

ORIGINAL RESEARCH

Prevalence and Risk Factors for Suicidal Ideation and Attempts Among Black LGBTQ+ Young Adults

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BACKGROUND

Young people who hold both a Black and LGBTQ+ identity (e.g., lesbian, gay, bisexual, transgender, queer) are facing increasingly high levels of suicide risk. Very few studies have investigated risk factors that contribute to suicidality among Black LGBTQ+ young adults, many of whom live in the southeastern United States, including North Carolina. This study aims to investigate the risk factors that impact the Black LGBTQ+ young adult population.

METHODS

Data were collected through a cross-sectional survey in North Carolina from June–October 2023. The analytic sample includes 361 Black LGBTQ+ young people aged 18–34 years, a developmental period where individuals transition out of adolescence and into adulthood. Analyses include descriptive statistics and binary logistic regression modeling predicting suicidal ideation and suicide attempts as outcomes using predictor variables from multiple domains (i.e., demographics, psychological disorders, substance use, exposure to discrimination and violence, and poverty).

RESULTS

About one-third of participants considered suicide at some point in their lives, and nearly one-fifth of participants attempted suicide. Results also show that food scarcity was associated with suicidal ideation. Among substances, alcohol consumption increased risk for suicidal ideations while cocaine/crack use increased risk for suicide attempts. Having a psychological disorder (i.e., depression, bipolar disorder, post-traumatic stress disorder, anxiety disorder, gender dysphoria, and eating disorder) increased risk for suicidal ideation and/or attempt. Implications for suicide prevention and future research are discussed.

LIMITATIONS

Study limitations included convenience sampling, cross-sectional data, lack of variables unique to the population group, and measurement of lifetime suicidality.

CONCLUSIONS

Black LGBTQ+ young people report high rates of suicidality. Intervening to mitigate food scarcity, alcohol consumption, cocaine use, and mental health challenges may reduce suicidality among Black LGBTQ+ young people.

Introduction

Rates of suicidal ideation, suicide attempts, and suicide deaths among young adults (YA) with a Black racial/ethnic identity and LGBTQ+ identity (e.g., lesbian, gay, bisexual, transgender, queer) have been increasing.¹⁻³ Research is needed to understand suicidality among Black LGBTQ+ YA, many of whom live in the southeastern United States, including North Carolina. This study explored suicidal ideation and suicide attempts, focusing on risk factors for these problems, using data from a sample of Black LGBTQ+ YA in North Carolina.

Increasing Risk for Suicide

Recently, several high-profile reports were published on suicide and suicidality (e.g., suicidal ideation, planning, and non-fatal attempts) among Black young people in the United States.¹⁻³ These reports evidenced rising rates of suicidality and suicide deaths among Black YA in recent decades. For example, data show that the suicide rate for young Black individuals increased by 144% between 2007 and 2020,⁴ giving “Black youth the fastest growing suicide rate compared to their peers of other racial and ethnic groups.”¹ These reports also raise attention to the issue of suicidality among Black LGBTQ+ YA. The Centers for Disease Control and Prevention (CDC) found that among young Black LGB individuals in the United States, 40.6% had seriously considered suicide, 36.1% had made a plan for suicide, and 23.8% had attempted suicide in the past 12 months.⁵ A national survey by The Trevor Project showed that 41% of Black LGBTQ+ emerging adults had considered suicide in the past 12 months, and 14% had attempted suicide in the past 12 months.⁶

The Health Equity Promotion Model and Factors Related to Suicidality

In health disparities and equity research, after a disparity has been detected and empirically documented in a population, we must next understand the disparity.^{7,8} Such research involves identifying risk factors that contribute to the disparity. At this time, there is not a specific theory, framework, or model detailing factors and processes leading to suicidality among Black LGBTQ+ YA. The Health Equity Promotion Model (HEPM) is used to guide research on multiple levels and intersecting factors and processes that influence health outcomes for LGBTQ+ people.⁹ The model highlights the importance of *social positions*, which include intersections of marginalized and privileged social statuses and identities (e.g., age, race/ethnicity, gender). HEPM also

highlights the importance of the *individual, structural, and environmental context*, which includes broad oppressive forces (e.g., institutional heterosexism) that lead to negative individual experiences (e.g., microaggressions, acts of discrimination, violence). HEPM offers various mechanistic pathways that can be *health-promoting* and *adverse pathways* that influence health outcomes. Embedded in these pathways are behavioral (e.g., substance use), social (e.g., social isolation), psychological (e.g., internalized homophobia), and biological (e.g., allostatic) processes and influences. Given the complex, multi-causal nature of suicidality, a comprehensive conceptual and empirical approach is needed to understand and prevent this problem.

Researchers have studied factors related to suicidality among YA, although most of this research has been with YA in the general population. In terms of social positions, suicidality increases dramatically during adolescence and then begins a low-sloping decline during emerging adulthood into middle adulthood.¹⁰ Evidence shows that YA assigned female at birth have higher rates of suicidal ideation and behavior than those assigned male at birth.¹¹⁻¹⁴ A small number of studies with LGBTQ+ YA have shown that bisexual individuals have higher rates of suicidality compared to other sexual orientation identities, and transgender individuals have higher rates of suicidality compared to their cisgender counterparts.¹⁵⁻¹⁸ Some emerging research suggests LGBTQ+ YA living in rural areas have higher rates of suicidality compared to those in urban areas.¹⁷

Substantial evidence indicates that experiencing violence victimization (e.g., bullying, physical violence, sexual violence) increases the risk for suicidal ideation and behavior.^{11,12,14,15,17-21} On the other hand, less research has examined poverty as a risk factor for suicidality among YA. Poverty is characterized as a lack the resources to meet basic personal needs, such as food and shelter. Some studies have found that lower socioeconomic status and housing insecurity are risk factors for suicidality.^{15,17,19}

Psychological and behavioral factors play a significant role in suicidality. Substance use, especially alcohol, can increase risk for suicidality.^{12,19,21,22} Having any mental disorder is associated with increased risk for suicidality.^{12,17,21,23} Research shows strong relationships between certain disorders or symptom clusters and suicidality, including depression, bipolar disorder, anxiety, psychosomatic problems, and post-traumatic stress disorder (PTSD).^{13-15,17,21,23,24} In addition, suicidal ideation is a very strong predictor of suicide attempts.²¹

Current Study

Given the escalating rates of suicidality among Black LGBTQ+ YA and the lack of research and theory on this problem, the need to examine suicidal ideation and suicide attempts in this population is clear. North Carolina has

one of the largest proportions of Black YA in the country²⁵ and one of the largest proportions of LGBTQ+ people in the Southeast.²⁶ This study sought to answer these research questions: 1) What proportions of Black LGBTQ+ YA in North Carolina have considered suicide and attempted suicide? 2) How are demographic variables (e.g., age, sex, gender identity, sexual orientation identity, and urbanicity/rurality) related to suicidal ideation and suicide attempts among Black LGBTQ+ YA in North Carolina? 3) What are significant risk factors for suicidal ideation and suicide attempts among Black LGBTQ+ YA in the domains of psychological disorders, substance use, discrimination and violence victimization, and poverty?

Methods

Data were derived from a cross-sectional quantitative survey conducted in North Carolina from June 2023 to October 2023. Participants were recruited at 27 LGBTQ+ Pride events across the state. LGBTQ+ Prides are celebrations of LGBTQ+ identities, cultures, and communities that also promote LGBTQ+ visibility, dignity, and civil rights. The researchers tabled at every Pride event in North Carolina and asked individuals who approached the table or walked by the area if they were interested in completing an online LGBTQ+ health survey. Interested individuals scanned a Quick Response (QR) code with their smartphones that took them to the online informed consent page and survey. Eligible participants were at least 18 years of age, currently living in North Carolina, and identified as LGBTQ+. Participants received a rainbow pin as an incentive after they completed the survey, which took about 5–10 minutes. This project was approved by the University of North Carolina Institutional Review Board (IRB # 22-1610).

Participants

In total, 3170 LGBTQ+ individuals consented, met eligibility criteria, and took the survey. Within this sample, there were 361 participants who identified as Black and LGBTQ+ in the age range of 18–34 years.

Variables and Measurement

Survey items were crafted by a team of researchers, public health and social work community workers, and members of the LGBTQ+ community. Many of the items were derived from the Pennsylvania LGBTQ Health Needs Assessment.²⁷

Suicidal ideation and suicide attempt. Two forms of suicidality were measured using two items. Each participant was asked if they had ever “thought about killing yourself” and “attempted to kill yourself.” Response options were coded 0 (*No*) and 1 (*Yes*).

Psychological disorders. Participants were asked “Have you ever had any of the following mental health issues?”: depression (major depressive disorder), bipolar disorder, post-traumatic stress disorder (PTSD), anxiety disorder, gender dysphoria, substance use disorder, and eating disorder. Response options were coded 0 (*No*) and 1 (*Yes*).

Substance use. Participants rated their current frequency of smoking cigarettes and using e-cigarettes/vapes using a 4-point Likert-type rating scale ranging from 0 (*Not at all*) to 3 (*Every day*). Participants rated their frequency of drinking alcohol and using marijuana using a 3-point Likert-type rating scale ranging from 0 (*Never*) to 2 (*Every day*). Participants indicated their usage of cocaine/crack, opioids (e.g., heroin, oxycontin, fentanyl), and amphetamines using binary response options of 0 (*Never*) and 1 (*Yes, some use*).

Poverty. Poverty is evident when individuals lack resources to meet basic needs, such as food and shelter. Participants were asked about food insecurity in the past 12 months using two items: “I worried whether my food would run out before I got money to buy more,” and “The food that I bought did not last, and I did not have money to get more.” Housing instability was assessed in the past 12 months using this item: “I did not have a steady place to live.” Response options were coded 0 (*No*) and 1 (*Yes*) for these items.

Discrimination and violence victimization. Participants were asked to report if they had ever experienced the following forms of discrimination and violence: “At any point in your life have you experienced discrimination based on your LGBTQ+ status?” “At any point in your life have you experienced physical and/or sexual violence based on your LGBTQ+ status?” “Has anyone ever had sex with you after you said or showed that you didn’t want them to.” Response options were coded 0 (*No*) and 1 (*Yes*) for the first two items and 0 (*No*), 1 (*Prefer not to say*), and 2 (*Yes*) for the sexual assault item.

Demographic variables. Demographic variables for participants included the following: age (in years); sex assigned at birth (0 = male, 1 = female); gender identity (0 = cisgender, 1 = transgender and gender diverse); sexual orientation identity (0 = gay/lesbian; 1 = bisexual; 2 = pansexual/omnisexual; 3 = queer; 4 = other identities [e.g., asexual, demisexual]); and urbanicity-rurality ranged from 0 (urban/big city) to 5 (rural area).

Data Analysis

Binary logistic regression was used to examine predictors of suicidal ideation and suicide attempts. Before running the regression models, various assumptions and diagnostics were examined; no issues were found to preclude the regression analyses. Hierarchical regression modeling was used to compare results across multiple models with successive additions of independent variables predicting the outcomes of suicidal ideation and suicide attempt. This cumulative modeling approach allows for the comparison of changes

in pseudo R^2 values and statistical significance, which can illustrate the relative importance of certain independent variables in predicting outcomes. The pseudo R^2 values reflect how well the models fit the data and can be compared across models predicting the same dependent variable.²⁸ The hierarchical entry of the groups of independent variables was based on the HEPM and prior research on variables associated with suicidality. For the regression results, odds ratios and McKelvey and Zavoina's pseudo R^2 values will be reported because McKelvey and Zavoina's pseudo R^2 is the best estimator for the true R^2 based on results from Monte Carlo simulation.^{29,30}

Results

Descriptive results for the sample are shown in [Table 1](#). Approximately one-third (33.5%) of participants had considered suicide at some point in their lives, and approximately 1 in 5 (18.8%) participants had attempted suicide.

Hierarchical binary logistic regression modeling was used to predict suicidal ideation (see [Table 2](#)). In Model 1, suicidal ideation was regressed on social positions or demographic characteristics. Transgender/gender diverse participants were more likely to report suicidal ideation compared to cisgender participants. Pansexual/omnisexual participants were more likely to report suicidal ideation compared to gay/lesbian participants. Those with other less common sexual orientation identities had lower odds of suicidal ideation compared to gay/lesbian participants. In Model 2, discrimination and violence victimization variables were added. Sexual violence victimization was the only significant victimization variable. Those who reported they had experienced sexual violence had significantly higher odds of suicidal ideation compared to those who had not experienced sexual violence. In Model 3, poverty variables were added. Running out of food was significantly related to suicidal ideation. In Model 4, substance use variables were added; however, none of these variables were significant. In Model 5, psychological disorder variables were added. Other sexual orientation identities showed lower odds of suicidal ideation compared to gay/lesbian individuals. For sexual violence victimization, participants who preferred not to answer the question had lower odds of suicidal ideation compared to those who reported no sexual violence. Running out of food was significantly related to suicidal ideation. Drinking alcohol was the only substance use variable associated with suicidal ideation. Among the psychological disorders, depression, PTSD, anxiety disorder, gender dysphoria, and eating disorders were all significantly related to suicidal ideation. Variables in Model 5 accounted for 60.5% of the variance in suicidal ideation (pseudo $R^2 = 0.605$).

A second set of hierarchical binary logistic regression models were run predicting suicide attempt ([Table 3](#)). Model 1 included demographic variables, and one was significant: transgender participants were more likely to have attempted suicide compared to cisgender participants. In Model 2, victimization variables were added, and participants who experienced sexual

Table 1. Summary of Descriptive Statistics for the Sample (N = 361)

Variable	M(SD) or n(%)
Age	24.4 (4.9)
Sex at Birth	-
Male	87 (24.7%)
Female	274 (75.3%)
Gender Identity	-
Cisgender	267 (73.8%)
Transgender/gender diverse	94 (26.2%)
Sexual Orientation	-
Gay or Lesbian	131 (37.2%)
Bisexual	100 (26.1%)
Pansexual or omnisexual	63 (17.6%)
Queer	40 (11.4%)
Another identity	27 (7.7%)
Urbanicity-to-Rurality	-
Urban/big city	47 (15.5%)
Urban/medium-size city	111 (32.4%)
Small city	109 (21.6%)
Suburb	48 (14.9%)
Small town surrounded by countryside	24 (8.1%)
Rural area	22 (7.4%)
Experienced discrimination based on LGBTQ+ status	176 (48.8%)
Experienced physical and/or sexual violence based on LGBTQ+ status	77 (21.3%)
Experienced sexual violence (No-ref.)	192 (53.2%)
Prefer not to say	74 (20.5%)
Yes	95 (26.3%)
Worried about having enough food	89 (24.7%)
Food ran out	56 (15.5%)
No steady place to live	32 (8.9%)
Cigarette smoking	0.14 (0.47)
E-cigarette use/vaping	0.42 (0.87)
Alcohol consumption	0.76 (0.54)
Marijuana use	0.75 (0.72)
Cocaine/crack use	18 (5.0%)
Opioid use	18 (5.0%)
Amphetamine use	19 (5.3%)
Depression	223 (61.8%)
Bipolar disorder	35 (9.7%)
PTSD ^a	59 (16.3%)
Anxiety disorder	172 (47.6%)
Gender dysphoria	51 (14.1%)
Substance use disorder	28 (7.8%)
Eating disorder	67 (18.6%)
Thought about suicide	121 (33.5%)
Attempted suicide	68 (18.8%)

^a PTSD = post-traumatic stress disorder.

Table 2. Summary of Binary Logistic Regression Analyses Predicting Suicidal Ideation (N = 361)

Independent Variable	Odds Ratio [95% CI]				
	Model 1	Model 2	Model 3	Model 4	Model 5
–	–	–	–	–	–
Demographics	–	–	–	–	–
Age	0.98 [0.93, 1.03]	0.97 [0.91, 1.02]	0.96 [0.91, 1.02]	0.95 [0.90, 1.01]	0.96 [0.89, 1.04]
Sex (female)	1.16 [0.64, 2.10]	1.27 [0.69, 2.37]	1.25 [0.67, 2.34]	1.19 [0.63, 2.26]	1.16 [0.41, 2.16]
Gender identity (transgender)	2.94* [1.68, 5.17]	2.48* [1.36, 4.55]	2.37* [1.28, 4.38]	2.51* [1.33, 4.73]	0.78 [0.32, 1.94]
Sexual orientation (gay/lesbian-ref.)	–	–	–	–	–
Bisexual	1.05 [0.58, 1.89]	1.14 [0.61, 2.12]	1.11 [0.59, 2.08]	1.12 [0.59, 2.11]	1.05 [0.47, 2.35]
Pansexual/omnisexual	2.12* [1.08, 4.18]	2.14* [1.06, 4.33]	2.16* [1.06, 4.39]	2.05 [0.99, 4.22]	1.27 [0.51, 3.19]
Queer	1.11 [0.50, 2.49]	1.31 [0.57, 3.00]	1.39 [0.60, 3.24]	1.33 [0.56, 3.16]	0.78 [0.27, 2.26]
Other identities	0.18* [0.05, 0.67]	0.18* [0.05, 0.69]	0.17* [0.04, 0.66]	0.18* [0.04, 0.71]	0.12* [0.03, 0.54]
Urbanicity-to-rurality	1.10 [0.92, 1.33]	1.10 [0.92, 1.33]	1.09 [0.91, 1.32]	1.10 [0.91, 1.34]	1.19 [0.93, 1.53]
Discrimination and violence victimization	–	–	–	–	–
Experienced discrimination based on LGBTQ+ status	–	1.45 [0.83, 2.51]	1.36 [0.77, 2.40]	1.39 [0.78, 2.47]	0.94 [0.46, 1.91]
Experienced physical and/or sexual violence based on LGBTQ+ status	–	0.82 [0.43, 1.55]	0.78 [0.41, 1.49]	0.78 [0.38, 1.60]	0.43 [0.17, 1.08]
Experienced sexual violence (No-ref.)	–	–	–	–	–
Prefer not to say	–	0.75 [0.39, 1.45]	0.75 [0.39, 1.45]	0.67 [0.35, 1.33]	0.40* [0.17, 0.97]
Yes	–	2.05* [1.13, 3.72]	1.79 [0.96, 3.34]	1.57 [0.82, 3.00]	1.55 [0.70, 3.46]
Poverty	–	–	–	–	–
Worried about having enough food	–	–	0.97 [0.54, 1.74]	1.02 [0.56, 1.87]	0.68 [0.32, 1.45]
Food ran out	–	–	2.31* [1.15, 4.62]	2.18* [1.06, 4.48]	2.74* [1.09, 6.87]
No steady place to live	–	–	1.03 [0.42, 2.52]	0.99 [0.38, 2.55]	1.52 [0.42, 5.45]
Substance use	–	–	–	–	–
Cigarettes	–	–	–	0.61 [0.32, 1.19]	0.58 [0.25, 1.33]
E-cigarettes/vapes	–	–	–	1.14 [0.84, 1.54]	0.95 [0.66, 1.66]
Alcohol	–	–	–	1.35 [0.81, 2.23]	2.05* [0.31, 10.24]
Marijuana	–	–	–	1.20 [0.81, 1.77]	1.04 [0.13, 6.64]
Cocaine/crack	–	–	–	1.41 [0.31, 6.55]	1.77 [0.25, 13.10]
Opioids	–	–	–	0.65 [0.15, 2.82]	0.91 [0.13, 6.64]
Amphetamines	–	–	–	1.23 [0.31, 4.81]	1.82 [0.25, 13.10]
Psychological disorders	–	–	–	–	–
Depression	–	–	–	–	6.65* [2.87, 15.40]

Independent Variable	Odds Ratio [95% CI]				
Bipolar disorder	-	-	-	-	1.96 [0.66, 5.84]
PTSD ^a	-	-	-	-	3.07* [1.28, 7.34]
Anxiety disorder	-	-	-	-	2.16* [1.08, 4.33]
Gender dysphoria	-	-	-	-	8.09* [2.60, 25.11]
Substance use disorder	-	-	-	-	0.53 [0.15, 1.90]
Eating disorder	-	-	-	-	5.85* [2.61, 13.12]
McKelvey and Zavoina's pseudo R^2	0.149	0.187	0.209	0.232	0.605
Model likelihood ratio χ^2 (df, P value)	39.37 (8, .0001)	50.55 (12, .0001)	57.32 (15, .0001)	62.47 (22, .0001)	180.62 (29, .0001)

Note. Sex was coded 0 = male, 1 = female. Gender identity was coded 0 = cisgender, 1 = transgender. The reference group for sexual orientation was gay/lesbian. The reference group for ever experienced sexual violence was “No.”

^a PTSD = post-traumatic stress disorder.

* $P < .05$

violence victimization had higher odds of suicide attempt compared to participants who had not experienced this victimization. In Model 3, poverty variables were added, yet none were significant. In Model 4, substance use variables were added, and using cocaine/crack was significantly associated with suicide attempt. In Model 5, psychological disorder variables were added; depression, bipolar disorder, gender dysphoria, and eating disorder were significantly associated with attempting suicide. In Model 6, suicidal ideation was added and was strongly associated with suicide attempt. Variables in Model 6 accounted for 64.5% of the variance in suicide attempt (pseudo $R^2 = 0.645$).

Discussion

About one-third of Black LGBTQ+ YA in North Carolina in the sample had considered suicide, and about one-fifth had attempted suicide. These results are similar to findings from national studies. The 2021 Youth Risk Behavior Survey found that 40.6% of Black LGB young people (aged 14–19 years) had seriously considered suicide, and 23.8% had attempted suicide in the past 12 months.⁵ Similarly, The Trevor Project data showed 41% of Black LGBTQ+ YA (aged 18–24 years) had considered suicide, and 14% had attempted suicide in the past 12 months.⁶ These rates are slightly higher than those found in the present study, perhaps due to age and developmental differences. For example, adults have more rights than minors, and as age increases, individuals have more autonomy and agency, which may mitigate risk factors and increase self-selected protective factors. Nonetheless, all these rates are alarmingly high and warrant additional efforts to understand and prevent suicidality.

Initial regression models showed higher odds of suicidal ideation and attempts among transgender individuals compared to cisgender individuals, consistent with extant literature.^{15,17,18} However, these statistically significant differences disappeared after gender dysphoria was entered as a predictor, suggesting that gender dysphoria may be an important explanatory factor for suicidality among transgender YA. Other studies show a link between gender dysphoria and suicidality among transgender people³¹ and a link between use of gender-affirming care and decreased suicide risk,³² underscoring the importance of access to affirming care and services to reduce gender dysphoria (and in turn suicide risk) among transgender YA, including Black transgender YA.

Running out of food was the only poverty variable significantly associated with suicidal ideation. Research on food insecurity among YA in the general population shows a positive association with suicidality.³³ Food insecurity is associated with stress, shame, strain, and sadness.^{34,35} Food insecurity

Table 3. Summary of Binary Logistic Regression Analyses Predicting Suicide Attempt (N = 361)

Independent Variable	Odds Ratio [95% CI]					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Demographics	–	–	–	–	–	–
Age	0.97 [0.91, 1.03]	0.95 [0.89, 1.01]	0.95 [0.89, 1.01]	0.95 [0.88, 1.02]	0.99 [0.91, 1.08]	1.01 [0.91, 1.12]
Sex (female)	2.05 [0.93, 4.50]	2.03 [0.91, 4.56]	2.08 [0.92, 4.72]	2.14 [0.90, 5.10]	2.28 [0.78, 6.67]	2.44 [0.75, 7.94]
Gender identity (transgender)	2.87* [1.53, 5.40]	2.63* [1.32, 5.24]	2.51* [1.25, 5.02]	2.75* [1.33, 5.71]	1.25 [0.42, 3.14]	1.33 [0.43, 4.10]
Sexual orientation (gay/lesbian–ref.)	–	–	–	–	–	–
Bisexual	1.24 [0.59, 2.64]	1.22 [0.56, 2.65]	1.20 [0.55, 2.61]	1.33 [0.60, 2.96]	2.17 [0.81, 5.85]	1.94 [0.63, 6.01]
Pansexual/omnisexual	2.13 [0.97, 4.67]	1.98 [0.89, 4.40]	2.04 [0.91, 4.57]	1.93 [0.84, 4.45]	1.54 [0.54, 4.42]	1.51 [0.46, 4.96]
Queer	1.35 [0.52, 3.52]	1.48 [0.56, 3.95]	1.45 [0.54, 3.93]	1.48 [0.52, 4.17]	1.11 [0.32, 3.80]	1.12 [0.28, 4.52]
Other identities	0.34 [0.07, 1.63]	0.33 [0.07, 1.60]	0.31 [0.06, 1.53]	0.36 [0.07, 1.86]	0.66 [0.12, 3.68]	1.54 [0.20, 12.14]
Urbanicity-to-Rurality	0.85 [0.67, 1.07]	0.84 [0.66, 1.07]	0.83 [0.66, 1.05]	0.84 [0.66, 1.08]	0.82 [0.60, 1.13]	0.69 [0.47, 1.01]
Discrimination and violence victimization	–	–	–	–	–	–
Experienced discrimination based on LGBTQ+ status	–	1.26 [0.65, 2.45]	1.28 [0.65, 2.52]	1.33 [0.65, 2.72]	0.83 [0.35, 2.00]	0.79 [0.29, 2.11]
Experienced physical and/or sexual violence based on LGBTQ+ status	–	0.56 [0.25, 1.24]	0.54 [0.24, 1.20]	0.44 [0.17, 1.09]	0.33 [0.10, 1.00]	0.35 [0.10, 1.28]
Experienced sexual violence (No–ref.)	–	–	–	–	–	–
Prefer not to say	–	1.42 [0.67, 2.99]	1.45 [0.68, 3.06]	1.41 [0.66, 3.02]	1.20 [0.47, 3.08]	1.79 [0.59, 5.43]
Yes	–	2.20* [1.07, 4.55]	1.86 [0.87, 3.99]	1.49 [0.66, 3.37]	1.50 [0.58, 3.89]	1.23 [0.41, 3.73]
Poverty	–	–	–	–	–	–
Worried about having enough food	–	–	1.45 [0.73, 2.83]	1.53 [0.76, 3.10]	1.16 [0.50, 2.96]	1.47 [0.55, 3.89]
Food ran out	–	–	1.31 [0.59, 2.90]	1.05 [0.45, 2.45]	0.74 [0.25, 2.18]	0.54 [0.17, 1.74]
No steady place to live	–	–	1.19 [0.42, 3.39]	0.96 [0.30, 3.08]	0.92 [0.21, 4.05]	1.05 [0.21, 5.28]

Independent Variable	Odds Ratio [95% CI]					
Substance use	-	-	-	-	-	-
Cigarettes	-	-	-	0.92 [0.43, 1.98]	1.03 [0.37, 2.86]	1.26 [0.38, 4.20]
E-cigarettes/ vapes	-	-	-	1.28 [0.91, 1.80]	1.21 [0.78, 1.87]	1.33 [0.81, 2.20]
Alcohol	-	-	-	0.96 [0.51, 1.79]	1.17 [0.54, 2.54]	0.78 [0.32, 1.90]
Marijuana	-	-	-	1.25 [0.78, 2.01]	0.90 [0.51, 1.60]	0.87 [0.46, 1.65]
Cocaine/crack	-	-	-	9.25* [1.43, 60.02]	35.62* [3.12, 46.67]	69.03* [2.77, 179.29]
Opioids	-	-	-	0.35 [0.05, 2.46]	0.28 [0.02, 3.81]	0.17 [0.01, 3.24]
Amphetamines	-	-	-	0.40 [0.06, 2.55]	0.28 [0.02, 3.24]	0.19 [0.01, 2.95]
Psychological disorders	-	-	-	-	-	-
Depression	-	-	-	-	5.52* [1.81, 16.88]	1.93 [0.56, 6.64]
Bipolar disorder	-	-	-	-	4.86* [1.59, 14.89]	4.86* [1.32, 16.51]
PTSD ^a	-	-	-	-	1.47 [0.59, 3.67]	0.99 [0.34, 2.94]
Anxiety disorder	-	-	-	-	1.88 [0.79, 4.48]	1.47 [0.54, 4.01]
Gender dysphoria	-	-	-	-	2.92* [0.93, 9.16]	1.46 [0.43, 4.97]
Substance use disorder	-	-	-	-	0.64 [0.17, 2.45]	0.92 [0.19, 4.39]
Eating disorder	-	-	-	-	6.23* [2.80, 13.86]	3.33* [1.38, 8.04]
Suicidal ideation	-	-	-	-	-	21.05* [7.10, 62.41]
McKelvey and Zavoina's pseudo R^2	0.163	0.191	0.205	0.257	0.549	0.645
Model likelihood ratio χ^2 (df, P value)	33.74 (8, .0001)	39.33 (12, .0001)	41.48 (15, .0003)	53.88 (22, .0002)	131.52 (29, .0001)	172.00 (30, .0001)

Note. Sex was coded 0 = male, 1 = female. Gender identity was coded 0 = cisgender, 1 = transgender. The reference group for sexual orientation was gay/lesbian. The reference group for ever experienced sexual violence was "No."

^a PTSD = post-traumatic stress disorder.

* $P < .05$

typically results from poverty, and many Black LGBTQ+ YA likely struggle with poverty given the multiple systems of oppression (e.g., racism, heterosexism, cisgenderism) facing this population.³⁶⁻³⁸

Among the substance use variables, alcohol was the only variable significantly related to suicidal ideation, and cocaine/crack use was the only variable significantly related to suicide attempts. Alcohol is a depressant with effects that can include feelings of sadness and despair.³⁹ Alcohol can also impair individuals' abilities to apply adaptive coping or problem-solving skills to manage difficult life situations.^{40,41} Alcohol may play a greater role in suicidal ideation and unplanned suicide attempts rather than planned attempts.⁴¹ Cocaine is a psychostimulant with potential negative effects during and after intoxication, including agitation, paranoia, and impulsivity.⁴² Following cocaine intoxication, individuals may experience dysthymia, apathy, reduced pleasure, and panic symptoms.⁴² These negative effects may increase risk for suicide, especially for individuals already struggling with psychological pain or mood problems.

Almost every psychological disorder was significantly associated with suicidal ideation and/or suicide attempt, which is consistent with related research.^{12, 17,21,23} Effectively treating psychological problems may likely reduce suicidality among Black LGBTQ+ YA. A systematic review on mental health service experiences among LGBTQ+ people of color found numerous barriers to accessing mental health care, including health insurance issues, lack of providers in rural areas, lack of affirming providers, lack of integrated services, help-seeking stigma, mistrust of providers, and anticipation of discrimination in service settings.⁴³ Other issues identified during service utilization included prejudicial encounters, lack of cultural competence/humility, and dissatisfaction with services.⁴³ Mental health service agencies can do outreach specifically to Black LGBTQ+ communities and provide affirming services, provided that staff are trained on intersectional issues, implicit biases, and cultural competency/humility regarding this population. To improve service access and utilization, agencies can accept Medicaid, offer sliding scale fees, provide tele-therapy, offer free or low-cost group interventions, and provide peer support resources.

Intervening with Black LGBTQ+ YA contemplating suicide is essential to prevent future suicidal behavior and deaths. Connection to mental health services may be beneficial. Others can provide support and be trained as community helpers who are typically not mental health professionals but are positioned to recognize signs for suicide risk, refer to services, and offer hope.^{44,45} Anyone can be trained as a community helper, including family members, friends, educators, church members, and case workers. Recent evidence suggests that Black churches are particularly well-positioned for this approach,⁴⁶ though some Black LGBTQ+ YA may have more limited contact with Black churches.⁴⁷ Emergency crisis services are broadly available

through the Suicide and Crisis Lifeline (988), as well as other organizations that provide mental health crisis services and do not contact the police without individuals' consent, including The Trevor Project (for LGBTQ+ YA), Trans Lifeline (for transgender people), and Call BlackLine (for Black, Black LGBTQ+, Brown, Native, and Muslim people).

Limitations

This study relied on convenience sampling; therefore, participant responses may not represent the larger population. Given the larger purpose of the parent project (i.e., a brief statewide survey of LGBTQ+ health), variables that could have been risk or protective factors specific for Black LGBTQ+ YA were not available in the dataset. Relatedly, the cross-sectional nature of the survey precludes inferences related to temporality and causality. The measurement of suicidal ideation and attempts was lifetime, rather than in the past 12 months or 30 days.

Conclusion

Future studies should comprehensively and longitudinally examine risk factors, mechanisms, and pathways for suicidality among Black LGBTQ+ YA. The complexity of this issue will require quantitative and qualitative data, advanced methods (e.g., mediation analysis), and measurement of variables representing important intersectional issues (e.g., not feeling accepted in the Black community and White-dominated LGBTQ+ community) for the population. Future research should also investigate protective factors at multiple levels, as strengths and resources that decrease suicide risk exist at the individual (e.g., hopefulness, resilient self-concept), interpersonal (e.g., strong relationships with family of origin and chosen family), community (e.g., involvement in religious/spiritual community), and societal (e.g., equitable policies to redress racism, heterosexism, and cisgenderism) levels. More in-depth, comprehensive, and customized data for this population and this challenging issue are needed to inform prevention. Additional research and prevention strategies can reduce suicide risk among Black LGBTQ+ young adults.

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Disclosures of interests

The authors declare no conflicts of interest.

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