

## **ADOLESCENT SUICIDAL BEHAVIOR –PART OF A WIDE SPECTRUM OF DESTRUCTIVE BEHAVIORS?**

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Many countries in Europe and over the world are developing national suicide prevention programs, this effort will be highlighted at the forthcoming Ministerial Mental Health in Helsinki. Any national effort at reducing adolescent suicide rates however should take into account the increasingly apparent notion that suicidality in adolescence can be viewed as part of a wide spectrum of destructive behaviors in which the suicidal behavior is only a part. (for a full review see King et al ., 2003) This shift in view has important theoretical as well as preventative applications. Thus the study of suicidal behavior in adolescence separately form that of other forms of destructive behavior may impair the implementation of suicide prevention programs and impair cooperation between various organizations in implementing these programs.

In addition to high rates of suicide, suicidal attempts and ideation, adolescence in the industrialized world is also characterized by increased health-threatening behaviors, such as tobacco, alcohol, and drug use; unprotected sex; fighting; reckless driving; and, in the US, weapon-carrying (Centers for Disease Control and Prevention, 2000). Adolescent problem behaviors such as truancy, substance use, high risk or early onset of sexual activity, and delinquency frequently are also often are present in the same individual (Jessor, 1991, Donovan et al, 1988, Dryfoos, 1990).

Recognizing these striking epidemiological observations, Holinger et al. (1979) and others have postulated a "continuum of self destructiveness" in adolescence ranging from substance use, unprotected and precocious sexual activity, reckless driving through self-mutilation and suicide attempts.

Suicidal and other problem behaviors **share common developmental antecedents and risk factors.** These include negative environmental influences (family, peers, neighborhood) interacting with specific personality or temperamental traits and resulting in impulsivity, increased risk-taking, and egotism thus thwarting the development of adaptive emotional coping skills and adequate cognitive and moral development. Such environments often also present an increased level of hassles and stressful live events which, especially when amplified by a reactive emotional style, increase the cumulative burden of negative life experiences..

Whatever the pathogenic basis for the association between suicidality and other health-endangering behaviors, it may persist over time, even many years. For example, adolescent suicide attempters are at ongoing risk for injury and death from motor vehicle accidents, substance abuse, homicide, etc.. Prospective studies demonstrate a shared set

of social, developmental, and psychopathological risk factors predicting completed or attempted suicide and unintentional injury or death (Fergusson et al., 1995; Neeleman et al., 1998). Similarly, smoking in adolescence or young adulthood has a significant association with suicide, even years later (Clayton, 1988) (whether by virtue of a link with impulsivity, aggression, or other psychiatric comorbidity or neurobiological trait remains uncertain).

Post-mortem studies of youthful suicides find that over and above the high rates of Axis I psychiatric disorder, **personality disorders and problematic personality traits also make a contribution.** Even after controlling for Axis I diagnoses, Brent et al. (1993) found that traits such as irritability and aggression and Axis II diagnoses (especially DSM Cluster B (impulsive, dramatic disorders) were significantly associated with adolescent completed suicide.

Another source of association between adolescent suicidality and other problem behaviors is the **cumulative deleterious effect of problem behaviors on adolescent development.** Viewed longitudinally, many adolescent problem behaviors increase the likelihood of negative interactions with significant adults (and thus the number of disciplinary crises and other stressful life events), erode academic and prosocial involvements, and augment the probability of socialization to progressively more deviant peer groups. Furthermore, in so far as the adolescent indulges in alcohol and substance use, these in turn increase impulsivity and affective instability, decrease inhibition, and further undermine coping skills.

Even after adjusting for socio-demographic status and the presence of a mood, anxiety, or disruptive disorder, a statistically significant association remains between suicidal ideation or attempts and sexual activity and even occasional recent drunkenness, smoking, and physical fighting (King et al., 2001)

Studies examining possible risk factors for the development of risk-taking behaviors have focused on a variety of personality factors: impulsivity (e.g. Kahn et al., 2002;) aggressiveness (Durant et al., 1997); self-criticism (Leadbetter et al, 1999); sensation seeking; and deficits in coping, social skills, and problem solving deficits (Kazdin, 1995). These same traits also appear to set the stage for vulnerability to suicidal ideation or behavior (Blatt, 1993). Other authors have specifically emphasized the role played in both adolescent suicidality and various risk behaviors by recklessness ( Shaffer et al., 1996), sensation-seeking, high neuroticism, hostility, and low socialization (for a review see also Verona & Patrick, 2000).

These specific personality factors, in turn, have also been suggested as providing a link to other social and family factors conferring vulnerability for the development of many kinds of risk-taking behaviors, including suicidality. Some authors, for example have suggested that abuse in childhood may constitute an environmental risk factor for the development of trait impulsivity and aggression, as well as suicide attempts in depressed adults, or alternatively, that impulsivity and aggression may be inherited traits underlying both a parental propensity for child abuse and subsequent adult suicidal behavior in the offspring (Brodsky et al., 2001).

One of the most ambitious attempts to give a general account of the underlying causes(s) of various types of behavior deviance is Jessor's Problem Behavior Theory. Jessor (1991, 1998) describes several overlapping domains of risk and protective factors for adolescent risk behaviors: biology/genetics, social environment, perceived environment; and personality.

The conclusion seems to be that any effective method of suicide prevention must entail a joint and cooperative effort by all the major organizations both governmental and non-governmental that are involved in the promotion of adolescent mental health. This should include educators, drug and alcohol regulators, those involved in motor and work accident prevention, the police and juvenile justice systems as well as those working for the prevention of aids and other sexually transmitted diseases. All this needs organization and political will-hopefully the Helsinki conference will provide the leadership needed for this great challenge.

## *Bibliography*

Blatt, S.J., Hart, B., Quinlan, D.M., Leadbeater, B & Auerbach, J.(1993). Interpersonal and Self-Critical dysphoria and behavioral problems in adolescents. *Journal of Youth and Adolescence*, Vol 22(3), pp:253-266.

Brent, D.A., Johnson, B., Bartle, S., Bridge, J., Rather, C., Matta, J., Connolly, J., & Constantine, D.(1993). Personality disorder, tendency to impulsive violence, and suicidal behavior in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 32, pp: 69-75.

Brodsky, B.S., Oquendo., M., Ellis, S.P., Haas, G.L., Malone, K.M., and Mann, J.J . (2001). The relationship of child abuse to impulsivity and suicidal behavior in adults with major depression *American Journal of Psychiatry* 158, 1871-1877

Centers for Disease Control and Prevention (2000) Youth Risk Behavior Surveillance --- United States, 1999 MMWR Vol 49, No SS05;1-104 (June 9, 2000).

Clayton P. (1998) Editorial: Smoking and Suicide. *Journal of Affective Disorders* 50:1-2.

Donovan JE, Jessor R, Costa FM. (1988) Syndrome of problem behavior in adolescence: a replication. *Journal of Consulting and Clinical Psychology*, 56:762-765.

Dryfoos JG (1990), *Adolescents at Risk*, New York, NY: Oxford University Press.

Durant, R.H., Knight, J., and Goodman E. Factors associated with aggressive and delinquent behavior among patients attending an adolescent clinic *Journal of Adolescent Health* 21 -303-308

Fergusson D.M. and Lynskey M.T. (1995) Antisocial behavior, unintentional and intentional injuries during childhood. *Criminal Behavior and Mental Health* 5, 312-329

Holinger PC (1979), Violent deaths among the young: Recent trends in suicide, homicide, and accidents. *Am J Psychiatry* 136:1144-1147

Jessor R (1991), Risk behavior in adolescence: A psychosocial framework for understanding and action. *J Adolesc Health* 12:597-605

Jessor R (1998), *New perspectives on adolescent risk behavior*. Cambridge UK: Cambridge University Press

Jessor R. (1987) Risky driving and adolescent problem behavior: An extension of problem-behavior theory. *Alcohol, Drugs and Driving*, 3:1-12.

Jessor R, Turbin MS, Costa FM (1997) Predicting developmental change in risky driving: The transition to young adulthood. *Applied Developmental Science*, 1:4-16.

Kazdin A., (1995) *Conduct disorders in childhood and adolescence* 9<sup>nd</sup> edition) Thousand Oaks CA: Sage

Kahn, JA., Kaplowitz R.A., Goodman E., and Esmans S.J. The association between impulsiveness and sexual risk factors in adolescent and young adult women *Journal of Adolescent Health* 30, 229-232.

Kernberg, O.F.(1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.

King RA., Ruchkin VV and Schwab-Stone ME. "continuum of adolescent self destruction-is there a connection. In King RA and Apter A (eds) *Suicide in Children and Adolescence*. Cambridge University Press Cambridge UK. PP 41-62

King RA., Schwab-Stone M., Flisher A.J., Greenwald S., Kramer R.A., Goodman S.H., Lahy, B. B., Shaffer D., and Gould, M. S. Psychosocial and risk behavior correlates of youth suicidal attempts and suicidal ideation *Journal of the American Academy of Child and Adolescent Psychiatry* 40 (7) 837-846

Leadbeater, B.J., Blatt, S.J., & Quinlan, D.M.(1995). Gender linked vulnerabilities to depressive symptoms, stress and problem behaviors in adolescents. *Journal of Research on Adolescence*, Vol 5(1), pp:1-29.

Neeleman, J., Wessely S., and Wadsworth M. (1998). Predictors of suicide, accidental death and premature natural death in genral-population birth cohort. *Lancet* 351 (9096) 93-97.

Shaffer, D.(1974). Suicide in childhood and early adolescence. *Journal of Child Psychology and Psychiatry*, Vol 15, pp: 275-291.

Shaffer, D., Gould, M., Fisher, P. et al.(1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, Vol. 53, pp: 339-348.

Verona E., and Patrick C.J. (2000) Suicide risk in externalizing syndromes: temperamental and neurobiological underpinnings. In (Joiner, TE., and Rudd. MD eds) *Suicide Signs: Expanding the Boundaries pp 137-173*. Norwell, MA : Kluwer Academic Publishers

