Disparities in mental health and access to care are well-documented by both sexual orientation and rural/urban location. However, less is known about the intersection of sexual orientation and rurality in mental health and access to or utilization of health care. This policy brief addresses the research gap among rural sexual minorities by illuminating differences in mental health for two of the most common mental health disorders (depression and anxiety), as well as differences in access to health care.

Background and Policy Context

In recent years, notable progress has been made toward advancing the civil rights of lesbian, gay, and bisexual (LGB) individuals living in the US. Still, health disparities by sexual orientation remain, with LGB individuals facing an array of challenges that their heterosexual counterparts do not experience. One particularly egregious set of challenges involves mental health, both in terms of access to mental health care and mental health outcomes. Members of the LGB community experience worse mental health outcomes and face greater challenges accessing care than their heterosexual counterparts. For example, LGB individuals are more than twice as likely to experience a mental health condition compared with their heterosexual counterparts. More specifically, research suggests that LGB adults are at higher risk than heterosexual adults for experiencing depression and anxiety disorders.

Rural residents also experience disparities in mental health outcomes and access to mental health services. According to the National Survey on Drug Use and Health (NSDUH), just over 1 in 5 rural adults reported having a mental illness in 2020. Some research suggests that the prevalence of mental health conditions for rural and urban adults is similar, but the accessibility and uptake of health care services and supports, such as specialized mental health care provid-
ers, varies dramatically by rurality. As a result, rural residents report substantial disparities in mental health outcomes. Adults experiencing mental illness in rural settings also face unique challenges in accessing mental health care, including lack of anonymity when seeking care, shortage of mental health professionals available to them, transportation to treatment, and issues with affordability.

Unfortunately, very little research has examined the mental health of rural LGB populations—mostly due to the lack of credible data on sexual orientation and rurality. Of the available research, qualitative evidence and convenience samples of sexual and gender minorities (often combined for easier recruitment strategies) suggests elevated levels of psychological distress and substance use among rural LGB adults with barriers to mental health care. Much more research is critically needed to examine the intersection of sexual orientation and rurality in mental health care access and mental health outcomes. The purpose of this policy brief is to illustrate the differences in two of the most common mental health disorders, and in access to mental health care, by sexual orientation and rurality.

**Approach**

Data for this study came from the 2019-2020 National Health Interview Survey (NHIS), accessed through the IPUMS Health Surveys. The NHIS is a nationally-representative survey of the civilian, noninstitutionalized population in the US, which has been fielded annually since 1957. It was among the first nationally representative surveys to include a publicly-available measure of sexual orientation, which was added to the adult component of the survey in 2013. The 2019-2020 NHIS included a longitudinal component, in which some respondents were invited to participate both years. For this brief, we only used baseline responses for all respondents who had answered questions on mental health, access to care, and sexual orientation (N=50,995).

Outcome variables included whether respondents had ever received a diagnosis of depression or anxiety disorder. For anxiety disorder, the survey asked respondents, “Have you ever been told by a doctor or other health professional that you had any type of anxiety disorder?” We created a categorical variable indicating whether they had received a diagnosis of neither, only depression or only anxiety disorder, or both depression and anxiety disorder. We also assessed the level of depression, which was asked using this question, “Thinking about the last time you felt depressed, how depressed did you feel? Would you say a little, a lot, or somewhere in between?” The level of depression question was asked of sample adults who reported feeling some depression (regardless of a formal diagnosis) and/or who took medication for depression.

Finally, we looked at three measures of access to care: has a usual source of care (including multiple usual sources of care); needed, but couldn’t afford medications (of any type) in the past 12 months; and delayed mental health care because of cost in the past 12 months. While two of these three measures are not specific to mental health care, they are indicative of broader access issues. Further, mental health concerns are often addressed first in a primary care setting, so measuring differences in access to care generally is important for understanding access to care for mental health conditions.

Rural location was defined using the 2013 NCHS Urban-Rural Classification Scheme. All non-metropolitan counties were categorized as rural and all metropolitan counties were categorized as urban. Sexual orientation was defined using the question, “Do you think of yourself as gay/lesbian; straight, that is, not gay/lesbian; bisexual; something else; or you do not know the answer?” We defined lesbian, gay, bisexual (LGB) as including all respondents who answered gay/lesbian, bisexual, or something else and heterosexual as all respondents who answered “straight.”

For all mental health and access to care measures, we used chi-squared tests to determine statistically significant differences within rural (LGB vs. heterosexual) and within urban (LGB vs. heterosexual) respondents. We used survey weights for all estimates and ran all analyses in Stata v. 16.

**Results**

The highest levels of depression and anxiety disorder diagnoses were found among rural LGB adults, with 38.6% reporting a dual diagnosis of depression and anxiety disorder (vs. 11.4% of heterosexual rural adults, P<0.001, 29.5% of urban LGB adults, and 8.7% of ur-
urban heterosexual adults; see Figure 1). Urban heterosexual adults had the highest rates of neither depression nor anxiety disorder diagnosis (81.0%) compared to other heterosexual and LGB adults.

Among both rural and urban adults who had felt depressed or took medication for depression, the severity of depression was higher among LGB adults (see Figure 2). Rural LGB adults had the highest levels of depressed feelings, with 30.3% reporting that the last time they felt depressed it was, “a lot.” Rural and urban heterosexual adults had similar rates of reporting that the last time they felt depressed it was, “a little” (51.1% and 51.0% respectively).

Table 1 shows differences in access to care measures by sexual orientation among rural and urban adults by mental health diagnosis. Among rural respondents, LGB respondents were less likely to report having a usual source of care and more likely to report not being able to afford medications across most diagnosis categories; however, those differences were not statistically significant, likely because of small sample sizes (e.g., 171 rural LGB adults). Rural LGB adults without a depression or anxiety disorder diagnosis were more likely than rural heterosexual adults without a depression or anxiety disorder diagnosis to say that they had delayed mental health care in the past 12 months because of cost (9.9% vs. 1.1%, P<0.001), as were rural LGB adults with both a depression and anxiety disorder diagnosis, compared to rural heterosexual adults with both a depression and anxiety disorder diagnosis (25.5% vs. 13.9%, P<0.05).

We found statistically significant differences among urban adults by sexual orientation, with urban LGB adults being less likely to have a usual source of care among those with no depression/anxiety disorder diagnosis and among those with a diagnosis of both depression and anxiety disorder. Urban LGB adults with no

Figure 1. Prevalence of Depression and Anxiety Disorder by Rurality and Sexual Orientation

Note: Differences by sexual orientation among rural and urban adults significant at P<0.001. Data are from the National Health Interview Survey, 2019-2020. N=50,995
depression/anxiety disorder diagnosis were more likely than their heterosexual counterparts to have needed but couldn’t afford medication in the past 12 months. Lastly, urban LGB adults across all mental health diagnosis categories were more likely than urban heterosexual adults to have delayed mental health care because of cost in the past 12 months.

Discussion and Implications

In this brief, we identified disparities in mental health and access to care (including mental health care) at the intersection of sexual orientation and rurality. Specifically, we found the highest rates of depression and anxiety disorder overall for rural LGB adults, as well as higher levels of depressed feelings. In contrast, urban, heterosexual adults reported the lowest overall levels of depression and anxiety disorders. Elevated rates of depression and anxiety among rural LGB adults points to the intersecting risks factors related to homophobia and structural urbanism – that is, systemic and interpersonal discrimination against sexual minorities coupled with under-resourcing of rural areas.

Urban LGB adults reported the most barriers to accessing mental health care despite nearly half of urban LGB adults reporting a lifetime diagnosis of depression, anxiety, or both. Further, although not statistically significant, rural LGB adults reported more barriers to care than their heterosexual counterparts. In particular, more than one-third of rural LGB adults reporting any lifetime diagnosis of depression, anxiety, or both have forgone medications and delayed mental health care in the past year because of cost, compared with less than one-fifth of rural heterosexual adults. The lack of significant findings may be related to small samples sizes, especially of rural LGB adults, and should prompt additional research and data collection to better illuminate these inequities.

Efforts to improve rural health, including mental health and access to mental health care, should focus on sexual orientation diversity. Meanwhile, policies

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Figure 2. Level of Depressed Feelings by Rurality and Sexual Orientation

<table>
<thead>
<tr>
<th></th>
<th>Lesbian, gay, or bisexual (n=120)</th>
<th>Heterosexual (n=3,489)</th>
<th>Lesbian, gay, or bisexual (n=1,094)</th>
<th>Heterosexual (n=18,061)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>28.5%</td>
<td>51.1%</td>
<td>31.6%</td>
<td>51.0%</td>
</tr>
<tr>
<td></td>
<td>41.2%</td>
<td>34.7%</td>
<td>45.7%</td>
<td>36.8%</td>
</tr>
<tr>
<td></td>
<td>30.3%</td>
<td>14.2%</td>
<td>22.7%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Note: Differences by sexual orientation among rural and urban adults significant at P<0.001. Data are from the National Health Interview Survey, 2019-2020. N=22,764
Anxiety, Depression, and Access to Mental Health Care by Sexual Orientation and Rurality

Table 1. Access to Care by Rurality, Sexual Orientation, and Mental Health Diagnosis

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LGB</td>
<td>Heterosexual</td>
</tr>
<tr>
<td>Has usual source of care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No depression or anxiety disorder</td>
<td>90.4%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Depression only or anxiety disorder only</td>
<td>90.5%</td>
<td>94.6%</td>
</tr>
<tr>
<td>Depression and anxiety disorder</td>
<td>90.4%</td>
<td>94.6%</td>
</tr>
<tr>
<td>Needed but couldn’t afford medication, past 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No depression or anxiety disorder</td>
<td>7.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Depression only or anxiety disorder only</td>
<td>9.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Depression and anxiety disorder</td>
<td>28.4%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Delayed mental health care because of cost, past 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No depression or anxiety disorder</td>
<td>9.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Depression only or anxiety disorder only</td>
<td>10.8%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Depression and anxiety disorder</td>
<td>25.5%</td>
<td>13.9%</td>
</tr>
</tbody>
</table>

Note: P-value represents differences by sexual orientation within rural and urban adults. LGB=lesbian, gay, or bisexual.
large enough sample size to examine differences by race and ethnicity, another layer of intersecting identity impacting health equity because of racism. The NHIS also does not collect data on gender identity, so transgender and gender diverse populations cannot be identified in this analysis. Mental health needs at the intersection of gender and race are likely more pronounced. Finally, the measures of access to care in this brief are not all specific to mental health care; however, since many mental health conditions first present in primary care, understanding health care access broadly remains relevant for addressing inequities in access to mental health care specifically.

Health and health care disparities by rurality and sexual orientation are well-documented, but less is known about how they intersect. This brief shows disparities in mental health and access to mental health care for rural LGB adults. Our findings that rural LGB adults experience the highest rates of depression and anxiety, coupled with inequitable access to health care, should serve as an urgent call for policy to bolster mental health and health care access at the intersection of rurality and sexual orientation.

References

23. Probst J, Eberth JM, Crouch E. Structural urbanism contrib...


**Suggested Citation**