Polysubstance abuse in adolescence: A case series

ABSTRACT

Substance use and abuse in adolescents is a major public health concern in India where a high proportion of the population are in this age group. The most common substances used by adolescents are tobacco, alcohol, and marijuana, but include a wider range of substances. Two patients with polysubstance abuse are presented. After initial detoxification, both were started with dialectical behavioral therapy and motivational enhancement therapy along with family therapy; both have been on regular follow-up and currently maintaining well.

Keywords: Adolescence, family, polysubstance abuse, psychosocial risk factors

CASE REPORTS

Case 1
An 18-year-old boy was brought to the emergency medicine department with wrist slashing after a verbal fight at home, along with consumption of alcohol, cannabis, tobacco, nicotine, and certain inhalants (glue sniffing), with a history of admission due to polysubstance abuse. Mental status examination (MSE) showed ill-kempt individual indifferent toward examiner, not maintaining eye-to-eye contact, rapport not established noncooperative, oriented to time place and person, and psychomotor activity was increased. Speech was nonspontaneous, rate and tone of speech was increased, and affect was irritable. He had craving for tobacco, no perceptual abnormality, and insight and judgment were impaired. A diagnosis of mental and behavioral disorders due to multiple drug use and use of other psychoactive substances was made. He was started on oxcarbazepine, lithium, and haloperidol.
gradually uptitrated, along with dialectical behavioral therapy, motivational enhancement therapy, and family therapy. Currently, the patient is maintaining well with regular outpatient follow-up.

**Case 2**

A 13-year-old boy was brought to the psychiatry outpatient department by his mother, with complaints of excessive consumption of cannabis, nicotine, tobacco, and inhalants for the past 10 months with irritable-aggressive behavior on denying money for the same since 3 months. MSE revealed a kempt and groomed individual, cooperative, communicative, in touch with reality, initiating but not maintaining eye-to-eye contact, psychomotor activity was increased, and rapport established with some difficulty. Speech was spontaneous; rate, tone, and volume normal; and mood was mildly anxious. He had craving for cannabis, no perceptual abnormality reported, and insight and judgment were unimpaired. A diagnosis of mental and behavioral disorders due to multiple drug use and use of other psychoactive substances was made. He was started on risperidone on outpatient basis, which was gradually uptitrated, along with dialectical behavioral therapy, motivational enhancement therapy, and family therapy. Currently, the patient is maintaining well with regular outpatient follow-up.

**DISCUSSION**

Many risk and protective factors influence the age of onset and severity of substance use among adolescents. Psychosocial risk factors mediating the development of substance use disorders include parent modeling of substance use, family conflict, lack of parental supervision, peer relationships, and individual stressful life events. Interventions that diminish risk factors are likely to mitigate substance use.[i]

Factors influencing the emergence of adolescent substance abuse include parental belief in the harmlessness of substances, lack of anger control in families of substance abusers, lack of closeness and involvement of parents with children’s activities, and maternal passivity. Studies that assess physiological responses to alcohol find that behavioral responses among sons of alcoholics are not as strong as control’s responses to alcohol.[ii] This is probably because of a higher degree of tolerance among those with parental history of alcoholism. Other risk factors include comorbid psychiatric disorders such as conduct disorder and depression, parental and peer substance use, impulsivity, and early onset of cigarette smoking. The greater the number of risk factors, the more likely it is that an adolescent will be a substance user. One of the most consistent findings in the alcohol literature is that early age at first alcohol use is significantly associated with alcohol-related problems in adulthood.[iii] Modest evidence supports that initial reaction to alcohol, at least among males, may influence the later development of problem drinking.[iv]

The deliberate misuse of volatile substances poses a poorly recognized risk for considerable morbidity and mortality in adolescent populations worldwide. The abuse of inhalants continues to be a significant problem among our country’s youth.[v] Efforts to combat abuse of these substances have largely focused on limiting their availability, identification of those at risk, and referral for treatment.[vi]

Pervasive drinking by youths is reported in many countries around the world. However, the highly prevalent emergence of problem drinking and dependence in late adolescence are inextricably connected to developmental processes. Therefore, a developmental perspective is essential for fully elucidating the scientific basis of these phenomena and for successfully preventing and treating the causes, problems, and consequences associated with excessive alcohol consumption.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

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