Overview of Suicide Risk among Adolescent Hispanic Girls in Indiana

INTRODUCTION

Suicide is one of the leading causes of death among adolescents in the United States and in Indiana. Suicide is a complex public health issue, and common risk factors include problems with mental health, substance use, physical injury and psychological trauma. In addition, social and cultural differences can place certain racial and ethnic groups at especially high risk of thoughts and behaviors that may lead to suicide. This brief provides an overview of youth suicide, highlighting the risk and protective factors specific to Hispanic* girls, who are at heightened risk for suicide.

Nationally one in 15 high school students has either made a suicide gesture or attempted suicide in the past year.[1] As of 2012, suicide was the third leading cause of death for adolescents between the ages of 10 and 14 years, both in Indiana and the nation.[2,3] Furthermore, suicide is the second leading cause of death for youth between 15- and 24-years-old, outnumbering homicides.[2,3] In Indiana, 86% of suicide attempts or self-inju-

ries treated at hospitals and 81% treated at emergency departments were for individuals between 15 and 19 years old.[2] Also, nearly 15% of college students surveyed at 11 Indiana colleges reported considering harming themselves in the past two weeks, with female students and students younger than 21 more likely to consider harming themselves.[4]

Nationally and in Indiana, girls are more likely to think about and attempt suicide than boys, however boys are more likely to die from suicide. In Indiana, 82% of suicide deaths for youth between the ages of 15 and 24 were males.[5] This may be due to males choosing more lethal methods, such as firearms, while females are more likely to choose poisoning/overdose. Hanging or suffocation is the third most common cause of death by suicide and is used by males and females at similar rates.[5] Nationally, American Indian/Alaska Native adolescents and young adults ages 15 to 34 have a suicide rate that is 2.5 times higher than the national average.[6] While Hispanic youth report thinking about and attempting suicide at higher rates

KEY POINTS

- Suicide is one of the leading causes of death among adolescents in Indiana.

- Compared to other adolescents, Hispanic girls in Indiana are more likely to consider and plan to commit suicide.

- There are many risk factors for suicide, some of which may uniquely or disproportionately affect Hispanic girls, including family conflict, lower rates of behavioral health treatment, and increased exposure to violence and trauma.

- Protective factors specific to Hispanic girls include: strong family and community relationships, religiosity, and moral objection to suicide.

- Suicide prevention programs and interventions have been developed specifically to help Hispanic girls.

- Policy recommendations to reduce thoughts and behaviors related to suicide in Hispanic girls include: gathering more information about their needs; employing effetive suicide prevention strategies; increasing the number of Hispanic health professionals; and ensuring affordable and culturally sensitive behavioral health resources and services.

---

* This paper uses the federal Office of Management and Budget's definition of Hispanic or Latina/Latino individuals as persons "of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race." In this paper the terms White and Black are usd to refer to individuals who are not of Hispanic or Latino ethnicity.

than other youth, they do not commit suicide at higher rates.[7] For many years, Hispanic youth in Indiana reported the highest rate of suicide attempts, but recent surveys have indicated increasing rates among Black youth.[5,8]

GENERAL RISK AND PROTECTIVE FACTORS FOR SUICIDE

Risk factors are conditions that increase the likelihood of a person engaging in unhealthy behaviors or being impacted by negative events.[9] Risk factors for suicide include a personal history of previous suicide attempts; mental illness (especially depression); substance abuse; impulsive or aggressive tendencies; severe loss related to a relationship or work; a serious physical illness; and cultural or religious beliefs that suicide is a noble way to resolve personal problems. These risks can be compounded if the person has easy access to firearms or other lethal methods, or if they know others in the community who have committed suicide. Having difficulty accessing mental health treatment or refusing to seek treatment for fear of stigma can also increase risk.

Table 1. Suicide Warning Signs

Many individuals exhibit warning signs before a suicide attempt. If you notice someone exhibiting the following symptoms, talk to them. Asking someone if they're thinking about suicide will not increase their risk of suicide - in fact it can save a life!
• Joking, talking, or writing about suicide
• Talking about "going away," seeing no reason for living, or feeling alone, trapped, hopeless, or in pain
• Making a plan to attempt suicide
• Withdrawal from family, friends, school, or activities they enjoy
• Seeking a means to kill themselves (trying to access a gun or pills)
• Giving away possessions or making a will
• Mood swings, increases in risky behavior (including substance use)

Source: The Indiana Youth Institute. (2014)

Protective factors are conditions that increase the likelihood of healthy, positive attitudes and behaviors by either reducing the impact of risks on a person or changing the way a person responds to risks. Factors that protect against suicide include: having access to and receiving effective clinical care for mental health, physical health, or substance use disorders; having strong social support (such as being connected to family, friends, and the community); and having strong

problem-solving and conflict resolution skills so one can effectively handle stress and disputes.[9,10] For youth, achievement in school and connections to teachers can also be protective.[11] Finally, some cultural beliefs affirm that the natural instinct for self-preservation and discourage suicide as an optional strategy can protect against suicide.[9] While suicide can affect anyone, certain groups are at greater risk. Several studies have shown Hispanic girls are at increased risk of having certain thoughts or behaviors related to suicide. The remainder of this brief will focus on the risk and protective factors impacting Hispanic girls, and will address intervention options for this population.

HISPANIC GIRLS AND SUICIDE

According to results from the 2013 Youth Risk Behavior Survey (YRBS), U.S. Hispanic high school students were more likely than either Blacks or Whites to exhibit four of the five survey criteria associated with suicide—e.g., having considered suicide, having made a plan for how to die by suicide, having attempted suicide, and having attempted suicide resulting in an injury that required medical attention.[8] Hispanic students were also more likely to feel sad or hopeless during the past two weeks, compared to White students.[8] Furthermore, Hispanic girls were more likely than White girls to report all five behaviors associated with suicide (see Table 2).

Table 2. Percent of U.S. Female High School Students Reporting Suicide-Related Thoughts and Behaviors (YRBS, 2013)

	In the past 2 weeks...	In the past year….			
	Felt sad or hopelessness	Seriously considered suicide	Made a plan for dying by suicide	Attempted to die by suicide	Attempt resulted in an injury requiring medical care
Hispanic Girls	**48.8***	**26.0***	**20.1***	**15.6***	**5.4***
White Girls	35.7	21.1	15.6	8.5	2.8

Source: Centers for Disease Control a.n.d. Prevention. (n.d.).
* Indicates significantly more Hispanic females reported the behavior than White females.

The most recent data for Indiana high school students comes from the 2011 YRBS, which found that Hispanic

females and White females reported similar levels of sadness and hopelessness (Table 3). Hispanic females were significantly more likely to report having seriously considered suicide and to have made a plan to die by suicide. However, the two groups had similar rates of suicide attempts that resulted in injury and required medical care.

Table 3. Percent of Indiana Female High School Students Reporting Suicide-Related Thoughts or Behaviors (YRBS, 2011)

	In the past 2 weeks...	In the past year....			
	Felt sad or hopeless-ness	Seriously considered suicide	Made a plan for dying by suicide	Attempted to die by suicide	Attempt resulted in an injury requiring medical care
Hispanic Girls	36.5	**30.2***	**27.2***	15.6†	5.2
White Girls	32.6	19.5	12.4	9.2	3.5

Source: Centers for Disease Control a.n.d. Prevention. (n.d.).
* Indicates significantly more Hispanic females reported the behavior than White females.
† Too few Hispanic cases to compare to other groups.

These data indicate Hispanic female high school students in Indiana report thinking about and planning to die by suicide at higher rates than White female students even though they are not reporting more sadness. Though they report considering and planning for suicide at higher rates, Hispanic females appear to attempt suicide at rates similar to their White counterparts. Still, the fact Hispanic female high school students are reporting thinking about and planning for suicide indicates they are likely experiencing significant distress. The rest of this brief will discuss the specific risk and protective factors which may be impacting Indiana's Hispanic girls' thoughts and behaviors related to suicide.

Hispanic/Latino Culture

Latinos make up 17.6% of the U.S. population and 6.7% of Indiana's population. In 2014, Indiana was home to approximately 443,500 of the 55.7 million Latinos in the nation. Indiana's Latinos trace their heritage to over two dozen Latin American countries, each with its own history and culture. Latinos also differ based on race (European, African, or indigenous ancestry), the languages they speak, and how many years or generations they have been in the United States.[13] The similarities and differences amongst Latinos can be un-derstood by exploring their cultural identity. Culture consists of life patterns (including language, social customs, art, food, values, and beliefs) passed from generation to generation.

Latino culture differs from mainstream U.S. culture in several ways. U.S. culture tends to define family as parents and children, while Latino culture tends to conceive of the family more broadly, encompassing several generations. In U.S. culture (individualistic) one's first obligation is to oneself; in Latino culture (collectivistic) it is to the family or society. *Familismo* refers to the high priority of family in Latino culture. Latino culture also has traditional gender roles that sometimes differ from U.S. gender expectations.

Latino immigrants, especially first and second generation immigrants, experience acculturation, which is the "process of adaptation that occurs when distinct cultures come into sustained contact."[14] Acculturation can be a difficult process and can affect family and social relationships, as well as physical and mental health.[15] Acculturation is also associated with risk and protective factors related to substance abuse and other health-related behaviors, including suicide.[15]

Hispanic girls' mental health is impacted by a combination of cultural traditions, adolescent development, and family functioning.[16] Challenges of acculturation may impact Hispanic girls in unique ways, placing them at greater risk for suicidal thoughts and behaviors.

Specific Risk Factors for Suicide among Hispanic Girls
Gender role discrepancy: There are strong cultural traditions supporting different gender roles for Latino boys and girls.[17] According to traditional Latino values, girls are expected to embody characteristics, or virtues, associated with Mary, the mother of Jesus. Referred to as *marianismo*, this tradition calls for women to adhere to a higher moral standard, prioritize the needs of others and make sacrifices, and be strong and not ask for help or discuss problems outside the household. Boys are expected to exhibit *machismo*, by displaying strength, courage, respect, dignity, and honor, and by protecting and providing for their family. While many values of machismo are similar to U.S. values for boys, there are bigger differences between marianismo and U.S. cultural values for girls. Youth tend to acculturate faster than their parents, which may result in conflicting values.[18] Differences in beliefs between youth and parents regarding appropriate female gender roles has been found to be a source of stress for Latino adolescents, particularly for recent immigrant girls and their mothers. Both boys and girls encountering gender role discrepancy experience greater family dysfunction and greater likelihood of depression, though family and mental health consequences are greater for girls.[19,20]

Sexual Orientation and Gender Identity: Regardless of ethnicity, lesbian, gay, bisexual, and transgender (LGBT) youth are disproportionately victims of bullying, discrimination , and harassment. Risk of suicidal ideation, attempts, and suicide are elevated. More than twice as many LGBT youth attempt suicide as their heterosexual counterparts.[21] Lesbian Hispanic/Latina adolescents report more serious depression than heterosexual adolescent girls.[22] Lesbian and bisexual Latina women report a higher number of serious suicide attempts than Whites.[23] Some Latina lesbians have reported their sexual orientation conflicts with their families traditional expectations of marianismo, resulting in significant family conflict, stress, and poor mental health.[24]

Role Reversal: Role reversal happens when first or second generation Hispanic children take on adult roles, assisting their parents or other family members who are less able to speak English or navigate the new culture.[25] Along with other stressors, role reversal can upset the parent-child relationship, contribute to intergenerational conflict and family dysfunction, and increase the risk of mental health issues in this family-focused culture.

Mood Disorders: Mood disorders such as depression and anxiety are a key risk factor for suicide, and nearly 30% to 50% of depressed youth attempt suicide.[7,26] Over 30% of U.S. adolescents experience an anxiety disorder at some point in adolescence, and nearly 15% experience depression.[27] Compared to other youth, Hispanic youth have higher rates of mood disorders and report more serious depression symptoms.[27,28] Latina adolescents have been found to be at especially high risk for depression.[19,20,29]

Substance Use: For adolescents, substance use is another significant risk factor for suicide and is often found in combination with mental illness.[7,11] Substance abuse increases the risk of suicide for youth, particularly among older adolescents with mental health problems.[7] Youth who drink alcohol heavily are one to three times more likely to report a suicide attempt compared to their peers.[7,30,31] A study of Hispanic youths in Indiana found certain risk factors for alcohol and substance use seemed to affect girls more than boys,[32] possibly because of the increased gender role discrepancy and acculturation stress faced by girls. The study also found Hispanic girls were at greater risk for alcohol use, binge drinking, and other drug abuse problems compared to boys.

Acculturation Stress: Acculturation refers to navigating and/or adopting the beliefs of a new culture. Stresses related to

acculturation, such as learning a new language or adjusting to different social norms and family dynamics, place Hispanic immigrants at higher risk of depression, anxiety, and consequently, suicide.[33,34] While learning to navigate a new culture, immigrants are more likely to experience perceived discrimination, which is also a risk factor for depression and suicide.[35-37] Acculturation stress can weaken family cohesion and place Hispanic youth at increased risk for substance use, aggressive behavior, and discrimination. Less acculturated Hispanic youth face an increased risk of discrimination in the form of bullying, which can increase depression (a risk factor for suicide).[34,37,38] Acculturation stress and discrimination may be particularly difficult for newer immigrants.[35]

Shame and Stigma: In Hispanic culture, as in many societies, mental illness is considered a weakness that is inconsistent with expectations of resiliency.[17] Mental illness and seeking treatment are seen as interfering with a person's ability to realize the values associated with marianismo (women suffering with dignity) and machismo (men being strong, providing for and protecting the family). Mental illness is also viewed as preventing people from having personalismo, which refers to forming lasting, informal interpersonal relationships. Also, within the tight-knit extended family, Hispanics consider mental health problems to be private and not to be shared with others outside the family.[39] Hispanics may be less likely to seek mental health treatment for fear of bringing shame to the family.

Documentation Status: Hispanic adolescents who are undocumented (or have undocumented family members), are at increased risk of depression and anxiety, compared to their documented peers, due to fear of being separated from loved ones or deportation.[33] Hispanics/Latinos may also be reluctant to seek mental health services for fear of deportation, distrust of service providers, or fear of law enforcement.[39]

Exposure to Violence and Traumatic Events: Exposure to violence and trauma increases the risk of substance abuse and mental health disorders, which are risk factors for suicide.[9] First generation Latino youth may experience separation from family members, lowered social status, or exposure to violence or trauma before, during, or after migration to the United States.[33] Hispanic youth in the United States are also at risk for experiencing violence or trauma.[8] More Hispanic youth (9.8%) than Whites (5.6%) report not going to school because they felt unsafe traveling to or attending school. Hispanic students are less like to carry a gun than other students, but are more likely to have been threatened or injured with a weapon

on school property (8.5%) or injured in a physical fight (4.7%) compared to Whites (5.8% and 2.1%, respectively). Hispanic youth are also more likely (8.7%) than Whites (6.1%) to have been raped.

Health Disparities in Mental Health Services: Along with Blacks, Hispanic populations have less access to adequate treatment for mental health and substance use issues when compared to Whites.[40,41] Latino youth with mental health issues are also less likely to receive mental health treatment than White youth.[42] These disparities may be exacerbated by a shortage of bilingual, bicultural mental health professionals and a lack of culturally competent mental health services.[43,44] Also, Hispanics may be less likely to have insurance coverage, a regular source of care, or adequate financial resources, and may have lower health literacy.[41,45] These barriers contribute to Hispanic adults (compared to Whites) being less likely to use mental health services, less likely to comply with treatment recommendations, and more likely to take guidance from informal sources such as family members.

Specific Protective Factors for Suicide among Hispanic Girls

Protective factors which are particularly significant for Hispanics as a cultural group include strong family ties and support (familismo), and religiosity and moral objections to suicide. Cultural pride can enhance a positive self-image and support resiliency, and ethnic affiliation is a particularly strong protective factor for Latina adolescents.[19,46] Community integration can also serve as a protective factor. Acculturation stress may be reduced with time as immigrants become more established in the United States and gain social support from family members, the broader Hispanic community, and other social institutions.[33-35] Relationships with caring teachers have been found to be particularly protective for Latina adolescents.[47] These supports and access to mental health services can serve to protect against substance use and mental health issues, including suicide.

PREVENTION RESPONSES

National efforts led by the Department of Health and Human Services are underway to reduce the number of suicide deaths and attempts among youth.[48] The Substance Abuse and Mental Health Services Administration Suicide Prevention Resource Center includes a database of evidence-based suicide prevention and intervention programs and resources targeting youth.[49] These include Preventing Suicide, a toolkit designed to help high schools plan and implement appropri-

ate protocols and programs, and the Kognito programs for High School Educators and College Students, which provide suicide prevention training. The site also describes the Emergency Room Intervention for Adolescent Females, a suicide intervention specifically designed for disadvantaged Latinas ages 12 to 18 and their family members who are at an emergency room following a suicide attempt. The intervention seeks to connect the girls with therapy and treatment, and can be delivered in English or Spanish.

In addition to these national resources, Indiana has demonstrated its commitment to preventing youth suicide. In 2009 the state developed a comprehensive Suicide Prevention Plan to organize state resources and address issues of suicide within Indiana.[50] In 2011, the Indiana State Legislature passed a bill requiring all teachers licensed after June 30, 2013 to complete a suicide prevention training course prior to licensure.[50] The training will ensure teachers are equipped to identify the signs of youth suicide and intervene when necessary.

THOUGHTS FOR POLICYMAKERS

Latina girls in Indiana and across the nation reporting thoughts of suicide and suicidal behaviors at higher rates than girls of other races is a public health concern. To address this behavioral health disparity, we recommend the following:

- *Data collection*
  Questions specific to the Hispanic experience (including the number of years of residence in the United States, language spoken at home, country of origin, documentation status, and circumstances of migration) in public surveys would provide helpful information about this population.
- *Funding of evidence-based practices*
  The additional data collected could be utilized to guide funding allocations for evidence-based suicide prevention programs in identified key communities.
- *Recruit and retain diverse and culturally sensitive workforce*
  Working with the Indiana Latino Institute, other Hispanic organizations, and Indiana institutions of higher education to increase the number of Hispanic health professionals through recruitment, retention, and mentoring would assist with the development of a diverse and culturally sensitive workforce.
- *Access to mental health care*
  Ensuring affordable, culturally sensitive mental health services are made available to Hispanic communities in Indiana would be a critical step in reducing disparities in access to care and improving suicide outcomes of Latina adolescents.

REFERENCES

1. Centers for Disease Control a.n.d. Prevention. (2010). Youth risk behavior surveillance - United States, 2009. Morbidity and Mortality Weekly Report, 59(SS-5). Retrieved from http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf
2. Skiba, J. & Hortemiller, J. (2013). Suicide in Indiana report: 2006-2011. Retrieved from http://www.state.in.us/isdh/files/Suicide_Report_2013_final(1).pdf
3. Centers for Disease Control a.n.d. Prevention. (2013). National vital statistics reports; vol 64, no 2. Deaths: Final Data for 2013, table 18. Hyattsville, MD. Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf
4. King, R. A. & Jun, M. K. (2013). Results of the Indiana College Substance Use Survey - 2013. Bloomington, IN. Retrieved from http://www.drugs.indiana.edu/publications/icsus/ICSUS_Survey_2013.pdf
5. The Indiana Youth Institute. (2014). Issue Brief: Youth suicide in Indiana. Retrieved from http://www.iyi.org/resources/doc/IYI-Issue-Brief-Suicide-April-2014.pdf
6. National Center for Injury Prevention a.n.d. Control. (2013). Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. Retrieved from www.cdc.gov/injury/wisqars/index.html
7. Cash, S. J. & Bridge, J. A. (2009). Epidemiology of youth suicide and suicidal behavior. Current Opinion in Pediatrics, 21(5), 613–619. doi:10.1097/MOP.0b013e32833063e1
8. Centers for Disease Control a.n.d. Prevention. (n.d.). 1991-2013 High School Youth Risk Behavior Survey Data. Retrieved 2015, from http://nccd.cdc.gov/youthonline/
9. DeLeo, D., Bertolote, J. & Lester, D. (2002). World report on violence and health. In Krug E. G., and Dahlberg L. L., and Mercy J. A., and Zwi A., and Lozano R. (Ed.), (pp. 185–212). Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/violence_injury_prevention/violence/global_campaign/en/chap7.pdf
10. World Health Organization. (2014). Preventing suicide - a global imperative. Luxembourg, Belgium. Retrieved from http://apps.who.int/iris/bitstream/10665/131056/1/9789241564779_eng.pdf?ua=1&ua=1
11. Wong, S. S., Zhou, B., Goebert, D. & Hishinuma, E. S. (2013). The risk of adolescent suicide across patterns of drug use: a nationally representative study of high school students in the United States from 1999 to 2009. Social Psychiatry and Psychiatric Epidemiology, 48(10), 1611–1620. doi:10.1007/s00127-013-0721-z
12. Centers for Disease Control a.n.d. Prevention. (n.d.). Adolescent and school health: YRBSS Results - 2013. Retrieved 2015, from http://www.cdc.gov/healthyyouth/data/yrbs/results.htm
13. Seitz de Martinez, B. (2014). Celebrating Hispanic Heritage Month, Part 1: Getting to Know You. Retrieved from http://www.drugs.indiana.edu/drug-info/featured-articles/254-celebrating-hispanic-heritage-month-part-1-getting-to-know-you
14. Organista, P. B., Marin, G. & Chun, K. M. (2010). The psychology of ethnic groups in the United States (p. 105). Thousand Oaks, CA: Sage Publications, Inc.
15. Seitz de Martinez, B. (2014). Celebrating Hispanic Heritage Month, Part 2: Acculturation and associated risk and protective factors. Retrieved from http://www.drugs.indiana.edu/drug-info/featured-articles/257-celebrating-hispanic-heritage-month-part-2-acculturation-and-associated-risk-and-protective-factors
16. Zayas, L. H., Lester, R. J., Cabassa, L. J. & Fortuna, L. R. (2005). Why do so many Latina teens attempt suicide? A conceptual model for research. American Journal of Orthopsychiatry, 75(2), 275–287. doi:10.1037/0002-9432.75.2.275
17. Abdullah, T. & Brown, T. L. (2011). Mental illness stigma and ethnocultural beliefs, values, and norms: an integrative review. Clinical Psychology Review, 31(6), 934–948. doi:10.1016/j.cpr.2011.05.003
18. Romero, A. J., Edwards, L. M., Bauman, S. & Ritter, M. K. (2014). Preventing adolescent depression and suicide among Latinas: Resilience research and theory (pp. 11–19). New York, NY: Springer.
19. Balis, T. & Postolache, T. T. (2008). Ethnic differences in adolescent suicide in the United States. International Journal of Child Health and Human Development, 1(3), 281–296.
20. Céspedes, Y. M. & Huey Jr, S. J. (2008). Depression in Latino adolescents: a cultural discrepancy perspective. Cultural Diversity & Ethnic Minority Psychology, 14(2), 168–172. doi:10.1037/1099-9809.14.2.168
21. Russell, S. T. & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: evidence from a national study. American Journal of Public Health, 91(8), 1276–1281.
22. Consolacion, T. B., Russell, S. T. & Sue, S. (2004). Sex, race/ethnicity, and romantic attractions: multiple minority status adolescents and mental health. Cultural Diversity & Ethnic Minority Psychology, 10(3), 200–214. doi:10.1037/1099-9809.10.3.200
23. Meyer, I. H., Dietrich, J. & Schwartz, S. (2008). Lifetime prevalence of mental disorders and suicide attempts in diverse lesbian, gay, and bisexual populations. American Journal of Public Health, 98(6), 1004–1006.
24. Reyes, M. (1998). Latina lesbians and alcohol and other drugs: Social work implications. Alcoholism Treatment Quarterly, 16(1-2), 179–192.
25. Frabutt, J. M. (2006). Immigrant youth mental health, acculturation, and adaptation. Journal of Catholic Education, 9(4), 499–504.

26. Dopheide, J. A. (2006). Recognizing and treating depression in children and adolescents. American Journal of Health-System Pharmacy, 63(3), 233–243.

27. Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., … Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A). Journal of the American Academy of Child & Adolescent Psychiatry, 49(10), 980–989.

28. Twenge, J. M. & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: A meta-analysis. Journal of Abnormal Psychology, 111(4), 578–588. doi:10.1037//0021-843X.111.4.578

29. Guiao, I. & Adams Thompson, E. (2004). Ethnicity and problem behaviors among adolescent females in the United States. Health Care for Women International, 25(4), 296–310. doi:10.1080/07399330490278330

30. Schilling, E. A., Aseltine, R. H., Glanovsky, J. L., James, A. & Jacobs, D. (2009). Adolescent alcohol use, suicidal ideation, and suicide attempts. Journal of Adolescent Health, 44(4), 335–341. doi:10.1016/j.jadohealth.2008.08.006

31. Aseltine, R. H., Schilling, E. A., James, A., Glanovsky, J. L. & Jacobs, D. (2009). Age variability in the association between heavy episodic drinking and adolescent suicide attempts: findings from a large-scale, school-based screening program. Journal of the American Academy of Child & Adolescent Psychiatry, 48(3), 262–270. doi:10.1097/CHI.0b013e318195bce8

32. Vaughan, E. L., Gassman, R. A., Jun, M. C. & Seitz de Martinez, B. J. (2015). Gender differences in risk and protective factors for alcohol use and substance use problems among Hispanic adolescents. Journal of Child & Adolescent Substance Abuse, (24), 243–254. doi:10.1080/1067828X.2013.826609

33. Potochnick, S. R. & Perreira, K. M. (2010). Depression and anxiety among first-generation immigrant Latino youth: key correlates and implications for future research. The Journal of Nervous and Mental Disease, 198(7), 470–477. doi:10.1097/NMD.0b013e3181e4ce24

34. Forster, M., Dyal, S. R., Baezconde-Garbanati, L., Chou, C.-P., Soto, D. W. & Unger, J. B. (2013). Bullying victimization as a mediator of associations between cultural/familial variables, substance use, and depressive symptoms among Hispanic youth. Ethnicity & Health, 18(4), 415–432. doi:10.1080/13557858.2012.754407

35. Chou, K.-L. (2012). Perceived discrimination and depression among new migrants to Hong Kong: The moderating role of social support and neighborhood collective efficacy. Journal of Affective Disorders, 138(1), 63–70. doi:10.1016/j.jad.2011.12.029

36. Seaton, E. K., Caldwell, C. H., Sellers, R. M. & Jackson, J. S. (2008). The prevalence of perceived discrimination among African American and Caribbean Black youth. Developmental Psychology, 44(5), 1288–1297. doi:10.1037/a0012747

37. Tummala-Narra, P. & Claudius, M. (2013). Perceived discrimination and depressive symptoms among immigrant-origin adolescents. Cultural Diversity & Ethnic Minority Psychology, 19(3), 257–269. doi:10.1037/a0032960

38. Smokowski, P. R., David-Ferdon, C. & Stroupe, N. (2009). Acculturation and violence in minority adolescents: a review of the empirical literature. The Journal of Primary Prevention, 30(3-4), 215–263. doi:10.1007/s10935-009-0173-0

39. Goldston, D. B., Molock, S. D., Whitbeck, L. B., Murakami, J. L., Zayas, L. H. & Hall, G. C. N. (2008). Cultural considerations in adolescent suicide prevention and psychosocial treatment. American Psychologist, 63(1), 14–31.

40. Wells, K., Klap, R., Koike, A. & Sherbourne, C. (2001). Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. The American Journal of Psychiatry, 158(12), 2027–2032.

41. Alegria, M., Canino, G., Rios, R., Vera, M., Calderón, J., Rusch, D. & Ortega, A. N. (2002). Mental health care for Latinos: Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino Whites. Psychiatric Services, 53(12), 1547–1555. doi:10.1176/appi.ps.53.12.1547

42. Hough, R. L., Hazen, A. L., Soriano, F. I., Wood, P., McCabe, K. & Yeh, M. (2002). Mental health care for Latinos: Mental health services for Latino adolescents with psychiatric disorders. Psychiatric Services, 53(12), 1556–1562. doi:10.1176/appi.ps.53.12.1556

43. Atdjian, S. & Vega, W. A. (2005). Disparities in mental health treatment in US racial and ethnic minority groups: Implications for psychiatrists. Psychiatric Services, 56(12), 1600–1602. doi:10.1176/appi.ps.56.12.1600

44. Aguilar-Gaxiola, S. A., Zelezny, L., Garcia, B., Edmondson, C., Alejo-Garcia, C. & Vega, W. A. (2002). Mental health care for Latinos: translating research into action: reducing disparities in mental health care for Mexican Americans. Psychiatric Services, 53(12), 1563–1568. doi:10.1176/appi.ps.53.12.1563

45. Ford-Paz, R. E., Reinhard, C., Kuebbeler, A., Contreras, R. & Sánchez, B. (2013). Culturally tailored depression/suicide prevention in Latino youth: community perspectives. The Journal of Behavioral Health Services & Research, 1–15. doi:10.1007/s11414-013-9368-5

46. Umana-Taylor, A. J. & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. Journal of Adolescence, 30(4), 549–567.

47. De Luca, S. M., Wyman, P. & Warren, K. (2012). Latina adolescent suicide ideations and attempts: Associations with connectedness to parents, peers, and teachers. Suicide and Life-Threatening Behavior, 42(5), 672–683.
48. U. S. Department of Health a.n.d. Human Services. (2012). 2012 national strategy for suicide prevention: Goals and objectives for action. Washington, DC. Retrieved from http://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/
49. Suicide Prevention Resource Center. (2016). Best Practices Registry - Section I: Evidence-Based Programs. Retrieved from http://www.sprc.org/bpr/section-i-evidence-based-programs
50. Indiana State Department of Health. (2009). Indiana state suicide prevention plan: journey from hopelessness to health. Retrieved from http://www.in.gov/issp/files/plan.pdf

The mission of the Center for Health Policy (CHP) is to conduct research on critical health-related issues and translate data into evidence-based policy recommendations to improve community health. The CHP faculty and staff collaborate with public and private partners to conduct quality data driven program evaluation and applied research analysis on relevant public health issues. The Center serves as a bridge between academic health researchers and federal, state and local government as well as healthcare and community organizations.

Authors: Barbara Seitz de Martinez, PhD and Erin L. Adams, MS

Edit and Layout: Lyndy Kouns

Please direct all correspondence and questions to: Center for Health Policy, IU Richard M Fairbanks School of Public Health at IUPUI, 1050 Wishard Blvd, RS5163, Indianapolis, IN 46202; Email: iuchp@iupui.edu; Phone: (317)278-5907.