants requires cross-sector collaboration in which partnerships extend beyond the health care system.
- Nurses can have the greatest impact on social determinants of health by using their experience and knowledge to advocate for the system-level and policy changes required to create health equity.

After the birth of a healthy, term infant, the family returned to the clinic. The newborn's Medicaid had not been processed, and the couple did not know how to apply for benefits provided by the Special Supplemental Nutrition Program for Women, Infants, and Children. Jessica was breastfeeding but did not own a pump, had only one bottle, and was struggling to keep up her milk supply. She and her boyfriend had no source of income to buy diapers or clothes. Their love for their child was evident, but they were struggling as young new parents who had never witnessed a healthy family environment. The newborn was not gaining weight, and Jessica was struggling with depression. Clinic staff focused an increasing amount of time on the family's social condition. With the exception of Jessica's bipolar disorder, the family's health problems fell largely outside of the scope of traditional health care. They needed infant supplies, parenting education, Medicaid, economic resources, food, safe housing, and social support. These social needs stemmed from systemic issues of poverty, family violence, the affordable housing crisis, and historical issues with mental health parity. Postpartum visits and well-child checkups that did not address these underlying issues would do little to improve the health of this family.

Social Determinants of Health

Jessica's experience illustrates the limitations of the health care system when social determinants such as socioeconomic status, food access, and housing are not considered in the plan of care. Social determinants of health are the conditions in which people are born, grow, play, work, live, and age that affect health and quality of life and are shaped by the distribution of money, power, and resources (U.S. Department of Health and Human Services [USDHHS], 2018; World Health Organization, 2018). Although health care no doubt can have a positive influence on health, its influence is limited. Whether working with women to promote a healthy pregnancy or manage chronic conditions such as hypertension or heart disease, nurses need an understanding of the social determinants contributing to women's health and illness.

Determining how social factors affect the body on a physiologic level is complex, but emerging research shows a strong and persistent relationship between socioeconomic factors and health (Braveman & Gottlieb, 2014). The human body was designed to manage episodic stress with protective mechanisms that return the body to allostasis after extreme physical or emotional stress. Poverty, unsafe living conditions, food insecurity, oppression, abuse, racism, and other determinants create chronic stress. In these situations, the body's mechanisms become maladaptive, resulting in damage to the body's functioning systems (Steptoe & Marmot, 2002). Chronic stress leads to changes in autoimmune, endocrine, and neurologic systems and has been linked to health conditions such as hypertension and preterm birth (Steptoe & Marmot, 2002; Wadhwa, Entringer, Buss, & Lu, 2011). It is not simply that social determinants of health make some individuals more likely to get sick than others; rather, social determinants have a direct influence on disease (Braveman & Gottlieb, 2014).

> The chronic stress resulting from factors such as poverty and other social determinants accelerates the onset of chronic disease and aging

Another example of the association between social determinants and poor health is premature aging. The weathering hypothesis, first proposed in 1992 by Arline Geronimus as a way of explaining the early adulthood decline in health experienced by African American women, states that differences in early onset of chronic disease are a result of differences in exposure to stress and access to coping resources (Geronimus, 1992; Geronimus et al., 2015). The chronic stress resulting from factors such as poverty and other social determinants accelerates the onset of chronic disease and aging. At the biological level, this can be tested through the measurement of telomere length. Telomeres are the protective end caps of chromosomes that prevent cell death and DNA degradation (Shammas, 2011). Factors that accelerate their shortening can lead to premature death. Geronimus et al. (2015) found that telomere length was influenced by poverty, education, safety stress, negative social interaction, neighborhood satisfaction, hopelessness, and obesity across all racial/ethnic groups included in the study. Because social determinants are linked to chronic disease burden and premature aging, addressing them is of critical importance to the health care system.

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However, social determinants of health further complicate health care delivery in that their impact is not isolated to those at the bottom of the socioeconomic ladder. It is not only the very poor or homeless who experience an increased risk of poor health outcomes. Rather, determinants operate on a gradient with each step up in social status, increasing the chances of better health and longer life (Marmot, Rose, Shipley, & Hamilton, 1978). For example, simply becoming employed does not equate to good health. Jobs with high demand and little control of work environment are associated with poorer health outcomes (Hämmig & Bauer, 2013). Such jobs breed frustration, stress, and burnout with little chance for upward mobility. Nurses and other clinicians cannot assume that an employed woman with health insurance is not experiencing chronic stress as a result of an unhealthy work environment, insecure housing situation, or neighborhood violence.

Care that does not consider social determinants falls short of being patient centered and outcomes focused in a time when zip code can be a better predictor of life expectancy than genetic code. Virginia Commonwealth University's Center on Society and Health (2016) life expectancy mapping project found life expectancy gaps of up to 19 years between zip codes within the same urban area. From a 5-year life expectancy gap in Denver to 13 years in Atlanta and 19 in Philadelphia, health inequity is a national problem. At the neighborhood level, this difference is even more staggering, with a life expectancy gap of more than 30 years between neighborhoods in the same U.S. city (Ducharme & Wolfson, 2019; NYU Langone Health, 2019). Improved access to quality health care alone cannot solve this problem. This creates a challenge for nurses and other health care professionals in that addressing determinants, such as inadequate housing, food insecurity, poverty, and unemployment, falls outside the scope of traditional health care interventions. However, mounting evidence shows that social determinants are a driving force behind health outcomes and health inequities.

Implications for Nursing Practice

Nurses regularly address the consequences of social determinants of health, whether readmitting a woman who did not have adequate shelter at discharge, teaching a woman with diabetes who lives in a food desert about dietary management, or providing prenatal care to a woman whose pregnancy is complicated by transportation barriers and unhealthy behaviors.

For many nurses, the influence of social determinants of health on health status may be more overwhelming than surprising. The issue is not whether social determinants of health matter but how to go about addressing them. Nurses, along with other health care professionals, are already overburdened. With staffing shortages, growing rates of burnout, and increased pressure to provide patient-centered care and decrease readmissions, there does not seem to be space for new interventions or programs. However, emergency departments across the United States continue to fill with

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people whose conditions have likely been caused in part by their environment and stress level. Discharges are delayed when housing, social support, and food and medication access are not available to make a safe transition home. Moving upstream in approach, although difficult, is the only means of stemming growing pressure on the health care system to eliminate persistent health disparities.

Health equity is the "attainment of the highest level of health for all people" and occurs when everyone has the opportunity to live a healthy life (USDHHS, 2014, para. 5). Social determinants of health stand in direct opposition to the achievement of health equity in the United States. Social conditions such as poverty and inadequate housing are caused by multiple factors, many of which lie outside of a person's control. Inequities in social determinants largely stem from structural racism and historical discrimination against marginalized populations (American Public Health Association, 2018). Structural racism describes the normalization and legitimization of a system in which policies, procedures, and cultural representations favor white people at the expense of people of color (Lawrence & Keleher, 2004; The Aspen Institute, n.d.). As outlined in Healthy People 2020 (USDHHS, 2014), achieving health equity requires "societal efforts to address avoidable inequities, historical and contemporary injustices, and the elimination of health and health care disparities" (para. 5). This reality cannot be achieved through the health care system alone but requires the active engagement and advocacy of all health care professionals.

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Given that inequities often stem from racism and discrimination, nurses desiring to promote health equity must be willing to examine their personal biases. Everyone has biases, and although some may be explicit stereotypes, bias is often implicit. Implicit bias describes subconscious attitudes and stereotypes that affect understanding and actions (The Joint Commission, 2016). Implicit bias is particularly concerning in the health care setting because it can result in lower-quality care and perpetuate health disparities. Authors of one systematic review found that most health care providers have low to moderate levels of implicit bias with negative attitudes toward people of color (Hall et al., 2015). In a meta-analysis of 42 articles, FitzGerald and Hurst (2017) found that health care providers, including nurses, manifest implicit biases similar to the general population around issues of race/ethnicity, gender, socioeconomic status, mental illness, drug use, and social circumstances. The same social determinants that correlate to poor health and lower life expectancy also make people more vulnerable in health care settings. Fortunately, nurses willing to recognize their implicit biases can take steps to prevent disparities in treatment. The development of certain interpersonal skills can limit the impact of implicit bias. Skills such as empathy, perspective taking, emotional regulation, and partnership building with patients have had positive effects on patient experience and outcomes (van Ryn et al., 2011). Nurses committed to the ongoing process of examining their implicit biases and recognizing the influence of social determinants on the women they care for are positioned to be change agents in developing and implementing new approaches for health equity.

A New Approach

For nurses seeking action steps toward achieving health equity and addressing the health effects of social determinants of health, it is their lived experience, health knowledge, and strength in patient advocacy that are needed, within the health care system and beyond. Nurses can start in their own clinics and health systems while fostering the societal change required to address upstream factors.

Screening for Social Determinants of Health

An initial step toward addressing social determinants of health involves knowing and understanding the factors that are most affecting specific patient populations. Screening women for the presence of social determinants of health allows health care providers and leaders of health systems to better understand the needs of their patients and create an environment in which women better understand the influence of their environment on their health. Nurses working in clinics or health systems currently not screening for social determinants of health can start by advocating for the implementation of a screening system. Several validated screening tools exist (see Table 1).

PRAPARE: Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences, developed by the National Association of Community Health Centers (2016), consists of 21 questions assessing social determinants of health. PRAPARE aligns with Healthy People 2020 initiatives around social determinants and emphasizes measures that are actionable (National Association of Community Health Centers, 2019). Core measures assessed include race/ethnicity, language, housing status, education, employment, transportation, and social integration, among others. The tool can be downloaded for free in paper form and several templates for electronic health records (EHRs) are also available.

The American Academy of Family Physicians (AAFP; 2019) produces long and short versions of the Social Needs Screening Tool as part of its EveryONE Project, which aims to advance health equity through family medicine by addressing social determinants of health and promoting diversity. The

TABLE 1 SCREENING TOOLS FOR SOCIAL DETERMINANTS OF HEALTH

Tool	Organization	Website
PRAPARE: Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences	National Association for Community Health Centers	http://www.nachc.org/research-and-data/prapare/about-the-prapare-assessment-tool
Social Needs Screening Tool	American Academy of Family Physicians	https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/physician-long.pdf
The Accountable Health Communities Health-Related Social Needs Screening Tool	Center for Medicare and Medicaid Services	https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf
Social Needs Screening Toolkit	Health Leads	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit

> Sometimes the most influence nurses can have on social determinants of health is not in their work as nurses but in their actions as community citizens

long form consists of 15 questions addressing housing, food, employment, finances, education, child care, transportation, utilities, and personal safety (AAFP, 2018a). The short version includes 11 questions addressing housing, food, transportation, utilities, and personal safety (AAFP, 2018b). Both forms, along with action plan templates, are available on the project's website.

The Centers for Medicare and Medicaid Services (n.d.) produces The Accountable Health Communities Health-Related Social Needs Screening Tool. This 10-question screening tool identifies needs in the areas of housing instability, food insecurity, transportation problems, utility help, and interpersonal safety. Supplemental questions are also available.

Health Leads (2018) offers a Social Needs Screening Toolkit to assist practices and health systems in designing a screening tool. Interested practices can download a how-to guide from their website.

Regardless of the tool used, screening for social determinants of health has several benefits. First and foremost, tools allow health care providers to identify which social determinants most influence women's health and to link them to needed resources and support systems. This exercise also helps women understand how their social conditions affect their health and creates opportunities for discussions. Screening tools also provide population data that can be used to inform the growth and programmatic development of health systems. Staff and clinicians at health systems and clinics can develop initiatives, patient incentives, and partnerships to address the social needs most commonly reported by women. Staff at nonprofit clinics can use these data to inform grant applications and obtain grant funding, which can increase the sustainability of programs that address social determinants of health.

Cross-Sector Collaboration

When considering social needs such as food insecurity, housing instability, lack of transportation, and unemployment, it becomes clear that the health care system is not equipped to address all social determinants affecting women's health. Medical care can reduce only approximately 10% of premature deaths in the United States (Schroeder, 2007). Strategies to alleviate social determinants and eliminate disparities in premature death rely on coordinated and effective cross-sector collaboration.

Nurses continue to be at the forefront of interdisciplinary care. Interdisciplinary or multidisciplinary care describes different health care staff working together to improve patient care (Nancarrow et al., 2013). Multidisciplinary teamwork involving nurses, technicians, aides, physicians, and other health care professionals is associated with improved patient outcomes and decreased adverse events (Epstein, 2014). The skills nurses have developed regarding communication and collaboration within the health care sector must now be applied to building teams that extend beyond the traditional health care system. Addressing social determinants requires team members from multiple sectors, such as social work, housing, business enterprise, the philanthropic community, education, employers, religious institutions, and government. Building common language,

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BOX 1 EXAMPLES OF PUBLIC ASSISTANCE PROGRAMS

Medicaid	State and federal program that provides health coverage for some low-income individuals, families with children, pregnant women, the elderly, and people with disabilities. Eligibility varies by state.
Emergency Medicaid	Health coverage provided retroactively for certain people who have experienced a medical emergency, including those not eligible for Medicaid due to immigration status. Emergency Medicaid is often used to cover the birth costs of uninsured women.
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	Provides supplemental food, formula, and nutrition education for pregnant and postpartum women, infants, and children up to age 5 years.
State Children's Health Insurance Program	State and federal program expanding health coverage to children who do not qualify for Medicaid but cannot afford private insurance.
Supplemental Nutrition Assistance Program (SNAP)	Also known as food stamps, this program provides a monthly supplement for purchasing nutritious food for low-income people.
Continuum of Care	Federal program providing funding to nonprofit organizations to help people experiencing homelessness obtain transitional and permanent housing.
Temporary Assistance for Needy Families	Monthly cash assistance program for families with children younger than 18 years of age.
General Assistance	State or local programs that provide financial assistance to very poor individuals who do not have minor children. Currently, 26 states have General Assistance programs.

communication systems, and resource sharing among sectors is critical in creating a culture of health that transcends the health care system.

Equipped with information about the social needs of their patient population, nurses can lead health systems and provider teams toward cross-sector collaboration. Innovative and effective models of this type of collaboration are plentiful. The assertive community treatment approach originated from the health care system to address the needs of patients experiencing mental health illness. The model involves health care providers meeting patients in community settings and integrating multiple services to address housing, finances, rehabilitation, and other needs in addition to mental health care (Bond & Drake, 2015). In response to frequent emergency department use, Pathways Housing First initiated a strategy in which people are housed immediately and the support systems they need to maintain housing are built around them (Padgett, Henwood, & Tsemberis, 2016). Clinics and health care systems are also well positioned to address food insecurity. Food prescription programs and partnerships with farmers markets and local farms offer affordable produce. Partnerships built out of a mutual desire to help people achieve health by addressing social needs allow health systems to move upstream in their approach to improved health outcomes.

Collaboration with sectors outside of the traditional health system is also aided through coordinated referral processes and information sharing. Software programs such as Unite Us (2019), Healthify (2019), NowPow (2019), and Aunt Bertha (2019) help clinicians connect patients to community resources to address social needs. Although EHR vendors are increasingly able to collect and report social determinants data for providers, the use of referral products is still new (USDHHS Assistant Secretary for Planning and Evaluation, 2018). EHR vendors and developers of software tools are under increasing pressure to close the loop by creating a two-way communication system in which health systems and

BOX 2 EXAMPLES OF ACTIONS TO ADDRESS SOCIAL DETERMINANTS OF HEALTH

Addressing the Individual Social Needs of Women

- A nurse provides a woman with a list of local food assistance locations and the nearest Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) office upon discharge postpartum.
- A nurse practitioner or midwife refers a woman to a local social worker with a Continuum of Care organization and helps complete paperwork to facilitate qualification for permanent supportive housing.
- A nurse administrator writes a grant to provide public transport ride cards to any prenatal care patient who reports missing appointments because of lack of transportation.

Participation in Health Care System Change

- A nurse collaborates with an interdisciplinary team to implement universal screening for social determinants of health in the hospital system.
- A nurse joins a national nursing organization and testifies at a state senate hearing about the effects of proposed Medicaid budget cuts on the women receiving care in his/her clinic.
- A nurse practitioner or midwife joins a local task force aimed at creating strategies for increasing access to mental health care in a rural community.

Advocacy Around Upstream Structural Factors

- A team of nursing educators redesigns their institution's nursing curriculum to include information about social determinants of health and implicit bias during each semester.
- A nurse-researcher develops a program in which parents receive information about language nutrition and an age-appropriate book at each well-child check-up and educates the nursing staff on how to talk to parents about language nutrition.
- A nurse runs for office to develop and vote on policies that promote health equity.

social services can refer people for services and receive confirmation that the referral was successful (Arndt, 2019). This trend moves from a resource list approach to a model in which organizations collaborate and share information. Nurses and health systems can work with EHR vendors or use third-party software programs to improve the efficiency and effectiveness of referrals outside of the health system.

Nurses are most effective in cross-sectional collaboration when they are knowledgeable about the programs available to women presenting with social needs. National programs designed to assist individuals in need of health and social services are highlighted in Box 1. Having a basic understanding of eligibility for these programs and how to direct women to these services allows nurses to link women to support beyond their immediate scope of care. However, nurses do not need to be in leadership positions or have expansive knowledge of the social safety net to address social determinants at the health systems level. Nurses can identify team members and community liaisons with expertise in areas such as housing, transportation, legal assistance, food assistance, and addiction services.

Cross-sectional collaboration might begin with a nurse creating or using a referral system to key social service providers. Nurses can identify gaps between women's social needs and services offered within the health system and then forge partnerships to meet these needs. Nurses can also urge hospital administrators to invest in technology to advance referral coordination and effectiveness. Nurses advocating for improved patient outcomes need to push health care systems beyond traditional boundaries and set a new standard for collaboration.

Advocacy Outside the Health Care Center

Outside of professional responsibilities, nurses are community members. They are parents, renters, homeowners, voters, shoppers, local leaders, and members of social organizations, religious congregations, and neighborhoods. Sometimes the most influence nurses can have on social determinants of health is not in their work as nurses but in their actions as community citizens. Addressing social determinants of health and eliminating health disparities requires systemic change around poverty, housing, food access, transportation, financial literacy, and education, among others. Furthermore, achieving health equity requires the dismantling of oppressive systems shaped by discrimination and racism. Providing for the social needs of individuals is essential, life-saving work but falls short for addressing social determinants. As Castrucci and Auerbach (2019) articulate, individual interventions "mitigate the acute social and economic challenges of individual patients, but they do so without implementing long-term fixes" (para. 7).

Nurses are ideally positioned to bring issues regarding the health implications of policy and social conditions to the forefront. Using their experience of how social determinants affect health and how interventions have been successful in improving the health of individuals, nurses can educate those outside the health care system. Nurses can use their stories and health care knowledge to advocate for community-level interventions and Health in All Policies. Based on the understanding that social determinants are shaped by decisions made primarily outside of the health care sector, Health in All Policies is an approach to public policy that considers the health implications of decisions (Rudolph, Caplan, Ben-Moshe, & Dillon, 2013). It involves collective decision making in which decision makers consider health, equity, and sustainability in

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evaluating policy options (Rudolph et al., 2013). Regardless of their position, place of employment, or interaction with the care of women, all nurse have the ability to influence their communities and public policy, which is essential to address the social determinants influencing the health of women.

Taking Action

Because social determinants of health act on a gradient, strategies to address them can be conceptualized similarly. There is no singular approach to achieving health equity. Nurses providing direct care can start by identifying and addressing, through partnerships and referrals, the social needs of patients. Next, nurses can advocate for and lead structural changes within the larger scope of the health system. This might include changing hospital policies to promote equitable health outcomes or joining a national advocacy organization to influence health policy. Finally, nurses can confront the structural causes of inequity. This confrontation can start with understanding personal implicit bias and drawing attention to the operation of structural racism within communities. This action might also include advocacy for policy change in areas outside of the health field such as housing subsidies or transportation. Examples of activities at each level of advocacy are provided in Box 2.

Conclusion

At a time of high health care spending, increasing health care costs, and persistent disparities in health status, the United States is in need of new strategies to improve the nation's health. The impact of social determinants on health and life expectancy mandates that solutions to health disparities occur within the health care system and outside of it. Nurses have several key opportunities to advance a health equity agenda. First, they can facilitate understanding in their health care systems about the social needs of women and how to ensure that these needs are addressed, thus mitigating the negative effects of social determinants on health status. Next, nurses can develop and promote community-level interventions and systemwide changes to better address social determinants of health. Last, nurse can advocate for the societal and policy changes needed to create a nation in which health equity is a reality. **NWH**

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