FROM THE EDITOR

Incorporating Social/Structural Determinants of Health in Oncology Nursing Research: Next Steps Are Needed

Collecting race and ethnicity data without adding SDOH measures may lead to racial existentialism, focusing on race and/or ethnicity as the source of health problems.

We have recently published several articles that address racism, structural barriers, and disparate health outcomes for Black Americans (Jones et al., 2021) and the implications that has for oncology nursing. These, and other recent publications in multiple journals, provide a basis for a deeper understanding of historic injustices that continue to adversely affect minorities, particularly Black Americans. To best honor the knowledge gained through this understanding, we must move, as a discipline, to consider data and human elements that can foster a richer research base for better understanding and eliminating health disparities. Social determinants of health (SDOH) are conditions in the places where people live, learn, work, and play that affect health risks and outcomes. Social determinants of health include a wide range of factors and can have profound downstream effects on the uptake of health-promoting behaviors, access to health care, the ability to follow through with care plans, and, ultimately, health outcomes (Elmore et al., 2021). SDOH can provide salutary or detrimental effects on health. With a few exceptions, most oncology research studies document the race and ethnicity of research participants. However, there are additional sociologic factors, including education, gender, sexuality, income, geographic community, and limited English proficiency, that have been relatively overlooked by oncology nurse scientists in designing research studies. Although demographic data, particularly race and ethnicity, are now an integral part of data collection, collecting race and ethnicity data without adding SDOH measures may lead to racial existentialism, focusing on race and/or ethnicity as the source of health problems. Another problem with collecting these data is that attributing health disparities to biology may exclude powerful socio-contextual forces that may, in fact, be more strongly related to health outcomes (Waters et al., 2021). The question to ask is are we using race and ethnicity as a proxy for social experiences (such as geography, access to care, poverty, food insecurity, etc.) (Zurca et al., 2022), or are we collecting the necessary SDOH data to prevent spurious relationships, yielding false conclusions?

Given that our scientific paradigm requires expansion of the consideration of multifactorial relationships among race, ethnicity, SDOH, and health outcomes, how do we, as nurse scientists, adapt quickly and comprehensively to move forward? With our strong history of patient advocacy and leadership in developing personalized patient and family relationships, oncology nurses are well-suited

for leading in this contemporary paradigm. One of the challenges is designing strategies that can be used across studies. We can start by focusing on studies using qualitative methodologies to better understand the lived experience of individuals with different types and levels of SDOH to more deeply understand the nuances and context of SDOH. These studies can be used to develop a research base that illuminates a rich understanding from individual or small groups (dyad/triad). For research in larger samples, quantitative studies will require adoption of robust measures of SDOH that can be used across studies and research groups. Sexual orientation and gender identity data should be self-reported, and elements should follow guidelines from the U.S. Health Resources and Services Administration. Research participants should self-select their race/ethnicity from multiple options or free-text option. A strategy similar to the National Institute of Health toolkit, unified symptom measures, or PROMIS (Patient-Reported Outcomes Measurement Information System) measures could be led by nurse scientists to quickly move this initiative forward. However, the adoption rate for common data elements has varied over time and, most likely, data elements that address SDOH will not be unified unless mandated by grant-funders.

One of the current foci in research is using artificial intelligence to discern patterns and make meaning, particularly in big-data studies. Incorporating these methods, such as GIS&T (geographic information science and technology) into oncology research, could give pertinent information related to environment, exposures, and barriers/facilitators of health-promoting behaviors, and thereby permit further understanding of neighborhood data. Similarly, land-use regression models and remote sensing data have been widely employed to forecast atmospheric aerosol levels. Recently, these methodologies have been combined to predict the influence of pollutants on human health (Tavera Busso et al., 2021). Although these methods add another source of community-level data, the validity of the results needs to be scrutinized for inherent racism or other forms of bias. We are cautioned that "AI practitioners may not be aware that data about X (e.g., ZIP codes, health records) may also be data about Y (e.g., class and race inequalities, socioeconomic status)" (Joyce et al., 2021, p. 2).

In all, oncology nurse scientists are well positioned to move systematically forward to incorporate perspectives and measures that reflect the relationships among SDOH and patient, family, and community outcomes in cancer prevention, treatment, and survivorship. We must be vigilant in seeking consultation and clarification in our study designs to ensure that we are not conflating race/ethnicity with other variables, particularly SDOH. As researchers and scholars, addressing SDOH in study designs in a systematic manner can lead to true insights and understanding, and, more hopefully, to decreased health disparities and increased health equity.

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