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Shifting the Lens on Lung Cancer Screening Inequities

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Disparities in lung cancer exist, with Black individuals in the US experiencing lung cancer disproportionately more compared with any other racial and ethnic group and having higher lung cancer incidence and mortality rates and lower survival rates compared with White individuals.[1] Black individuals in the US have a poor prognosis, largely related to later stage at diagnosis, which is further worsened by the disparities seen in lung cancer screening.[2] Over 14 million people in the US are eligible for lung cancer screening, and while screening uptake among eligible White individuals is a paltry 4.9%, it is even worse at 1.7% among eligible Black individuals.[3] The study by Richmond and colleagues[4] explored the decision to screen for lung cancer in the context of environmental and psychosocial factors, finding emergent themes that emphasized historical as well as present-day racism as a critical factor perpetuating medical mistrust and avoidance of cancer screening. At present, our understanding of the individual decision to screen or not for lung cancer has found that health beliefs (perceived risk, perceived benefits, perceived barriers, and self-efficacy) and psychosocial factors, such as stigma, medical mistrust, cancer fatalism, lung cancer worry, and lung cancer fear, are salient variables influencing lung cancer screening uptake.[5] The study by Richmond et al[4] offers a glimpse into the context of the sociocultural environment and its influences on critical factors that support why lung cancer screening inequities exist beyond an individual's behavior.

For the first time in the history of the world's deadliest cancer, there is a screening test that can reduce lung cancer–related mortality by 20% by detecting tumors at earlier, more treatable stages.[6] But if those eligible do not participate, the public health benefit of lung cancer screening will never be fully realized. Adoption is not automatic even for life-saving innovations. This was apparent during the COVID-19 pandemic. People have to trust the system in which they are placing their care to foster engagement in the process. Centuries of egregious acts by those supposedly in trusted positions within society have continuously eroded the collective trust of a culture. Historical memory of slavery, segregation, bad acts by bad actors, and scientific exploitation[7,8] have synergistically contributed to present-day medical mistrust in the Black community.

Richmond and colleagues'[4] new qualitative exploration of environmental, psychosocial, and modifying factors influencing lung cancer screening decision-making extends the original patient-centered conceptual model for lung cancer screening participation[5] from the perspective of the individual making the decision to screen or not for lung cancer, shedding light on previously unexplored areas like the influence of historical and contemporary racism on lung cancer screening decisions. These new findings consider the critical variable of medical mistrust in its historical context,[4] providing deeper insights into the origin of a people's discontent that further highlight the importance of considering social determinants of health when contemplating strategies focused on early detection for lung cancer.

Black patients have significantly lower odds of completing screening compared with White patients even after controlling for individual-level lung cancer risk factors and broader, neighborhood-level factors.[9] Black patients also experience delays in follow-up, decreased screening adherence, and increased loss to follow-up overall.[9] The current clinical state of suboptimal lung cancer screening uptake is pervasive among all lung screening–eligible individuals regardless of race and ethnicity, and its etiology is multifaceted. However, placing suboptimal lung cancer screening uptake in the Black community in the context of medical mistrust advances the current state of the science by supporting an etiology that may be unique to a community and thus offering insight into an essential target for community-based, tailored interventions. This further reinforces the notion

that disparities in lung screening stem not from individual behavior but from deep-seated environmental and structural factors. Unless these fundamental systemic issues are addressed, inequalities in lung cancer screening will endure.

Medical mistrust is a key construct to consider when addressing lung cancer screening disparities in the Black community. While medical mistrust was included in the original conceptual model for lung cancer screening participation,[5] the new research by Richmond et al[4] provides a robust exploration with screening-eligible individuals to uncover how important a construct medical mistrust may or may not be. While the conceptual model for lung cancer screening participation is focused on the individual level,[5] the new work by Richmond et al[4] expands our understanding of this critical construct as both being influenced at multiple levels and needing to be addressed at multiple levels. As we consider strategies to address lung cancer screening inequities, considering variables that may be more salient to the individual but also contextually situated within a culture or a community is essential. The latter perspective supports why tailored and targeted interventions are important considerations when trying to increase lung cancer screening uptake among those most at risk and necessitates targeted interventions focused at the system and community levels.

The environment can be a critical antecedent toward both process and outcome while intersecting with broader health care disparities and systemic inequities. Environmental barriers, such as historical context, that feed individual-level knowledge and beliefs about lung cancer screening, community cultures that support avoidance of preventive care and early detection, and lack of resource availability, such as income stability and access to transportation, all impact the process and subsequent outcomes of lung cancer screening.[4] In addition, individual negative experiences in health care can worsen existing mistrust such as seen in examples from the study by Richmond et al[4] in which participants recounted encounters during which pain was ignored by their health care practitioner. Acknowledging the influence of the sociocultural environment on health care outcomes has the potential to prompt a reevaluation of health care practices and policies to ensure equitable access and outcomes for all.

The study by Richmond et al[4] offers, to my knowledge, the first evidence qualitatively linking the environmental factor of racism to lung cancer screening decisions, creating a valuable foundation on which to build future research that contextualizes the environment as a critical factor to understand lung cancer screening inequities. To successfully address lung cancer screening inequities, we must first clearly understand factors across all levels contributing to the inequity. By addressing the complex interplay of environmental and psychosocial factors in lung cancer screening, we can create a more equitable and effective approach to early detection of lung cancer.

ARTICLE INFORMATION

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