Examining Participation Disparities in Cancer Clinical Trials

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OBJECTIVES: To examine factors that account for disparities in cancer clinical trial participation.

SAMPLE & SETTING: Pooled data from Behavioral Risk Factor Surveillance System surveys between 2010 and 2017.

METHODS & VARIABLES: Univariate and binary logistic regression analyses were used to examine the associations between participation in clinical trials and demographic and health characteristics, using SAS® procedures to account for complex sample features.

RESULTS: Univariate analyses showed that age, race, income, and self-rated health status were significantly associated with the likelihood of participating in cancer clinical trials. Binary logistic analyses showed that Black respondents who were ever diagnosed with cancer were more likely to participate in cancer clinical trials relative to White counterparts. Respondents aged 50–64 years were more likely to have participated in cancer clinical trials compared to those aged 65 years or older. However, respondents who self-rated their health as excellent or very good were less likely to participate in cancer clinical trials.

IMPLICATIONS FOR NURSING: Involving properly trained nurses and nurse practitioners from diverse backgrounds in cancer clinical trials to inform people with cancer about trials and ways to reduce personal barriers will increase participation from all people, regardless of socioeconomic and demographic characteristics.

KEYWORDS clinical trials; disparity; race; ethnicity; older adults; cancer

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Health disparities, commonly defined as differences in the burden of disease, injury, violence, or opportunities to obtain optimal health, are preventable but have been obstinate (Centers for Disease Control and Prevention [CDC], 2020). Evidence suggests that there are disparities in cancer clinical trial participation (American Cancer Society Cancer Action Network, 2018; Colon-Otero et al., 2008; Loree et al., 2019; Murthy et al., 2004; Nipp et al., 2019; Unger et al., 2016, 2020; Winkfield et al., 2018; Wong et al., 2016). Multiple factors contribute to the disparities in clinical trial participation. Lower socioeconomic status creates financial burden on people with cancer (Nipp et al., 2019; Winkfield et al., 2018; Wong et al., 2016), which has been linked to low medication adherence, poor quality of life, and increased mortality rates (Chino et al., 2017; Nipp et al., 2019; Ramsey et al., 2013, 2016). There is a large disparity in cancer clinical trials based on age. Less than 3% of adults aged 20 years or older and less than 1% of those aged 70 years or older participate in cancer clinical trials; however, 50% of all children with cancer take part in clinical trials (Colon-Otero et al., 2008; Sedrak et al., 2021). Evidence indicates an association between cancer clinical trial participation and population mortality or survival (Unger et al., 2016). Consistent reduction in mortality rates has been recorded among children aged younger than 15 years with an increase in clinical trial participation (Bond & Pritchard, 2006; Hunger et al., 2012). Of note, clinical trial participation by children aged younger than 15 years has always been higher than that of their adult counterparts (Bond & Pritchard, 2006; Markham et al., 2020; Unger et al., 2016).

Structural and clinical barriers to cancer clinical trial participation have also been reported. Clinical trials are not available to all people with cancer (Go et al., 2006; Unger et al., 2021). This is the case for more than half of individuals with cancer (Green et al., 2012). In addition, structural factors, such as transportation,