Anti-gay statements trigger elevated stress in lesbian, gay and bisexual study participants
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A study published today finds that when lesbian, gay and bisexual adults are exposed to even mild anti-gay prejudice, it triggers bodily changes such as increases in blood pressure that can contribute to heart disease. Credit: Pexels/GW

Previous research has suggested that the stress of discrimination may play a role in the development of health problems that disproportionately affect lesbian, gay and bisexual individuals. A study published today finds that when lesbian, gay and bisexual adults are exposed to even mild anti-gay prejudice, it triggers bodily changes such as increases in blood pressure that can contribute to heart disease.

"This study provides strong evidence that when LGB people experience anti-gay prejudice, their bodies respond with increases in heart rate and blood pressure, and in the stress hormone cortisol," David M. Huebner, a professor of prevention and community health at the George Washington University and lead author of the study, said. "When the body responds like this repeatedly, it can contribute to cardiovascular disease and other illnesses that develop over time."

Scientists know that the body's fight or flight response is triggered in response to a physical danger or psychological threat. Previous studies have shown that self-reports of discrimination are correlated with various health problems. However, in the past, researchers could not show that discrimination actually caused bodily changes that lead to such health problems.

To help change that, Huebner and his colleagues designed a laboratory study in which 134 lesbian, gay and bisexual adults participated in a stressful task—an interview. Before the interview, participants were given a sheet of paper that purported to tell them about the person conducting the interview. People in the experimental group learned that the person supposedly interviewing them was opposed to same-sex marriage. In reality, the researchers drafted the anti-gay statement and showed it to the experimental group to expose them to discriminatory statements in the laboratory. Participants in the control group were not exposed to such statements.

The researchers prerecorded the interview questions so that there was no variability in the questions or in the tone of voice. The participants had to answer a series of standard questions while the researchers measured any changes in heart rate, blood pressure and other markers of the stress response.

Because interviews are generally stressful, the team found that all of the participants experienced signs of physiological reactivity when asked to take part. However, the experimental group, those who had been exposed to the anti-gay statement, showed an even stronger physiologic response:
Blood pressure rose higher in the group exposed to anti-gay statements and recovered more slowly than the control group;
Heart rates rose higher for the experimental group and went back to normal more slowly than the control group;
Participants in the experimental group had higher levels of cortisol, a hormone released by the body in response to a dangerous or threatening situation.

"This work really begins to connect the dots between exposure to discrimination and physical health in a way that hasn't been done before," Huebner said. "For years, researchers have been showing correlations between reports of discrimination and poorer health. This study is one of the first to show how exposure to anti-gay prejudice really causes changes in physiological processes that can affect long-term health."

One limitation to the study is that the sample consisted of mostly young, white lesbian, gay and bisexual participants. Future research will have to find out how the stress of anti-gay discrimination affects Black or other ethnic minorities who are also lesbian, gay or bisexual, as well as older and younger people, Huebner points out.

Currently, very little research exists to show how people can lessen the specific impacts that discrimination might have on the body. Huebner suggests strategies for coping with other forms of stress, such as exercise, a healthy diet, and increasing mindfulness, would likely be helpful. He also suggests that people who find themselves struggling in the face of discrimination might seek the support of a skilled therapist. Research suggests that talk therapy can help people more effectively manage stressful events and reduce their negative health effects.

In the end, however, public policies aimed at banning discrimination toward lesbian, gay, bisexual and transgender people will go a long way toward creating a healthy environment for all, Huebner said. The recent executive order providing protection to transgender people in the United States military is an example of solutions that can be enacted now, he said.

The study, "Cardiovascular and Cortisol Responses to Experimentally-Induced Minority Stress," was published June 21, 2021 in the journal Health Psychology.


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