Pediatricians should be aware that adolescents and young adults are abusing medication that is regarded as sufficiently benign to be available without prescription. Obtained through legitimate over-the-counter channels or the purchase of “look-alikes” and used in place of controlled substances, these drugs can cause serious problems.

A decade ago, tightening of drug laws restricted production and availability of popularly abused stimulants, setting the stage for an increased use of nonprescription, sympathomimetic drugs. Amyl nitrite was restricted to availability by prescription in 1969, and the Controlled Substance Act of 1972 may have reduced the manufacture of amphetamine 95% from the levels of the 1960s. In 1974, methaqualone, a hypnotic, was added to the list of substances covered by the 1972 Act. These changes and the upsurge of cocaine use during the 1970s fostered the production of a legion of new drugs popularly known as look-alikes. Most often, look-alikes closely resemble amphetamine tablets or capsules in size, color, numbering, and trademarking; they also exist as cunning counterfeits of well-known medications. Adolescents and young adults who abuse look-alikes usually locate sources of supply in magazine advertisements that emphasize the “-amine” or “-caine” component of the drug. They receive more than a placebo, but not what they expect. Some look-alikes contain the stimulants phenylpropanolamine (deleted from some new look-alike formulations), ephedrine, and caffeine; others have lidocaine (to cover some advertising claims) or a hodge-podge of other substances—all of which are commonly found in over-the-counter preparations marketed for the treatment of allergic symptoms, upper respiratory infections, or obesity, or as “pick-me-ups.”

Although regarded as sufficiently benign to be available without prescription, phenylpropanolamine can cause problems and may result in users needing attention in an emergency room or a physician’s office. Look-alike capsule identification and content determination are difficult, and conventional toxicologic screening does not detect phenylpropanolamine; therefore, the patient’s symptoms and signs provide the best, or only, clue to the drug. In doses of 50 to 85 mg, phenylpropanolamine frequently increases the blood pressure to hypertensive levels.1 Combinations of phenylpropanolamine and other over-the-counter preparations have caused amphetamine-like reactions: agitation, restlessness, irritability, sleep disturbance, tachypnea, tachycardia, hallucinations, manic episodes, and psychotic reactions.2,3 One adolescent and two young adults who took similar preparations experienced chest pain, developed elevated creatine kinase levels, and showed ECG evidence of myocardial damage. A 4-year-old child and two adolescents had seizures4–6; one adolescent and a young adult male developed intracranial hemorrhages and died5; and two young adults had rhabdomyolysis and acute interstitial nephritis after taking phenylpropanolamine-containing preparations.7,8

The formulation of the drug is important in producing complications; regular dosage forms are more likely to be toxic than timed-release preparations. Combinations of these preparations and other drugs can also increase the possibility of adverse effects.9 In addition, individuals who use look-alikes regularly become accustomed to their effects and may experience a jolt when they take the actual drug that has been imitated or counterfeited. Look-alikes are usually sold in quantity, and some buyers may be tempted to exchange their extra supplies for a quick profit. Because the dealers sell over-the-counter preparations, they have tended to escape legal repercussions. New legislation should make it more difficult to sell any medication in the guise of a controlled drug and should interrupt the production and flow of nontherapeutic and dangerous look-alikes. Meanwhile, pediatricians can make information about these drugs available to their communities, help their adolescent patients avoid the temptation to use them—by education and by giving thoughtful attention to the reasons for which adolescents seek these drugs, and care for the abuser who is identified in an office.
or emergency visit.

References


Children's Use and Abuse of Pets

Animals commonly influence children's behavior and development. Children involve animals in their use of such defense mechanisms as displacement, projection, splitting, and identification. These same mechanisms may also be used to deal with their experiences with animals. Therapists are encouraged to inquire into children's associations with animals as a means of more thoroughly understanding their patients.

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*Pediatrics* 1983;72;256

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