Exploring Diagnostic Formulations for Violent Delinquent Adolescents: Conceptual Considerations

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The condition of the violent delinquent adolescent and its context involves a multiplicity of intricate and complex factors. In fact, a variety of literature reports indicate the pertinence of the following concerns: psychiatric; genetic and physiological; developmental; demographic; neuro­

cal; intellectual; social; environmental; and legal. The consideration of the informational complexity of many conditions has motivated in recent years the development of multiaxial diagnostic systems. The multiaxial model typically consists in the systematic formulation of the subject's condition and associated factors in terms of several variables, aspects or axes, that are presumed to have high clinical information value and are conceptualized and rated as quasi independent from each other. This model would ensure a comprehensive description of the condition and its context as well as allow the opportunity of conceptually clarifying its key aspects to facilitate their study.

The multiaxial diagnostic model has been increasingly used for the description of general psychiatric disorders, starting with the pioneering proposal of Essen-Moller and Wohlfahrt and continuing to recent nosologies such as DSM-III, the new U.S. psychiatric diagnostic system. Also the model seems to be particularly pertinent to childhood and adolescence behavior disorders, where frequently it is desirable to specify the type of psychiatric disorder, developmental delays, intellectual level, associated physical illness, and psychosocial stressors. In fact, these are the components of a multiaxial diagnostic system for children and adolescents developed by Rutter, et al. as a refinement of earlier versions prepared under the auspices of the World Health Organization. Furthermore, the multiaxial model has found useful applications in special areas such as the diagnosis of family dysfunction through a triaxial system developed by Tseng and McDermott, and the comprehensive description of mentally retarded individuals through the work of Tarjan et al.

If the multiaxial model has been found suitable for general clinical description, it would seem to be even more suitable and promising for the comprehensive description of such complex conditions as that of the violent delinquent adolescent. In this case, in addition to general clinical concerns, other clearly important aspects are adaptive functioning and legal status.

Thus, the purpose of this report is to present a multiaxial diagnostic system specifically aimed at providing a comprehensive description of the condition of the violent delinquent adolescent.

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A Multiaxial Diagnostic System

A review of the literature on violent delinquent adolescents was conducted in search for variables with potential or demonstrated descriptive value (useful to efficiently organize clinical, adaptive functioning, and legal information and to contribute to the exploration of other key variables) and/or predictive value (useful to predict important aspects of course and outcome). On this basis, a multiaxial diagnostic model specifically addressed to the description of violent delinquent adolescents was developed and is proposed here.

**Axis I. Psychiatric Syndromes**

Psychopathological syndromes or symptomatology has been widely considered as central to the description of psychiatric patients, and consequently this aspect has been included in all reported multiaxial psychiatric diagnostic systems. Given that clinical psychiatric characterization is considered a crucial element in the comprehensive characterization of violent delinquent adolescents, this aspect is included in the proposed multiaxial system.

Although this axis can be formulated and assessed according to various procedures, it seems preferable to use DSM-III Axis I (clinical psychiatric syndromes) as defined by explicit diagnostic criteria, given the standard status of this system.

**Axis II. Personality and Specific Developmental Disorders**

The concept of personality disorder is considered in several multiaxial psychiatric systems including Essen-Moller’s “habitual abnormalities,” Ottosson and Perris’s “personality disturbances,” and von Cranach’s “personality disorder.” Likewise, the concept of specific developmental disorders is included in the system developed by Rutter et al.

DSM-III encompasses both personality and specific developmental disorders in its Axis II, and given its wide application, it seems the preferable format to assess this aspect in the proposed multiaxial system.

**Axis III. Physical Disorders**

This axis corresponds to nonpsychiatric medical disorders that are either relevant to the causation of the behavioral disorder or need to be considered in the treatment plan. This axis is considered in most of the multiaxial psychiatric systems proposed to date including those of Essen-Moller, Wing, Rutter et al., Strauss, and DSM-III.

In the proposed multiaxial system, physical disorders are formulated according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM).

**Axis IV. Severity of Psychosocial Stressors**

Environmental and psychosocial factors have been included in some multiaxial systems developed for general psychiatric patients, as reflected in Rutter et al.’s “abnormal psychosocial situations,” Strauss’s “environmental stresses,” and DSM-III’s “severity of psychosocial stressors.”
EXPLORING DIAGNOSTIC FORMULATIONS

Although considerable problems have been noted in the assessment of psychosocial stressors, many clinicians seem to consider this a very important area for comprehensive psychiatric diagnosis.

The procedure used for assessing this axis in the multiaxial system presented here involves first identifying specific stressors to which the subject has been exposed in the past year and then rating the overall stress severity according to DSM-III’s 7-point scale from none (1) to catastrophic (7).

**Axis V. Adaptive Functioning**

The consideration of social functioning and performance of expected roles has been a distinct American contribution in the history of multiaxial psychiatric systems. First, Strauss proposed the formal assessment of current work functioning and personal relations. Later DSM-III considered highest level of adaptive functioning (occupational performance, social relations, and use of leisure time) during the past year. The assessment of current functioning seems to have mainly management value, and highest level of functioning in the past year mainly prognostic value. The importance of adaptive functioning is not restricted to general psychiatric patients, as it is also apparent for the assessment of juveniles, especially if functioning with legal authorities is included.

Adaptive functioning is assessed in the present multiaxial system taking into consideration school/work performance and functioning with family, with peers, and with legal authorities; and it is formulated in terms of both highest level in the past year and current functioning. In each case, a 7-point scale (from 1 = superior to 7 = grossly impaired) is used.

**Axis VI. Intelligence Level**

This provides a description of the individual’s current level of general intellectual functioning. It corresponds to the third axis of Rutter et al.’s multiaxial system for child psychiatric disorders. The importance of intellectual level in criminal behavior was studied by Hirschi and Hindeland, who reported that IQ had an effect on delinquency independent of social class and race, with the less intelligent individuals being more likely to be delinquent. Moffitt et al. recently confirmed this relationship in two longitudinal studies in which intelligence was assessed years before criminal behavior occurred. Furthermore, McGarvey et al. studied the interrelationships among rearing, socioeconomic class, intellectual performance, and criminal behavior and found that intellectual performance appeared to mediate the relationship between socioeconomic class and criminality.

Intelligence level is assessed in the multiaxial system presented here using either the WISC-R or the WAIS-R, according to the individual’s age.

**Axis VII. Social Class**

The paramount importance of social class in the comprehensive assessment of general psychiatric patients was documented by Strauss et al. in a study of first admissions for functional psychiatric disorder, which showed that social class correlated with a larger number of clinical characteristics.
than did symptom and functioning measures. More specifically on delinquent adolescents, the study by Wolfgang et al.\(^6\) found that social class was the background variable having the second highest correlation with offender status. Also, the longitudinal Cambridge Study on Delinquent Development\(^{33,34}\) found a high correlation between low family income and delinquency. Furthermore, Douglas et al.\(^{15}\) and Wadsworth,\(^{36}\) through their National Survey of Health and Development, found that social class differences existed in regard to overall incidence of offenses, recidivists' age at first offense, and types of offenses committed.

Social class is assessed in the present multiaxial system according to the Hollingshead scale,\(^{37}\) which is based on the occupation and education of the head of household.

**Axis VIII. Index of Mental Illness and Criminality in the Family**

Support for the inclusion of this axis is provided by Glueck and Glueck's study\(^{38}\) that found that parents of male delinquents, compared to controls, manifested more severe psychopathology, criminality, and alcoholism. Also, Lewis and Balla\(^{39}\) found that serious criminality in the parents and psychiatric treatment of the fathers were associated with significantly younger age at first juvenile court appearance of their delinquent offspring. Offord et al.\(^{14}\) compared 59 families with delinquent daughters with 59 families with non-delinquent daughters and found that parental mental illness played a significant part in such distinction, particularly when mental illness was associated with a broken home. Robins,\(^{40}\) in her study on deviant children grown up, found that both broken homes and parental mental illness and criminality contributed to the determination of both age at first offense and severity of offense.

This aspect is evaluated in the proposed multiaxial system in terms of the proportion of members of the subject's nuclear family presenting a history of criminality and/or psychiatric disorders.

**Axis IX. Chronicity of Legal History**

The importance of this factor has been documented by Hamparian et al.\(^{15}\) in their longitudinal study of violent delinquent adolescents in Columbus, Ohio. Five year birth cohorts (1956-60) were selected because they included individuals who would have completed their delinquent careers as juveniles in 1977. They found that the delinquent adolescents who committed very violent offenses tended to start their delinquent careers at an age younger than 13. Also, Wolfgang et al.\(^6\) found that chronic offenders, defined as those committing five or more violations, constituted one third of the subjects, were responsible for nearly 45 percent of all crimes against the person and continued committing offenses after their 18th birthdays. They also found that, regarding age of onset, those individuals whose contacts with the police began when they were 6 to 12 years old, tended to commit a large number of offenses of very serious nature before they reached 18 years of age.

In the present multiaxial system, chronicity of legal history is assessed in
EXPLORING DIAGNOSTIC FORMULATIONS

terms of (A) age at first offense, and (B) recidivism or number of delinquent adjudications, each involving one or more offenses.

Axis X. Magnitude of Offenses

In addition to their chronicity or time frame, consideration of the number and severity of the offenses seems to be an important component of their characterization. Hamparian et al. documented this point through their longitudinal study of violent delinquent adolescents.

In the proposed multiaxial system, severity of offenses is assessed in terms of (A) number of offenses in lifetime committed either at the same time or at separate times, and (B) severity of the most serious offense as measured with Coombs’ scale.

Comment

The multiaxial diagnostic system proposed for violent delinquent adolescents attempts to provide a comprehensive description of the condition of these individuals in which not only psychiatric disorders are considered but also the individual’s level of intelligence, adaptive functioning, legal status, and familial background. The identification and conceptual differentiation of important aspects of the condition of the violent juveniles allows the opportunity to separately rate and study the various aspects involved. Furthermore, the model provides the possibility of implementing an interdisciplinary and holistic approach to the conceptualization of this condition.

The comprehensiveness of the information provided in the model should enhance a more complete solution and rational planning of treatment and rehabilitation interventions for the juvenile. Also, it should facilitate the formulation of a prognosis for the juvenile in terms of clinical, adaptive functioning, and legal outcomes.

Because of the enumeration of key informational aspects presented on the multiaxial model, it may be helpful as a guideline for the assessment of the violent juveniles, and therefore it has a potential educational role. Pertaining to research, the demarcation of the various components of the condition at hand may facilitate the study of specific biological and psychosocial factors underlying them.

In due course, the systematic consideration of clinical, adaptive functioning, and legal aspects included in the model may lead to and facilitate the development and evaluation of more differentiated mental health treatment, placement, and vocational training programs for this complex population.

Empirical research on the various components of the proposed multiaxial system should clarify their worth and point out adjustments required in the model to improve its usefulness to meet the needs of violent delinquent adolescents and the objectives of the clinical and legal professionals working with them.
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