3. Brooks S, Warshaw G, Hasse L, Kues JR. The physician decision-making process in transferring nursing home patients to the hospital. Arch Intern Med 1994;154:902-8.
4. Fried TR, Gillick MR, Lipsitz LA. Whether to transfer? Factors associated with hospitalization and outcome of elderly long-term care patients with pneumonia. J Gen Intern Med 1995;10:246-50.
5. Degelau J, Guay D, Straub K, Luxenberg MG. Effectiveness of oral antibiotic treatment in nursing home-acquired pneumonia. J Am Geriatr Soc 1995;43:245-51.
6. Irvine PW, Van Buren N, Crossley K. Causes for hospitalization of nursing home residents: the role of infection. J Am Geriatr Soc 1984;32:103-7.
7. Norman DC, Castle SC, Cantrell M. Infections in the nursing home. J Am Geriatr Soc 1987;35:796-805.
8. Bentley DW. Bacterial pneumonia in the elderly: clinical features, diagnosis, etiology, and treatment. Gerontology 1984;30:297-307.
9. Niederman MS, Fein AM. Pneumonia in the elderly. Clin Geriatr Med 1986;2:241-68.
10. Yoshikawa TT. Pneumonia, UTI, and decubiti in the nursing home: optimal management. Geriatrics 1989;44:32-4, 37-40, 43.
11. Kayser-Jones JS, Wiener CL, Barbaccia JC. Factors contributing to the hospitalization of nursing home residents. Gerontologist 1989;29:502-10.
12. Teresi JA, Holmes D, Bloom HG, Monaco C, Rosen S. Factors differentiating hospital transfers from long-term care facilities with high and low transfer rates. Gerontologist 1991;31:795-806.
13. Rubenstein LZ, Ouslander JG, Wieland D. Dynamics and clinical implications of the nursing home-hospital interface. Clin Geriatr Med 1988;4:471-91.
14. Creditor MC. Hazards of hospitalization of the elderly. Ann Intern Med 1993;118:219-23.
15. Thompson RS, Hall NK, Szpiech M, Reisenberg LA. Treatments and outcomes of nursing home acquired pneumonia. J Am Board Fam Pract 1997;10:82-7.
16. Mylotte JM, Ksiazek S, Bentley DW. Rational approach to the antibiotic treatment of pneumonia in the elderly. Drugs Aging 1994;4(1):21-33.

Difficult Decisions

Of all bodily desires, it is the sexual to which they [adolescents] are most disposed to give way, and in regard to sexual desire they exercise no restraint.

— Aristotle

The adult community is anxious and worried about the reported increased prevalence of early sexual activity among adolescents. Research fostered by educators, health care providers, and government agencies explores the nature of events leading to initiation of sexual activity and methods to postpone the timing of sexual debut. Norms created by modern society define behaviors appropriate for a given age and a range of ages appropriate for life transitions. Among these transitions is the initiation of sexual activity. Adults accept sexual experimentation as integral to adolescent growth and development. Fearing serious ramifications for accomplishment of future tasks, however, adults oppose frequent practice of such behavior.

Many studies show outcomes of this risky behavior to include high rates of sexually transmitted diseases, teenage pregnancy, substance abuse, and serious school problems. In addition, Billy and colleagues[1] have reported adverse effects on the social and psychological development of the adolescent. These effects appear more marked among whites than African Americans. Further, the study found a strong negative effect on self-reported academic grades among white male adolescents and a negative effect on the importance placed on going to college among white female adolescents. Both effects could jeopardize the future well-being of the adolescents. Several studies have looked at risk factors or social circumstances that predict early sexual activity. Ku and colleagues[2] documented that being African American, especially male, predicts a higher rate of early intercourse. In addition, being a child of a woman who first gave birth as a teenager, being held back in school, experiencing early physical maturation, or associating with an older partner increase the risk of initiating sexual activity early in adolescence.

The timing of the first intercourse varies widely from early adolescence to adulthood. Improved understanding of this event can lead to more effective educational interventions to postpone the experience and minimize the risks of the behavior. In their article, "First Coitus for Adolescents, Understanding Why and When," in this issue of the *Journal*, Alexander and Hickner[3]

Submitted 7 January 1997.

From the Rainbow Babies & Childrens Hospital of University Hospitals, Cleveland. Address reprint requests to Rina Lazebnik, MD, Rainbow & Childrens Hospital of University Hospitals, 11100 Euclid Ave, Cleveland, OH 44106.

strengthen previous studies through their general conclusions. Their article emphasizes a highly important setting, the private office environment, in which evaluation and research of sensitive adolescent issues can be conducted. In addition, their article highlights the difficulty in answering why teenagers become sexually active, and when is the right time to engage in this activity.

As the investigators commented, the research was based on recall of events and feelings. The questionnaire offered a limited choice of statements, resulting in some limitations of answers. The heterogeneity of the speculated factors influencing the studied behavior, although difficult to assess in a one-time survey, remains very valuable. Perhaps the range of the partner's age and history of some reported or unreported abuse could enhance their conclusions. These data are especially relevant when reviewing a recent report of the Alan Guttmacher Institute,[4] which suggests 50 percent of the fathers of babies born to mothers aged between 15 and 17 years were 20 years old or older, and 20 percent of these fathers were 6 or more years older than their baby's mother. This conclusion is especially startling because most states prohibit people 18 years old or older from having sex with young teenagers. Thus, early sexual contacts might represent mostly unreported sexual abuse. It is therefore not surprising that 14 percent of the older teenagers in this study reported being forced to have initial sexual intercourse. Evaluation of the dynamics of the decision process to initiate sexual activity between same-age versus adult-teenage partners might help explain these disturbing reports. Also, a better understanding of the social circumstances that permit these contacts will help in formulating appropriate preventive strategies.

Peer pressure, self-esteem, and loss of self-control emerge as important reasons for initiating intercourse in young adolescents. Other studies have shown peer group perception and acceptance, or perhaps peer group selection to reinforce certain high-risk behaviors, have tremendous influence, especially in deviant peer networks.[1,5-7] It would be interesting to explore the formulation process of perception and perceived expectations within the peer group.

Clinical experience suggests that lack of adult supervision and scarcity of challenging activities play important roles in the translation of sexual curiosity into actual exploration, because more opportunities for sexual activity are available. Ironically, just as these adolescents need to establish their independence from adults, the absence of close supervision and good communication enables them to engage in adultlike behaviors. Such adolescents often are neither ready nor able to confront these responsibilities and their associated risks, however.

Tubman and colleagues[8] report that sexual intercourse, once initiated, is relatively persistent. Most teenagers seek medical advice regarding contraception or sexually transmitted disease (STD) prevention about 7 months to 1 year after initiating sexual activity. These facts partially explain the relatively high rates of adverse health outcomes and illustrate the importance of education regarding sexuality in the preadolescent and early adolescent years.

The reasons for sexual abstinence cited by the study group are instructive. Abstinent adolescents maintain that educational efforts that teach about STDs and pregnancy are important factors in deciding to postpone sexual activity. In addition, parental disapproval is a factor despite the rebellious nature of the adolescents. The influence of medical personnel on decision making would be an interesting additional topic to explore.

Recommendations of The Guidelines for Adolescents Preventive Services (GAPS), published by the American Medical Association regarding issues of sexuality at preventive visits with adolescents, seem especially appropriate in light of this study. The study found both a parental willingness to discuss this sensitive subject and the need for education and guidance in decision making, as reflected by the sample group's choices.

Our culture, which accepts explicit sexual messages as part of everyday life in advertising and the entertainment industry, thus cannot expect abstinence to dominate the teenage culture. Nevertheless, an effort should be made by school systems, health care providers, and the media to provide guidance and education to parents and adolescents, helping promote abstinence or postpone the first coitus. In many instances, even delaying the events allows developmental maturation and thus enables the adolescent to better understand the consequences and risks of his or her behavior. Groups refusing to accept this strategy should be encouraged to participate in educational efforts

that encourage protection from STDs and unintended pregnancy and to seek individualized guidance in decision-making strategies.

Rina Lazebnik, MD
Cleveland, Ohio

References

1. Billy JO, Landale NS, Grudy WR, Zimmerle DM. Effects of sexual activity on adolescent social and psychological development. Soc Psychology Quarterly 1988;51:190-212.
2. Ku L, Sonenstein FL, Pleck JH. Factors influencing first intercourse for teenage men. Public Health Rep 1993;108:680-94.
3. Alexander E, Hickner J. First coitus for adolescents: understanding why and when. J Am Board Fam Pract 1997;10:96-103.
4. Landry DJ, Forrest JD. How old are U. S. fathers? Fam Plann Perspect 1995;27:159-61, 165.
5. Capaldi DM, Crosby L, Stoolmiller M. Predicting the timing of first sexual intercourse for at-risk adolescent males. Child Dev 1996;67:344-59.
6. Ensminger ME. Sexual activity and problem behaviors among black, urban adolescents. Child Dev 1990;61:20-32.
7. Zabin LS, Hardy JB, Smith EA, Hirsch MB. Substance use and its relation to sexual activity among inner-city adolescents. J Adolesc Health Care 1986; 7:320-31.
8. Tubman JG, Windle M, Windle RC. Cumulative sexual intercourse patterns among middle adolescents: problem behavior precursors and concurrent health risk behaviors. J Adolesc Health 1996;18:182-91.