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# Skin Cancer Risk in Gay and Bisexual Men A Call to Action

Aaron J. Blashill, PhD; Sherry Pagoto, PhD

In this issue of JAMA Dermatology, Mansh and colleagues<sup>1</sup> report results from the first known study to examine the prevalence of skin cancer in sexual minorities. The authors leveraged large US-representative and California-representative

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epidemiological databases to explore self-reported diagnoses of skin cancer and use of indoor tanning among nearly

200 000 adults. The findings revealed significant sexual orientation health disparities. Skin cancer rates among sexual minority men ranged between 4.3% and 6.7%, whereas the rates among heterosexual men ranged between 2.7% and 3.2%, for increased adjusted odds of skin cancer for sexual minority men between 1.56 and 2.13. Nonsignificant differences emerged between heterosexual and sexual minority women. Although Mansh and colleagues<sup>1</sup> did not statistically compare the rates of skin cancer between sexual minority men and women, it is worth noting that sexual minority men reported the highest rates across sex and sexual orientation.

In addition to sexual orientation disparities in skin cancer diagnoses, Mansh and colleagues<sup>1</sup> reported substantial disparities in a key skin cancer risk behavior: indoor tanning. Sexual minority men reported a 12-month prevalence of any indoor tanning between 5.1% and 7.4% compared with 1.5% to 1.6% among heterosexual men, 2.6% to 4.1% among sexual minority women, and 5.0% to 6.5% among heterosexual women. Indoor tanning is a likely factor in the elevated rate of skin cancer in sexual minority men<sup>2</sup> since the International Agency for Research on Cancer<sup>3</sup> assigned indoor tanning as a group 1 carcinogen in 2009.

Previous research<sup>4</sup> on indoor tanning has reported that women are the population engaging in the highest rates and are most in need of intervention. As such, research focused on reducing indoor tanning has been exclusively focused on women.<sup>5</sup> To our knowledge, no trial on interventions for reducing indoor tanning has targeted sexual minority men, and no evidence exists to show that interventions targeting women would resonate with sexual minority men. Public health campaigns for skin cancer prevention, often informed by intervention and health communication research, have been instrumental in raising awareness about skin cancer. To the extent that sexual minority groups continue to be neglected in skin cancer prevention research, they will remain untargeted in public health campaigns, further facilitating this health disparity.

The findings reported by Mansh and colleagues<sup>1</sup> add to the growing list of sexual orientation health disparities that have

been revealed when sexual orientation has been measured.<sup>6</sup> Sexual minority men are at increased risk for developing not only skin cancer but also other forms of cancer,7 human immunodeficiency virus,<sup>8</sup> substance use disorders,<sup>9</sup> and mental illness.<sup>10</sup> A prevailing theory on why sexual minority men are disproportionately affected by physical and mental health problems is the sexual minority stress model,<sup>11</sup> which suggests that stigma, prejudice, discrimination, and victimization create a hostile social environment for sexual minorities, which subsequently leads to elevated psychological distress. Elevated distress created by macrolevel social forces leads to health risk behaviors, including condomless sex, tobacco use, physical inactivity, and, possibly, indoor tanning. Supporting the role of psychological distress are studies showing that, among women, stress and depression are disproportionately elevated among indoor tanners.<sup>12</sup>

Indoor tanning has also been strongly associated with motives to enhance physical appearance.<sup>13</sup> Sexual minority men report elevated body dissatisfaction compared with heterosexual men, with levels of body image concerns similar to those of heterosexual women.<sup>14</sup> The convergence of elevated stress and body dissatisfaction may make sexual minority men particularly vulnerable to tanning as a way to cope with these issues. Unfortunately, to our knowledge, no published studies have examined predictors of indoor tanning among sexual minority men. The development of theoretically and empirically based skin cancer prevention programs will require first identifying drivers of elevated skin cancer risk in this population.

The results from Mansh and colleagues<sup>1</sup> have implications for both clinical care and research. Assessing sexual orientation as part of the initial patient interview in clinical dermatology settings could identify men at elevated risk for skin cancer and possible indoor tanners. Many physicians do not assess patient sexual orientation as part of routine care15; however, when sexual minority patients are informed why this information is important to their care and that it will be kept confidential, many are open to sharing it with their healthcare professionals. Recent data<sup>16</sup> have highlighted significant explicit and implicit negative attitudes toward sexual minorities by physicians and other health care professionals, suggesting that additional training in sexual minority issues is needed in medical school curricula. The expression of explicit or implicit bias toward sexual minorities is destructive to a physician-patient relationship and likely a liability to care. In addition, the Institute of Medicine<sup>6</sup> and Healthy People 2020 have called for routine assessment of sexual orientation in

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medical care and in all federally funded epidemiological surveys. The California Health Interview Surveys, the Adult National Health Interview Survey, and the National Longitudinal Study of Adolescent to Adult Health (Add Health) are 3 examples of epidemiological surveys including these data.

Skin cancer risk reduction in sexual minority men is an area in urgent need of research. Studies exploring predictors of indoor tanning and other skin cancer risk behaviors in sexual minority men and how these fit into the sexual minority stress model would further our understanding of why sexual minority men are disproportionately affected by preventable diseases. Further research is also needed to determine where sexual minority men engage in indoor tanning (ie, salon vs nonsalon locations) and to describe the nature of their tanning habits. Finally, skin cancer prevention interventions are also needed to reduce risk behavior in this population. Physicians can improve care and lend insights about this population by assessing sexual orientation as part of routine care and entering it into electronic medical records. Ultimately, reducing health disparities in sexual minorities will also require recognizing and eliminating bias and stigma in both research and clinical practice.

#### **ARTICLE INFORMATION**

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