

Additive Impact of Childhood Emotional, Physical, and Sexual Abuse on Suicide Attempts among Low-Income African American Women

PAGE L. ANDERSON, PHD, JASMIN A. TIRO, MPH, ANN WEBB PRICE, PHD,
MARNETTE A. BENDER, MS, AND NADINE J. KASLOW, PHD

This study examines the association between exposures to multiple forms of childhood abuse (emotional, physical, sexual) and adult suicidal behavior in a sample of low-income, African American women. We hypothesized a linear relation between childhood abuse and risk for making a suicide attempt, such that the more forms of childhood abuse to which a woman was exposed, the greater her risk would be to make a suicide attempt. Logistic regression analyses revealed that, compared to women who did not report any experiences of childhood abuse, women who experienced one, two, or three forms of abuse were 1.83, 2.29, or 7.75 times more likely to attempt suicide, respectively (all statistically significant). Furthermore, compared to women who reported one or two types of abuse, women who reported all three types of abuse were statistically more likely to attempt suicide. These findings have implications for clinicians working with African American women who report either childhood abuse or exhibit suicidal behavior.

Suicide attempts are a major predictor of suicide completions (Kachur, Potter, James, & Powell, 1995); thus, ascertaining predictors of suicide attempts are useful for understanding and preventing suicide completions. One risk factor for suicide attempts among women is childhood abuse (Moeller, Bachmann, & Moeller, 1993). The association between different types of childhood abuse, particularly

physical and/or sexual abuse, and suicidal behavior is relatively well documented, and the few studies that have examined childhood emotional abuse indicate that it is correlated with suicidal behavior as well (McCauley et al., 1997; Romans, Martin, Anderson, Herbison, & Mullen, 1995; Thompson, Kaslow, Bradshaw, & Kingree, 2000; Twomey, Kaslow, & Croft, 2000).

Abused children often experience more than one form of abuse (Moeller et al., 1993), but little research has examined the effect of exposure to multiple types of childhood abuse on suicidal behavior. It is unclear whether or not experiencing two or three forms of childhood abuse increases the risk for suicidal behavior beyond the risk associated with experiencing one form of abuse. Studies have shown that experiencing multiple types of childhood abuse increases the risk for other negative outcomes, including physical or sexual victimization in college (Schaaf & McCanne, 1998) and poorer phys-

PAGE ANDERSON is with Georgia State University, JASMIN TIRO is with the Houston School of Public Health at the University of Texas, ANN WEBB PRICE is a psychologist with Macro International, a private research organization, MARNETTE BENDER is with Georgia State University, and NADINE KASLOW is with the Emory University School of Medicine.

Address correspondence to Nadine J. Kaslow, Ph.D., Emory University School of Medicine Department of Psychiatry and Behavioral Sciences, Grady Health System, 80 Butler Street SE, Atlanta, GA 30335. E-mail: nkaslow@emory.edu

ical and mental health in adulthood (Moeller et al., 1993).

The present study examines the impact of exposure to multiple types of childhood abuse on suicide attempts among low-income African American women. Historically, suicide rates among African Americans have been reported to be lower than for European Americans (National Center for Health Statistics, 1996); however, some scholars report that the highest rates of misclassification of cause of death are for women and African Americans and that a significant number of deaths were not classified as suicides, despite evidence to the contrary (Phillips & Ruth, 1993; Warshauer & Monk, 1978). Further, the empirical literature is relatively sparse with regard to the long-term effects of childhood abuse among African Americans, including suicidal behavior (Mtezuka, 1996).

In an effort to increase our understanding of the link between childhood abuse and suicide attempts among diverse populations, we tested whether or not the presence of any type of abuse (emotional, physical, sexual), two types of abuse, or three types of abuse was associated with an increased risk for making a suicide attempt. We hypothesized that low-income, African American women who had experienced one or more types of childhood abuse would be at higher risk for making a suicide attempt than those who had not experienced childhood abuse. We also hypothesized a linear association between childhood abuse and risk for making a suicide attempt. We expected that African American women who experienced two forms of abuse would be at greater risk than women who experienced only one form of abuse and that women who experienced three forms of abuse would be at the greatest risk for making a suicide attempt.

METHOD

Participants

The sample inclusion criteria included self-identified African American women, ages 18–64, who presented for medical care at

Grady Health System, a large, public urban hospital affiliated with Emory University which serves a primarily indigent and minority population. The study participants comprised two groups: (1) women who presented to the hospital following a nonfatal suicide attempt ($n = 175$), and (2) women who presented to the hospital for non-emergency medical problems with no history of suicidal behavior ($n = 185$), for a total sample of 360 participants. Of all women approached to participate in the study, 32 declined (11 suicide attempters and 21 non-attempters).

Women were excluded from participation in the study if they had a life-threatening medical condition, significant cognitive impairment as measured by the Mini-Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975), or were acutely psychotic or delirious. Of the potential participants, four women who had attempted suicide were excluded from participation. Eleven women in the control condition were excluded due to a suicide attempt history.

Demographics

The average age of participants was 32 ($SD = 10.38$). Sixty-six percent of the participants had completed high school, 19% were married, and 40% were employed. Table 1 shows the demographic characteristics for the sample. There were significant differences in educational attainment and employment status across exposures to childhood abuse, such that participants who had not completed high school were more likely to report being abused than participants who had completed high school, $\chi^2(1, N = 360) = 9.26, p < 0.05$, and unemployed participants were more likely report being exposed to abuse than employed participants, $\chi^2(1, N = 360) = 10.15, p < 0.05$. These demographic variables were used as covariates in subsequent analyses.

Recruitment

The principal investigator (Nadine Kaslow) or a member of her research team was on-call 24 hours per day, 7 days per

TABLE 1
Demographic Characteristics of Case Controls and Suicide Attempters

Demographic	Non-Attempters (n = 175)	Attempters (n = 185)
Age		
18–29	50%	60%
30–65	50%	40%
Education		
No HS Diploma	59%	73%
HS diploma	41%	27%
Marital Status		
Not Married	91%	89%
Married	9%	11%
Employment Status*		
Unemployed	73%	49%
Employed	27%	51%

*Missing data for one participant

week. The research team was immediately notified of all women who came to the hospital following a suicide attempt. A suicide attempt was operationally defined as a self-injurious behavior requiring medical attention that was enacted with the intent to die. After the PI evaluated the eligibility of the suicide attempt and the woman was medically stable, a research team member recruited the woman for participation within 48 hours.

Women in the control condition were recruited from three medical walk-in clinics: the urgent care center, the family planning clinic, and the gynecology emergency clinic. Research team members stationed themselves at these clinics at various times of day and on various days of the week. Research team members consisted of postgraduate, graduate, and undergraduate psychology students, who were trained in interviewing techniques and supervised weekly by a licensed psychologist. The interviewers approached women who were eligible for the study and explained the purpose of the study. Women were told that their participation in the study was voluntary, that they could terminate the interview at any time, and that their decision to participate would not affect the treatment they received at the hospital. Written in-

formed consent was obtained from each participant.

Interviews with both attempter and control participants were conducted in a semi-private setting. Due to the low literacy levels of many of the patients served at the hospital, the format of the interview was face-to-face, with the interviewer reading each self-report measure aloud to the participant (Williams et al., 1995). Interviews generally lasted 2 to 3 hours, and participants were compensated \$25.00 for their time. Participants were given a list of referral resources upon completion of the interview. The current study is part of a larger project, and thus only the subset of measures that are pertinent to the questions posed in this paper are included. For more detailed information about the project, the reader is referred to Kaslow and colleagues (1998).

Measures

Demographic Variables. Demographic information was obtained from participants' self-report, including age, education level, marital status, and employment status.

Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994). The CTQ is a 34-

item Likert-scale used to assess childhood maltreatment. The CTQ has been shown to have good internal consistency and test-retest reliability, as well as strong convergent and discriminant validity for interviews of childhood trauma in psychiatric populations (Bernstein et al., 1994; Bernstein, Ahluvalia, Pogge, & Handelsman, 1997). Additionally, the CTQ has been validated using therapists' ratings as an external criterion (Bernstein et al., 1994; Bernstein et al., 1997; Fink, Bernstein, Handelsman, Foote, & Lovejoy, 1995). As instructed by Bernstein, the 34-item CTQ was converted to a 28-item format so that the most current, valid, and clinically meaningful measure was utilized. For the present study three subscales were used: physical abuse ($\alpha = .88$; "People in my family hit me so hard that it left me with bruises or marks") sexual abuse ($\alpha = .94$; "Someone tried to make me do sexual things or watch sexual things"), and emotional abuse ($\alpha = .85$; "People in my family called me things like 'stupid,' 'lazy,' or 'ugly'"). Participants rated each item on a scale of 1 (*never true*) to 5 (*very often true*). Each subscale included five items, with possible scores ranging from 5–25 for each subscale. Clinical cut-off scores were used to dichotomize the presence or absence of each type of abuse (0 = *no*; 1 = *yes*). In order to minimize the chance of including false positive cases of abuse, only women reporting "moderate" abuse or greater were assigned a score of 1. In accordance with the manual for the CTQ, the cut-off scores used in this study to identify moderate levels of abuse were 13 (emotional abuse), 10 (physical abuse), and 8 (sexual abuse) (Bernstein & Fink, 1998).

RESULTS

Suicide Attempts

By far, the most common method for suicide attempt was overdose, including aspirin, psychotropic medication, and illegal substances. In fact, 80% of the suicide at-

tempters overdosed on medication, 3% cut themselves severely enough to warrant medical attention, and 3% ingested poisonous substances. Other methods for suicide attempters included jumping from a high place ($n = 2$), hanging oneself ($n = 2$), asphyxiation ($n = 2$), and shooting oneself ($n = 1$).

Prevalence of Childhood Abuse

Of the total sample of 360 participants, an alarming number of women reported childhood abuse using the clinical cut-off scores described above. Forty-six percent of participants reported no childhood abuse, 27% reported one type of childhood abuse, 13% reported two types of childhood abuse, and 14% reported all three types of abuse.

Relation between Number of Abuse Exposures and Suicide Attempt Status

Suicide attempters reported exposure to more types of abuse than non-attempters. Specifically, the percentage of suicide attempters and non-attempters reporting no childhood abuse was 34% versus 66%; one type of abuse, 52% versus 48%; two types of abuse, 57% versus 43%; and three types of abuse, 82% versus 18%. Furthermore, each type of abuse, as measured by the CTQ, was significantly related to making a suicide attempt: emotional abuse $r(360) = .34$, $p < .0001$; physical abuse $r(360) = .25$, $p < .0001$; sexual abuse $r(360) = .22$, $p < .0001$.

Logistic regression was used to test the hypothesis that there is a linear association between the number of types of abuse experienced by women and subsequent suicide attempts. After entering education and employment status as covariates, the number of exposures to different types of childhood abuse was entered. As shown in Table 2, the confidence intervals for the adjusted odds ratios for one, two, and three types of abuse do not include 1, indicating that women who experienced childhood abuse were more likely to make a suicide attempt than women who did not experience childhood abuse. Ex-

TABLE 2

Predicting Suicide Attempt Status as a Function of Breadth of Exposure to Childhood Abuse

Number of Abuse Exposures	Suicide Attempt Rate	Adjusted Odds Ratios	95% Confidence Interval
None	34%	1.00	Referent
1 Type	52%	1.83	(1.08–3.10)*
2 Types	57%	2.29	(1.14–4.59)*
3 Types	82%	7.75	(3.49–17.34)*

Note. Confidence intervals that do not include 1 are statistically significant at the $p < .05$ level.

*Confidence intervals statistically significant at the $p < .01$ level.

amination of the contrasts show that women experiencing two types of abuse were no more likely to attempt suicide than women reporting one type of abuse, $\chi^2 (1, N = 360) = .35, p, ns$. However, women experiencing three types of abuse were more likely to attempt suicide than women reporting one or two types of abuse, $\chi^2 (1, N = 360) = 12.54, p < .001$; $\chi^2 (1, N = 360) = 7.22, p < .01$.

DISCUSSION

This examination of the association between the experience of multiple forms of childhood abuse and suicidal behavior among low-income, African American women revealed that 54% of women in this study experienced some form of childhood abuse and that 49% of those who were abused during childhood experienced more than one type of abuse. Women who reported any type of abuse (emotional, physical, sexual) were more likely to attempt suicide than women who reported no abuse. Furthermore, results showed that women reporting three types of abuse were more likely to attempt suicide than women reporting one type of abuse, partially supporting the hypothesis of a linear association between exposure to different types of childhood abuse and suicidal behavior.

Why might women exposed to multiple forms of childhood abuse be at greater risk for suicidal behavior? One potential ex-

planation is that adults who were exposed to multiple forms of childhood abuse may have developed coping skills that maximize the emotional avoidance of negative internal states (Polusny & Follette, 1995). In fact, research in the area of child sexual abuse suggests that emotional suppression and denial are the most common strategies used by adult sexual abuse survivors to deal with their abuse histories (Leitenberg, Greenwald, & Cado, 1992). Suicidal behavior may be conceptualized as one form of emotionally avoidant coping, along with other types of emotionally avoidant behavior, such as dissociation and substance abuse. Another possible explanation is that children who are exposed to multiple forms of abuse also are exposed to abuse for a longer period of time and thus may be more likely to engage in suicidal behavior due to disruptions in trust and increased levels of self-hate (Chu, 1999; Herman, 1992).

Women who did not complete high school or who were unemployed were more likely to report being abused as children, consistent with other research. For example, poor children are more likely to be abused on more than one occasion, report more than one form of childhood abuse, and fathers of abused children are more likely to be unemployed (Ley, Markovic, Chaudhry, Ahart, & Torres, 1995; Moeller et al., 1993). Low levels of education and unemployment may contribute to the development of hopelessness (negative expectations regarding the fu-

ture), a well-known risk factor for suicidal behavior (Beck, Steer, Kovacs, & Garrison, 1985).

There are several strengths of the present study. It extended prior research by addressing childhood abuse and suicidal behavior in a sample of low-income, African American women, an understudied population (Mtezuka, 1996). In addition, this study examined suicide attempts, which is a much stronger predictor of suicide completions than suicidal ideation (Kachur et al., 1995). Finally, this study adds to the small, but growing body of literature linking emotional abuse to suicidal behavior (Gould et al., 1994; Twomey et al., 2000).

The following study limitations should be noted. By using used self-report and retrospective data, the response validity is questionable. Furthermore, there is limited information about the psychometric properties of the Childhood Trauma Questionnaire in a low-income African American population. Although initial reliability estimates in the current study are promising, further research is needed to establish the CTQ as a culturally sensitive measure of childhood abuse. The cross-sectional and correlational nature of the data prevents drawing conclusions about causation. In this study, information was not collected on the perpetrator's relationship to the abused participant or the duration of the abuse, important variables which would provide more interpretive context. Finally, because study participants were from a hospital-based sample, the ability to generalize research findings to community samples is limited.

The findings gleaned have implications for mental health professionals. Clinicians working with African American women who are victims of childhood abuse should carefully assess suicidal ideation and behavior. Clinicians working with African American women who have exhibited suicidal behavior should assess all forms of childhood

abuse to determine the meaning, importance, and impact of these experiences on women. Childhood physical and sexual abuse may be easier to detect and therefore more likely to be addressed in a therapeutic context, but all forms of abuse, including emotional, should be assessed.

Future research is needed to better understand the relation between the exposure to multiple forms of childhood abuse and suicidal behavior. Moscicki (1999) distinguishes between distal and proximal risk factors for suicidal behavior. Distal factors are conceptualized as the foundation for attempted suicides, but may not occur closely in time to the suicidal behavior. Proximal factors are conceptualized as the "triggers," and are likely to immediately precede the suicidal behavior. Theoretically, breadth of exposure to different forms of childhood abuse appears to be an important distal predictor for suicidal behavior. Future research should examine the combinations of proximal and distal risk factors. Another area for future research is to examine the potential mediators and moderators of the breadth of exposure to different forms of childhood abuse and suicidal behavior. For example, recent research shows that object relations act as a mediator of childhood abuse on suicidal behavior and that childhood abuse in combination with PTSD is a particularly lethal combination with regard to suicidal behavior (Thompson et al., 2000; Twomey et al., 2000). Research should also address contextual variables related to childhood maltreatment. As suggested by reviews of the child sexual abuse literature, there are several well-known contextual factors of abuse that impact psychological outcomes, such as the victim-perpetrator relationship, duration of the abuse, and severity of the abuse (Green, 1993; Polusny & Follette, 1995). Such variables may act as moderators of the impact of breadth of exposure to different types of abuse and suicidal behavior.

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Manuscript Received: June 9, 1999

Revision Accepted: June 10, 2001.