Case studies of African American youth with conduct disorder were examined in the context of a descriptive evaluation of co-occurring substance-related problems and mental disorders. The purpose of this study was to extend the findings of the Epidemiologic Catchment Area (ECA) study of the National Institute of Mental Health into the area of comorbid assaultive violence and to evaluate recommendations made by J. D. Yoder and A. S. Kahn (1993) for noncomparative and descriptive research designs. Case records of 257 male youth offenders, aged 12-17 years, were reviewed. Variables were documented alcohol- or drug-related problems, referrals or counseling for emotional problems, and incidents of interpersonal violence. Half of these participants had at least one prior offense, and 14% were adjudicated for drug-related offenses not related to alcohol. Thirty-three percent had a history of violent crime. Subjects with an alcohol problem were 18 times more likely to have a co-occurring drug problem, 10 times more likely to have a co-occurring drug-related or mental health problem, and 5 times more likely to have an emotional problem than subjects without a history of alcohol-related difficulties. However, there was no indication of comorbidity of any of these disorders with assaultive violence. Substance-related and mental disorders may share some common pathways, but the mechanisms underlying interpersonal violence appear to be different. (Contains 32 references.) (SLD)
Lack of Co-occurring Interpersonal Violence Emotionally-Related Difficulties, or Alcohol and Other-Drug Problems among African American Youth with Conduct Disorder

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This investigation reviewed the archives of more than 400 adjudicated juvenile cases. Case records of all African-American youth in the pool (i.e., 317 males and 72 females) were selected from this pool on the basis of diagnosed conduct disorder following court ordered referrals for psychological evaluation. Variables included in the study were documented alcohol-or-other-drug-use-related problems or referrals, referrals or counseling for emotional problems or mental disorders, and incidents of interpersonal violence. Incidence rates per 100 and risk ratios (unadjusted odds ratios) were calculated and compared separately for youth with and without each classification and within each class of comorbid disorders. Odd ratios were adjusted to reflect disparities in the gender and age distribution. Increased rates of incidence and risk of co-occurring substance abuse and emotional problems were noted; however, no significant relationship was found between comorbidity of the same disorders with interpersonal violence. Results were also consistent with the findings of previous investigations of psychiatric comorbidity such as the Epidemiologic Catchment Area (ECA) study of the National Institute of Mental Health which reported a wide range of co-occurring substance abuse and mental disorders, and they parallel conclusions of studies that cite frequent arrests but few violent crimes among population groups that experience emotional difficulties. With regards to study youth, therapeutic optimism not pessimism is warranted.

Considerable attention has been paid to the concepts of risk and vulnerability in discussions of societal problems, and both are essential to our understanding of the etiology of mental disorders. For example, childhood disadvantages such as adverse familial and parental circumstances serve as markers for development of emotional problems, and factors like poverty or low socioeconomic status are typically mentioned as risk factors for drug and alcohol use, while conduct disorder and

Epidemiology studies are the hallmark of risk and vulnerability research and are particularly useful in identifying groups with special intervention needs. One such investigation, the National Institute of Mental Health Epidemiological Catchment Area (NIMH ECA) Study, noted substantial comorbidity among substance-related and mental disorders, and reported that rates were noticeably higher among groups like incarcerated populations (Regier, et al., 1990). Another major thrust provided National Center for Health Statistics data which indicated that deaths caused by interpersonal violence among African American youth were seven times higher than those found among their White counterparts (Fingerhut & Makuc, 1992). Epidemiologic findings were also used to generate Healthy People 2000 (U.S. Department of Health and Human Services, 1990). Racial differences in negative health outcomes were established and emphasis was placed on the needs of special populations like African Americans. The assumption was that because of their disadvantaged status blacks experienced higher levels of risk making them more vulnerable to health problems and mental disorders.

Unfortunately, the focus on risk has also helped perpetuate a dim view of some American families and the behaviors of their children (Collier, 1992; Harper, 1991; Rhodes & Singleton & Miller, 1995; Singleton, 1989). The American public relies heavily on the judgments of science; the public, however, lacks the sophistication to truly understand the negative implications of scientific
findings on general perceptions. A particular case concerns comments made by Frederick Goodwin (the Director of NIMH at the time and one of the co-authors of the ECA study) which suggested that inner-city ghetto males were like jungle monkeys with regard to violent and sexual behaviors (see Jackson & George, 1996 for details). Clearly, research has value implications and the "...perceptual, comprehensive and systematic process of destruction can be seen in what is being done to our children and youth who are much more vulnerable to research abuse than most people in our communities realize" (Jackson & George, 1996, p. 12).

Group comparisons often lead to exaggerated distinctions and an incorrect conclusion of deficiencies (Yoder & Kahn, 1993) because racial differences may be confounded with unknown and unmeasurable combinations of nationality, ethnicity, gender, age, socioeconomic status, culture, biology, and heredity (Betancourt & Lopez, 1993; Jones, LaVeist, Lillie-Blanton, 1991; Zuckerman, 1990). For this reason, some researchers (Yoder & Kahn, 1993) have recommended that research needs to be conducted by using noncomparative and descriptive designs to help balance the literature and counteract negativism. Studies of this type should focus on members of various social categories alone. This would foster insight into how high-risk populations behave within their own group, not as they exist relative to other races who may or may not operate in a different personal, family, community, or social contexts (Jones, Laveist, Lillie-Blanton, 1991). Thus, this study examined the case records of African American male youth with conduct disorder within the context of a descriptive evaluation of co-occurring substance-related problems and mental disorders to extend the findings of ECA into the area of comorbid assaultive violence and to provide appropriate evaluation of the merit of the recommendations of Yoder and Kahn (1993).
Method

Participants

We examined records of youth offenders in the custody of the Department of Juvenile Services in the inner-city of a large Northeastern city. Records contained results of court-ordered psychiatric evaluations and profiled offenses that came before the juvenile courts between 1987-89. Only cases that met the Diagnostic and Statistical Manual for Mental Disorders criteria (see DSM-III-R, American Psychiatric Association, 1987) for the diagnosis of conduct disorder were included in the study. Consistent with the methods proposed by Yoder and Kahn (1993), records of females and racial groups other than black were excluded from the analyses. The final sample contained data on 257 male, African American adolescents who were 12-17 years of age (Mean = 14.5, S.D. = 1.6).

Procedures

Variables included in the study were documented alcohol or other-drug-use-related problems, treatment or referrals; notes, referrals, or counseling for emotional problems or mental disorders, and past or current adjudication for violent crime. According to procedures utilized in the ECA study (Regier, et al., 1990), comorbidity of alcohol, alcohol- or other-drug-use-related problems or referrals, referrals or counseling for emotional problems or mental disorders, and incidents of interpersonal violence were assessed by calculating the rates per 100 participants of each disorder (such as alcohol-related problems) with all possible combinations of the other disorders (e.g., alcohol with any drug problem; alcohol with any drug or mental disorder; alcohol with any drug or mental problem; alcohol with any drug or mental disorder or violent incident). The assessments were made separately for subjects who had and did not have a documented history of the problem.
Then, relative risk was determined by computing odds ratios (rate per 100 with the disorder divided by the rate per 100 without the disorder) for all comorbid combinations (here for example, odds ratio = 71% with alcohol-related problem or any drug-related problem divided by 4% without alcohol-related problem but who had a documented drug-related problem = 17.85). Loether and McTavish (1976) indicate that 95% confidence intervals were used to define a critical region bounding each odds ratio (for the previous example, 15.4 - 20.1). A statistically significant association among two or more disorders existed for odds ratios with critical regions that did not include 1.0, a value indicating that the risks were identical (Morris, 1970). Psychological prototypes of subjects with and without each disorder were compared and contrasted using graphical profiles of T-scores from clinical scales on the adolescent normed personality inventory. Twenty-one demographic, educational/vocational, behavioral, home environment and discipline, peer group, and community variables were entered into a forward stepwise multiple regression to identify smaller subgroups of risk factors specific to each disorder under investigation. Only significant findings will be reported to conserve space.

Results

Demographics

Half of the participants had at least one prior offense. Fourteen percent were adjudicated for drug-related offenses not related to alcohol. Thirty-three percent had a past or current history of committing a violent crime according to public health criteria where force or other means were used by the youth with intent of causing harm, physical injury, or death to another person. Most (87%) were attending school and many (66%) were identified as problem students. Eighty-three percent
had a mother or other adult female present in the home and more than one-fifth (21%) had a sibling with a prior arrest history living with the family. Average household income was $473 per month.

**Alcohol**

Subjects with an alcohol problem (8.6%) were 18 times more likely to have a co-occurring drug problem, 10 times more likely to have a co-occurring drug-related or mental disorder, and five times more likely to have had an emotional problem than subjects without a history of alcohol-related difficulties. The most significant risk factor of alcohol disorder was a comorbid drug-related problem (Alcohol model, $R^2 = .47, p = .001$). Psychological profiles of subjects with alcohol-related problems suggested they were more assertive and less irritable, and they exhibited less severe emotional symptoms than those without a documented history of referrals or intervention for difficulties with alcohol use.

**Other Drugs**

Among subjects with an other-drug-related problem (7%), the risk of having a co-occurring alcohol-related and mental disorder was 10 times greater than those with no drug-related difficulty. The most prominent risk of having this disorder was a documented history of an alcohol-related problem (Drug model, $R^2 = .66, p = .001$). This group showed higher levels of social sophistication, and less anger and resentment than subjects without alcohol-related disorder.

**Mental Disorders**

Personality problems placed this group at higher risk for mental disorder (Mental disorder model, $R^2 = .42, p = .001$). Subjects who exhibited signs of a mental disorder (4.5%) were more than four times as likely to have had a co-existing alcohol-related problem.
Violence

Profiles of adolescents with a history of interpersonal violence suggested lack of insight, social introversion, and isolation in contrast to non-violent offenders. The greatest risk factor for assaultive violence (Violence model, $R^2 = .47, p = .001$) was the presence of an older sibling in the home. More importantly, this group had less or similar overall risk of having any comorbid disorder when compared to subjects who had no history of violent crime.

Discussion

This investigation examined the case histories of youth with conduct disorder within the context of a descriptive evaluation of documented co-occurring substance-related problems and mental disorders to extend the findings of ECA into the area of comorbid assaultive violence, and to assess the utility of noncomparative and descriptive designs (Yoder & Kahn, 1993). Here, reliance on documented incidences may limit the findings to the extent that the rates of any disorder may have been underreported and biased with regard to the criteria of this specific adjudication process. Other research (Betancourt & Lopez, 1993) has demonstrated that symptoms rather than diagnoses may be better indicators in studies of this kind because they may be more sensitive to sociocultural influences.

Nevertheless, results for adolescents with alcohol-related, other-drug-related, and mental disorders were generally consistent with the findings of ECA and other comorbidity studies that have reported a wide range of increased risk in co-occurring substance abuse and mental disorders (Young & Werch, 1990), especially among incarcerated populations (Regier et al., 1990). Significant multiple correlations from the multiple regression models for these disorders supported
the conclusions regarding increased risk, accounting for 18% to 44% of the explained variance. The findings strengthen the argument for the inclusion of drug and alcohol interventions within mental health programs and vice versa.

However, there was no indication of comorbidity of these disorders with assaultive violence. Substance-related and mental disorders may share some common pathways, but the mechanisms underlying interpersonal violence appear to be different. This supports the current trend in treating violence as a separate public health problem (Nagayama, Hall & Barongan, 1997) and bolsters the contention that more prevention programs be targeted at violence among African-American youth (Rodney et al., 1996). Findings also augment the general psychiatric literature about the low rates of violence in mentally disordered groups in general (Kaplan & Sadock, 1991).

On the average, this group of African-American adolescent males exhibited psychological profiles that were only slightly elevated or well within ascribed normal limits. This is not unusual because conduct disorder is symptomatic of behavioral problems and not gross psychopathology. In fact, the psychological profiles of youth with alcohol-related other-drug-related, and mental disorders were less suggestive of pathology than their non-problem counterparts. Thus, there is reason for therapeutic optimism not negativism with regards to intervention outcome. Overall, findings fail to support the notion that violence, substance abuse, and defective personalities are co-occurring (Ito, Miller, & Pollack, 1996) in the exclusive domain of African-American male youth.

The question of why the most prominent risk factor for assaultive violence was the presence of an older sibling in the home is a matter of speculation at this time. Notably, only 12% of the variance was attributed to variables in the violence risk model. This result suggests that the model
may have been underspecified. At present, the literature on violence remains underdeveloped (Hammond, 1993) and we would do well to look for sources of information other than juvenile justice records in determining the true nature of interpersonal violence (Singleton & Douglas, 1995). Many researchers (Brown & Rhodes, 1991; Clayton, 1992; Cowen, 1991; Hawkins, et al, 1987; Garmezy & Neuchterlein, 1972) have stressed taking a look at a broad range of protective factors as one alternative to the traditional risk paradigm. A protective factors model may well provide a better framework for understanding how high-risk youth avoid rather than engage in violent behavior, and yield information critical to the development of more effective intervention programs.
References


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