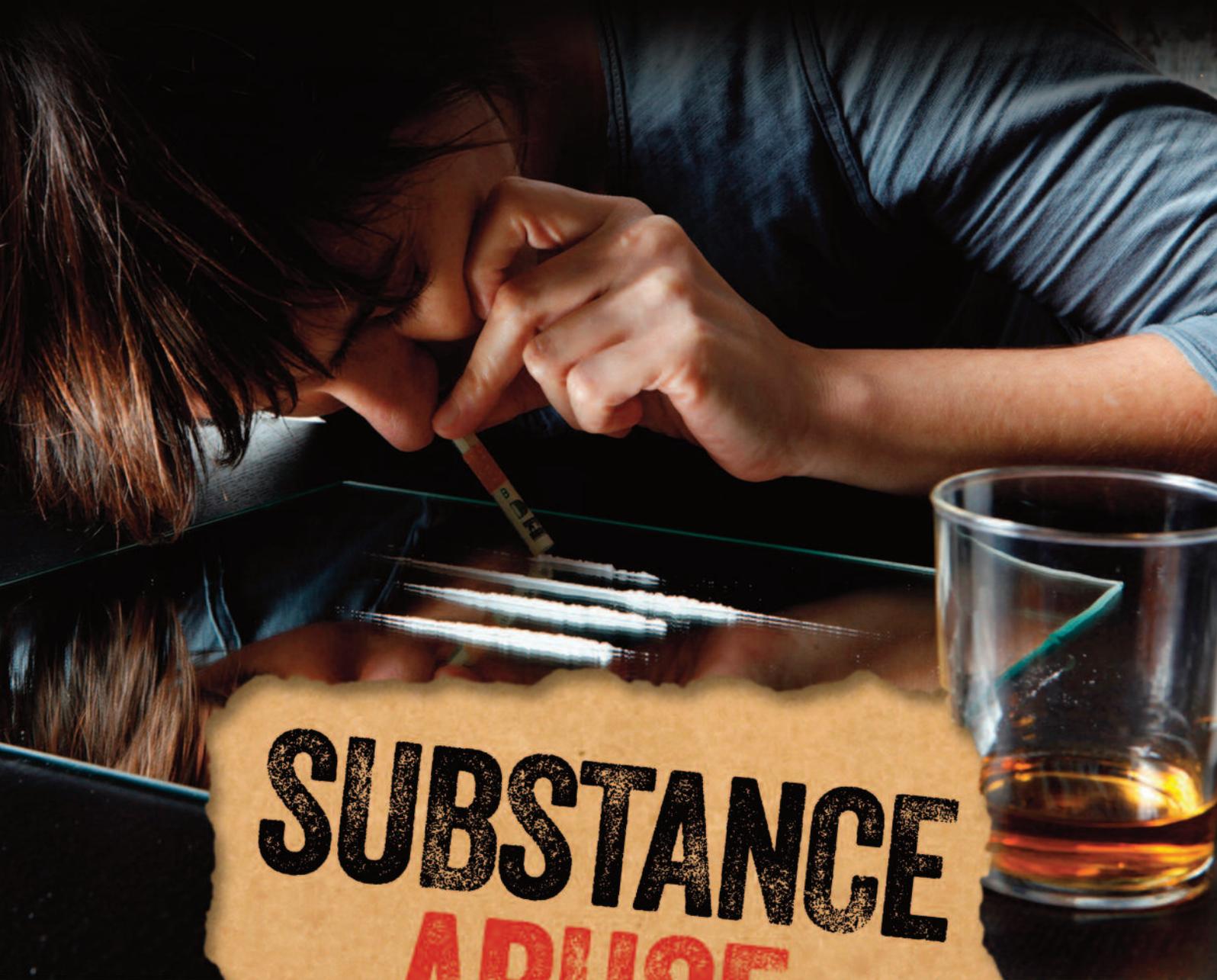
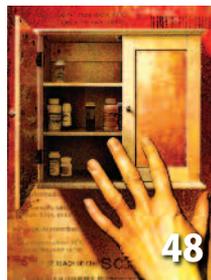


ADVENTIST EDUCATION



SUBSTANCE ABUSE

S P E C I A L I S S U E



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The World Health Organization (WHO) estimates that some 315 million people, or almost seven percent of the world population, used an illicit drug in the last year. Injection drug use remains a major means of HIV transmission around the world.¹ WHO estimates that up to 2.5 million deaths per year are directly related to alcohol consumption, causing nearly four percent of all deaths. Alcohol consumption is one of the top three major health problems worldwide.² The costs of substance abuse include the direct cost of health-care delivery treating the consequences of use, the expenses related to criminal prosecution and incarceration, drug- and alcohol-related traffic fatalities, the wide-ranging harm to families of users, and the impact on economic development and productivity. Consequently, WHO has concluded that alcohol and substance abuse are major health issues globally in all areas of economic development, human health, and well-being.

Ellen G. White and the other founders of the Seventh-day Adventist Church were major participants in and supporters of early temperance efforts. The early church's message was consistent, well-articulated, and powerful. For many decades, starting with the 1860s, our stand on temperance formed part of a larger Protestant proclamation about the destructive power of alcohol and drugs. However, more recently, the voices of most other churches have grown silent; in fact, some of the traditionally strongest supporters of the temperance cause now allow members and employees to use alcohol.³ The Seventh-day Adventist Church remains one of the few denominations to maintain a firm position on abstinence. However, the Adventist Church itself also faces the reality of changing attitudes and behavior toward alcohol.⁴ As the article by Landless and Williams documents (and critiques), sci-

entific and popular media have touted the supposed health benefits of alcohol.

But in spite of media attempts to encourage more positive attitudes toward alcohol use, data, mostly from the North American Division, consistently show that Adventist young people use alcohol and drugs at a two-thirds lower rate than youth in the general population. And that rate does not appear to be increasing.⁵ Adventist schools must seek effective ways to uphold church standards and to transmit our historical position on alcohol and drug use. However, we also must develop redemptive policies to deal with students who experiment with or initiate use of

substances, and establish strategies to protect the majority of our young people from the influence of those who use dangerous substances.

This special issue of *THE JOURNAL OF ADVENTIST EDUCATION* addresses a number of issues related to substance use. Three articles focus on school policymaking: The one led by Judith Fisher explores how to create redemptive policies at the college level, while the

one with Curtis VanderWaal as primary author targets the academy level. Combined with this helpful material is an article that focuses specifically on redemptive approaches to use when dealing with students who struggle with substance-abuse problems, also with VanderWaal as lead author. This article shares a portion of the scientific research that has identified a wide variety of factors that protect our youth from engaging in substance use. Alina Baltazar is the lead author of an article that presents the latest scientific information on protective factors against high-risk behavior, such as parental bonding, strong spirituality, service, and adult mentoring—areas that can be developed or strengthened in our schools.

The article by Peter Landless and David Williams carefully examines the latest scientific evidence regarding the

SUBSTANCE ABUSE: A MAJOR GLOBAL HEALTH ISSUE

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Creating Effective

SUBSTANCE- USE POLICIES

for Seventh-day Adventist Campuses

Substance use on college campuses worldwide has been a source of ongoing concern for many years.¹ Alcohol and drug use has a significant impact on campus life, creating safety concerns and interfering with learning. One of the first steps in crafting an effective prevention program is to develop clearly stated, well-reasoned, and consistently enforced policies that address the challenges faced on each campus, including increasingly diverse student bodies. In a Christian institution, these policies must grow out of

and reflect the core mission of the school. Carefully crafted and widely disseminated policies help institutions communicate predefined boundaries, integrate a redemptive and holistic approach to student discipline, and help ensure the school's accountability to its constituents. Well-crafted policies are critical in helping students understand the dangers of substance abuse and strengthen their decision-making skills, which are essential to the maturation process.²

This article will address the role of institutional policies in preventing substance use, the way students' percep-

tions shape their adherence to policies, and the role of redemptive values in policy implementation. Attention will also be given to how to craft school policies based on the authors' research regarding the factors that protect and serve as a buffer against substance use.

State and country laws, community and religious standards, and type of institution influence the manner in which substance-use policies are implemented and upheld. Seventh-day Adventist and other conservative religious institutions of higher education characteristically maintain a zero-tolerance

BY JUDITH BERNARD FISHER and OLIVIA TITUS

policy for substance use both on and off campus, while state-funded public schools and other secular institutions often adopt more lenient measures, such as a “drink responsibly” approach, which does not serve as a deterrent for a great majority of college students.

The Unique Position of Substance-Free Faith-Based Institutions

Faith-based institutions, whose student behavioral expectations are generally more precisely defined than the expectations of secular institutions, have a greater challenge in developing and

sities allow legal substances to be used or stored in on-campus housing, although more recently, most higher education institutions in the U.S. prohibit the use of tobacco on their campuses.³

It is interesting to note that many secular universities now offer housing designated as substance-free. These facilities do not permit alcohol, tobacco, smokeless tobacco, and other drugs, whether legal or illegal, to be stored or used on their premises. Most of these substance-free buildings also prohibit residents from being on-site while under the influence, and do not allow any

versity is likely to face more severe consequences, including dismissal.⁵

Seventh-day Adventist institutions of higher education have carefully crafted their policies to clearly communicate that the school cares about its students in a holistic way that extends beyond concerns about substance abuse, by promoting a healthy lifestyle that encompasses mind, body, and soul. More specifically, Adventist institutions adopt a whole-person development approach, with most promoting residential campus living where students are nurtured mentally, physically, emotionally, spiritually, and socially. Adult commuting students who drink socially off campus with their family and friends create a special challenge for student-life administrators. When there is a high concentration of those enrollees, administrators may need to create prevention initiatives geared toward older students.

Our schools’ policies on substance use must take into consideration students’ developmental stages, while incorporating both a disciplinary and a redemptive component. The policies should mesh with the church’s belief system and embrace concepts of accountability and grace. This clarity of intent by administrators, as well as an individualized approach to student care and a student population that largely adheres to a religious lifestyle, appears to have contributed significantly to lower substance-use rates on our campuses, according to studies that have been done regarding substance abuse by students.⁶

Student Development and Decision Making

School psychologist and researcher Arthur Chickering, whose identity-development model is widely regarded as a comprehensive description of the psychosocial maturation of college students, provides great insight on how college students gradually progress from focusing on achieving competence to striving for interdependence and integrity. Chickering identifies seven vectors or developmental milestones that affect decision making in college students.⁷ His theory suggests that as students achieve intellectual competence,



articulating policies. Policies at those colleges and universities need to not only reflect institutional expectations, but also clearly communicate to students the distinctive beliefs promoted by the institution.

Whereas secular higher education institutions generally establish policies banning illegal drugs from their campuses as well as the illegal use of alcohol and tobacco by minors, faith-based institutions typically prohibit students from using alcohol and other drugs both on and off campus property. With an older student body no longer restrained by age-of-use laws, many secular univer-

items, even in private residences, that may promote substance use, such as posters, clothing, and other paraphernalia.⁴ The policies at these substance-free housing facilities are often similar to those at religious universities, but enforcement may be quite different. A secular university may require a student violating school policies in a substance-free campus residence hall to transfer to a different building, or resolve the issue in some other non-punitive manner; whereas the student who breaks the rules at a substance-free religious uni-

they draw from a larger frame of reference and a wider scope of perspectives, which enables them to derive greater meaning from their life experiences.⁸ However, this emerging enlightenment often stimulates a strong desire to explore and test established boundaries in a quest for self-definition.

During this stage of development, young people also pursue greater autonomy and self-sufficiency, and seek to assert their independence. Their decision making is often characterized by a determination to clearly declare themselves as emerging adults, asserting their newfound independence through an embrace of new roles and lifestyles.

Meanwhile, school administrators must create and enforce policies that send a consistent message about institutional expectations. Well-crafted policies attempt to erect boundaries, provide structure, and foster a sense of responsibility and accountability. These guidelines not only describe the school's expectations, but also help to shape the campus culture.⁹

Student Usage, Policies, and Response

How effective are current substance-use policies? And what kind of policies can schools develop to promote a healthy lifestyle and prevent the negative consequences of substance use? Smoking rates among the general adult population in the U.S. have declined steadily over the past decades and are currently estimated by the Centers for Disease Control and Prevention at 18 percent. Increased public education and greater awareness on the dangers of tobacco may have helped to curb the incidence of smoking in America.¹⁰ Studies have found that students who attend a school with policies banning the use of tobacco on campus property have lower smoking rates than students who attend a school that allows them to smoke on campus.¹¹ It appears that these smoke-free campus policies, reinforced by anti-smoking campaigns, have raised the levels of awareness of U.S. students, strengthening prevention efforts.

By contrast, the use of alcohol on col-

lege campuses continues to be alarmingly high. Most U.S. campaigns focus on harm reduction, rather than abstinence, with their "drink responsibly in moderation" messages. National campaigns that stress harm reduction may cause students to react negatively toward more restrictive campus policies.

A review of the literature clearly establishes the significant role of peers in student development and decision making.¹² As students seek greater autonomy, moving toward independence, and attempting to establish an identity, they often adopt behaviors they perceive as accepted by their peers. Consequently, if they think that their peers are drinking, they are more likely to consume alcohol.¹³ Peer influence is also a significant factor in students' feeling at greater liberty to use substances when off campus, although they may heed their schools' guidelines and refrain from use while on campus.¹⁴

Although students on Adventist campuses report significantly lower rates of alcohol use than their counterparts at both secular and other religious schools, as well as lower rates of other substance use, some of our youth are using dangerous substances.¹⁵ It is interesting to note that students surveyed at Adventist colleges and universities confirm that alcohol use occurs primarily off campus, with significantly lower rates observed on campus.¹⁶ The presence of trained residence-hall staff and a strong partnership between academic and student-life professionals may contribute to these lower on-campus rates.

In 2005, 43 percent of public college students in the United States reported heavy intermittent drinking.¹⁷ One might think this is because a number of students reach the legal drinking age while enrolled in higher education, but levels of underage drinking are almost as high.¹⁸ Many students regard drinking as a normal college experience.¹⁹ College-age students' generally positive view of substance use may also be a contributing factor.²⁰ Becoming a part of the drinking culture is viewed by many young people as a sign of their emerging independence from restrictive parental norms, as well as a way of gaining peer acceptance.

Students surveyed at both public and religious universities perceive substance use by their classmates to be significantly higher than the actual usage levels.²¹ The idea that "everyone is doing it" is potentially one of the greater threats to policy and recovery programs because of the large number of students who hold that opinion and also regularly use substances. Drinking serves as a gateway to many other risky behaviors, including the use of other drugs, increased sexual encounters, and increased injuries.²²

In 2001, a Harvard School of Public Health college alcohol-use study led by Henry Wechsler surveyed students at 119 four-year colleges in 38 U.S. states and the District of Columbia. The students in that study represented a national cross-section, with 13 percent attending religiously affiliated colleges. This study concluded that the mere presence of formal substance-use policies may reduce students' substance use in a location where they might be caught, such as on campus, but it did not seem to have any significant effect on whether or not students used the substance at all.²³ The students surveyed were asked to identify policies that they felt were helpful in reducing alcohol consumption on their campuses. Among those they cited were *clarifying alcohol rules, providing more alcohol-free recreational and cultural opportunities, and enforcing policies more strictly*. The researchers concluded that students need to have a clear awareness of school policies, including well-defined disciplinary consequences and rehabilitative procedures.

More than half of the students in that study reported experiencing secondhand effects of alcohol use, which negatively affected their sleep, their study life, and their overall feeling of wellbeing. The Harvard study's conclusions about secondhand effects correlate well with a 2005 study of university freshmen who participated in a lottery roommate assignment project. Some students lived in substance-free housing, while others were assigned roommates with various drinking habits. At the end of the term, freshmen students

Studies have shown that students who believe that their peers have a negative opinion of substance policies are more likely to disregard those policies. If they believe their peers are drinking, they are more likely to do so as well.

assigned to a roommate who drank prior to college had GPAs that had declined by more than a quarter point.²⁴ These studies highlight the importance of using peer influence in promoting healthier lifestyles.

The Harvard research results are consistent with many other studies exploring substance use by college students. Borsari, et al.'s 2007 study on predictors of alcohol use among college freshmen²⁵ also emphasized the need for clear and consistently enforced policies in reducing substance use, as well as promoting a culture of health and wellness. The study further noted the importance of creating policies and prevention programs with specific student characteristics in mind. Some of these factors include developmentally maturing freshmen students with higher levels of sensation-seeking behaviors²⁶; male students, who tend to drink at higher rates than female students²⁷; and Anglo-American students, who report drinking at higher rates than minority students.²⁸

The Borsari study²⁹ identified policies and prevention measures that may mitigate the use of alcohol among first-year students, such as increased opportunities for developing intrinsic religiosity, an internally motivated approach to living and making personal decisions based

on adopted religious values; partnering with parents, whose influence continues to impact their children's decision making and moderate peer influence; offering strategic screening opportunities to identify students in need of help, especially at the beginning of the academic year; creating service-learning experiences, which provide students with meaningful volunteer opportunities and reduce unstructured leisure time; and disseminating accurate information to counteract misperceptions about the prevalence of student substance use.

Studies have shown that students who believe that their peers have a negative opinion of substance policies are more likely to disregard those policies. If they believe their peers are drinking, they are more likely to do so as well.³⁰ These studies suggest that social norm campaigns can have a significant effect on policy support, and possibly even on off-campus substance use.³¹

In preparing to write this article, the authors analyzed substance-use policies from online student handbooks of 13 Seventh-day Adventist colleges and universities in North America and 10 more in other locations, including Mexico, Europe, and Australia, which provided a fairly accurate representa-

tion of the church's higher education system worldwide. It was evident from the results of this survey that the substance-use policies of our colleges send a clear message of abstinence. As a whole, these schools have adopted substance-use policies that incorporate a graduated response plan of action in order to account for individual student needs. Disciplinary measures typically included the following actions:

1. *In-house suspension* – Typically consists of one or more of the following: citizenship warning; on-campus suspension, which often entails restricted social activities for a determined time frame; referral for assessment and professional help; and, for first-time offenders, enrollment in a psycho-educational group experience, which provides education within a therapeutic context, often offered through the institution's counseling services.

2. *Major suspension* – This option is typically reserved for significant problems, including violations related to illegal substances. The student is often required to enter into an agreement to complete either a drug awareness or rehabilitation program (usually off campus), after which his or her enrollment status may be reviewed. The suspension may result in the student's banishment from school property and all campus activities for one or more academic terms. This disciplinary measure is generally implemented after consultation with parents and community professionals.

3. *Expulsion* – At this stage, students usually have engaged in illegal activities that violate school guidelines, or they may be repeat offenders. All the institutions whose policies were reviewed include this option. Although great care and attention are given to emphasize the redemptive nature of the policies, students ultimately have the choice whether to follow the rules and embrace the healthy culture of care promoted throughout Adventist campuses worldwide.

Most of the colleges and universities surveyed also include in their policies an emphasis on substance-use education, which is often offered through the university's counseling services. Avondale Adventist University in Australia in-

cludes in its student handbook a section on rehabilitative actions that include psychological testing and counseling, pastoral counseling, and education through reading, audio-visual presentations, research, and lectures.³²

Several institutions also maintain an active prevention program. Andrews University's prevention efforts include presentations on targeted topics throughout each semester, health and wellness fairs, substance-abuse screenings, professional counseling, and psycho-educational group explorations where students participate in a class-like experience led by counselors.

Students are also encouraged to voluntarily seek professional help from a counselor through the institution's counseling services or from the faculty, residence-hall deans, and campus chaplains. Students are also strongly urged to reach out for help by being given the incentive that if they do so voluntarily and are faithful to the recovery plan designed for their rehabilitation, they will not face disciplinary action by the university. However, it remains a challenge to find ways to encourage students to seek help in spite of their fear.

The university works closely with students faced with substance use or abuse challenges to offer restorative opportunities even when the policy calls for separation from the campus. Even suspension is regarded as opening restorative paths that will enable the student to eventually achieve wholeness, return to the academic environment, and ultimately achieve God's purpose for his or her life. The restorative process is an integral part of school policies, and the redemptive dimension of the learning environment is clearly a priority.

The church's U.S. college and university campuses, which have a greater concentration of adult students, are subject to state and federal guidelines with respect to parental notification. These laws, which include the federal Family Educational Rights and Privacy Act (FERPA) guidelines,³³ provide parameters within which parents of adult students can be involved in disciplinary and redemptive interventions. When



Adventist school drug-prevention efforts include psycho-educational groups led by professional counselors.

young adult students (ages 18 to 21) violate campus guidelines with respect to substance use, FERPA laws permit disclosure to parents. However, the older adult learner (over the age of 21) usually must make his or her own decisions, and may choose not to share pertinent information with family.

Most campuses collaborate with the local police force regarding unscheduled searches, with or without canine assistance, especially in residence halls. These interventions provide an extra layer of support to the schools' efforts at maintaining drug-free campuses.

Consistent with our commitment to Seventh-day Adventist education, the crafting of policies that reflect our fundamental belief of redemption through grace is a key element in modeling the forgiveness of Christ and the emphasis on both physical and emotional recovery.

Reducing At-Risk Behavior

A large number of U.S. studies focus on factors that foster the development of resiliency in adolescents and young adults, identifying conditions that will reduce the effects of risk. Students who experience protective factors are likely

to demonstrate greater resiliency despite their risk exposure. Benard³⁴ identified three protective factors with respect to risk behaviors—caring and supportive environments, high expectations, and opportunities for meaningful participation—from among the many researched factors associated with student resiliency.

Since the early 1980s, the Institute for Prevention of Addictions at Andrews University has conducted a quinquennial risk-behaviors study that focuses on identifying protective factors for college-age students. Although the study has yielded comparable findings throughout the years, a recent investigation emphasized two of the protective factors found in Benard's study³⁵:

- **Spiritual Commitment.** Students with a meaningful relationship with God, who attend Sabbath school and church services, and have a meaningful prayer life have lower rates of alcohol use. In fact, the greatest correlation with reduced alcohol use was weekly attendance at Sabbath school. This stronger correlation may be explained as follows: Students attending Sabbath school may embrace a culture that includes a strong

commitment to an active spiritual life, thus significantly reducing behaviors that interfere with those activities. In addition, students whose religious commitment led to their engaging in community service also had lower rates of alcohol use. When students are able to actively express their faith through concrete activities such as giving of their time and energy in community service, their religious commitment becomes more intrinsic, and they are less likely to use alcohol.

• **Caring and Supportive Environment.** Students who have a close relationship with their parents, who feel that they can openly communicate with them, and who have strong family bonds also have reduced rates of alcohol use. Family dinner moments seem to be especially critical, providing young adults with opportunities to connect with their parents and other family members in a relaxed setting that facilitates the sharing of feelings and daily challenges. Bernard's study also suggests that students in mentoring relationships with caring and supportive teachers have lower rates of alcohol use. Since a great number of students in our schools live on residential campuses during the school year, interacting with faculty and staff on a daily basis may enable them to remain connected with more experienced adults even as they seek to become more autonomous.

• **Commitment to Personal Health.** Students who have a commitment to healthy living are keenly aware of the health message associated with their faith and are concerned about their health as well as that of their offspring, have lower rates of alcohol use.

Clearly, a significant correlation exists between the lower rates of students' substance use on Adventist campuses of higher education and the protective factors identified in empirical studies. The seamless integration of religious programming with academic life promotes a culture of spiritual nurturing in which students are given a plethora of opportunities to strengthen their spiritual commitment through actively participating in uplifting activities such as church services, residence-hall worship, chapels, volunteer service oppor-

tunities, Sabbath school gatherings, and vespers. Emphasis on prayer and personal devotion further enhances the potential for a deeper one-on-one connection with God, thus providing a more substantial buffer against risk behaviors like substance use.

Moreover, smaller college campus settings, with less-crowded classrooms and greater opportunities for teacher-student connections, promote a culture of care and mentoring relationships, foster a sense of community and genuine support, and contribute significantly to students' decisions to adopt a lifestyle free of substance use. Greater awareness of the church's health message through education and interactive explorations offers an extra layer of protection as emerging young adults, still establishing their personal identity, are exposed to the tenets of Seventh-day Adventist values in a manner that allows them to embrace those principles and assimilate them into their personal lives.

Although college students at Seventh-day Adventist institutions experiment with tobacco, alcohol, and other drugs at significantly lower rates than students on secular campuses and even at other faith-based institutions,³⁶ policies aimed at further reducing the rate of substance use at Adventist colleges and universities must draw from the identified protective factors to provide students with an academic milieu where expectations and prevention programs are unmistakably interwoven in campus life. As school administrators seek to strengthen their policies in their quest to promote a culture of healthy and wholesome lifestyle, the following considerations may be helpful:

1. *Create an attractive spiritual culture built around the worship experience.* This will encourage greater student participation in church and other religious services, while encouraging them to also develop a stronger intrinsic religious experience, which will foster in them a strong desire to embrace a lifestyle compatible with their religious values.

2. *Develop and expand mentoring relationships involving faculty, staff, church community, and alumni, especially for first-year college students.*³⁷

3. *Develop campus-wide awareness programs, giving all students the opportunity to actively participate in small forums and group experiences.* This will enable them to process information on the impact of substance use and the benefits of embracing a healthy lifestyle.

4. *Offer peer-led programming using student leaders committed to a healthy lifestyle who have been trained to effectively connect with their peers.*

5. *Engage in marketing campaigns, with the objective of providing students with accurate information in regard to the levels of substance use by their peers.* As information is disseminated across campus through various media and opportunities are created for student discussions and explorations, students are likely to develop more positive views of campus policies.

6. *While emphasizing redemptive values, create policies that clearly communicate institutional expectations, and enforce them consistently.*

As administrators of higher education develop a vision of the culture they wish to nurture on their campus, they will also need to craft policies to achieve those objectives. Clearly articulated policies provide guidance that helps students achieve clarity of purpose and consistency within an environment conducive to academic learning and a healthy lifestyle. ☞



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Protecting Youth From

HEALTH RISK BEHAVIORS

Between the ages of 13 and 25, youth go through major psychosocial changes—forming their own identity, becoming independent of their parents, establishing intimate friendships and relationships, struggling with academic goals, and eventually starting a career and even a family.¹ During this time, they can experience difficulties adjusting to these changes and the stresses that accompany them, and as a result, make behavioral choices that are dangerous and even life destroying. To avoid destructive choices, young people need support from significant others throughout this stage of their lives.² What can educators, parents, and church and community leaders do to help prevent dangerous health-risk behaviors in youth?

This article will examine the extent and consequences of two major health-risk behaviors among youth—adolescent sexual activity and alcohol consumption³—and focus on factors that may protect young people from such behaviors. We will review and summarize the available research, including our own, that has been found to protect youth from health-risk behaviors. In addition, the article will also examine what parents, the faith community, and church schools can do to play an active role in the prevention of these behaviors.

Young people may consider risk-taking as normal, but some risks like excessive alcohol consumption and sexual promiscuity can lead to lifelong social problems, severe health risk, and even death.⁴ Not only do these behaviors affect the risk taker, but also his or her family, school, and community. Because these behaviors negatively affect students' ability to do quality academic work, schools inevitably become involved with discipline and/or providing counseling services for these individuals. When young people engage in health-risk behaviors such as alcohol abuse, this can also increase the amount of negative peer group influence in the school and jeopardize the safety of other students.

Youth Sexual Behaviors

Statistics indicate that a majority of young people today indulge in premarital sex, partly because of the modern trend of postponing marriage to the late 20s to early 30s for economic and/or educational reasons.⁵ In the U.S., for example, 70 percent of youth have had sex by their 19th birthday. Similar sexual-activity rates occur in European cultures.⁶ In fact, the World Health Organization (WHO) has estimated that a majority of the world's youth are sexually active in middle adolescence.⁷ A majority of unmarried U.S. college-age students are sexually

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active, with about 71 percent saying they had sex in the 12 months prior to the survey, which was conducted in 2012.⁸ The increasing time gap between first sexual intercourse and marriage often means that young people have a large number of sex partners, which exposes them to a variety of risks.

Risky sexual behaviors include unprotected sex, having sex while under the influence of alcohol and/or drugs, and multiple and/or unfamiliar partners.⁹ Unintended pregnancy and the spread of a variety of sexually transmitted diseases are common outcomes. The United States has the highest rate of teen pregnancy of any developed country.¹⁰ According to the Centers for Disease Control and Prevention,¹¹ in 2009, the number of births to mothers aged 15-19 was 34.2 per 1,000 women in the U.S. Compare this with the rate of 26 per 1,000 in the United Kingdom, which has the highest rate of teen pregnancy in Western Europe. According to a 2010 WHO report, girls age 15 to 19 give birth to 16 million babies each year, about 95 percent of whom are born in the economically developing world. On a global basis, the issue of teen pregnancy is complex because of cultural values and early marriage. However, WHO¹² notes that teen mothers are four times more likely to die than women in their 20s, and the death rate for newborn babies of teen mothers is five times that for women in their 20s.¹³ Even with the abundance of teen pregnancy prevention strategies and programs implemented in many countries worldwide, there appears to be little evidence of widespread success.

Teen sex also increases the risk of contracting a variety of diseases. More than 19 million new cases of Sexually Transmitted Infections (STI), apart from HIV, occur each year in the United States, with 48 percent of victims being between the ages of 15 and 24.¹⁴ On a global basis, almost 500 million new STI infections (apart from HIV) are diagnosed each year,¹⁵ with 15- to 19-year-olds being the second-highest incidence group.¹⁶ Although the U.S. Centers for Disease Control reported that the total number of new HIV cases decreased in 2005 compared with the figures for 2001, new cases for 15- to 24-year-olds have shown an increase. UNAIDS reports that 40 percent of all new HIV infections occur among 15- to 24-year-olds.¹⁷ Among the U.S. population, individuals between the ages of 15 and 29 comprised 39 percent of all new HIV infections in 2009.¹⁸

Alcohol Consumption Among Youth

Alcohol abuse is the leading public-health hazard among high school- and college-age youth worldwide.¹⁹ In the United States, young people age 12 to 20 account for 11 percent of all alcohol consumption, and within this group, 90 percent binge drink on multiple occasions.²⁰ Experimentation with alcohol and other drugs, which frequently starts in adolescent years, often expands during the college years.²¹ A U.S. college-age research sample showed that 73-81 percent drank regularly, with about one-third meeting the criteria for binge drinking in the previous month.²² Unfortunately, many college students believe heavy drinking is a part of college culture.²³ Not only is consuming alcohol considered normal, but often the amount consumed increases during college years,²⁴ making these years a peak time for substance experimentation and abuse.²⁵ According to WHO,²⁶ youth alcohol use is a primary cause of vio-

lence—from assault to rape to murder—as well as a wide variety of other problems ranging from STI to fetal alcohol syndrome, accidents, and suicide attempts.

These behaviors do not occur in isolation; there is a connection between sexual behavior and alcohol use. Alcohol use decreases inhibition and increases sexual risk taking.²⁷ Youth under the influence of alcohol are more likely to take sexual risks than those who are sober.²⁸

Protective Factors

Education and awareness are insufficient to deter youth from participating in these risky behaviors.²⁹ Research has identified several protective factors, such as individual personality characteristics, religion, parental relationships, adult mentoring, school involvement, and service learning.

- **Individual personality characteristics.** In a well-known study on the island of Kauai, Hawaii, a team of researchers conducted a longitudinal study on subjects from age 1 to age 40. They concluded that children who received positive responses from caregivers for their attitudes or behavior were more responsive to adults, developed increased motor and intellectual skills, and had improved self-concept.³⁰ Children who received more attention reacted positively to their caregivers, a trend that continued throughout adolescence.³¹ These studies show how important it is to comment positively to youth and to recognize genuinely and enthusiastically their successes and strengths. Young people who receive positive reinforcement from their teachers and other adults will also learn to be affirming when their turn comes as caregivers (parents and teachers).

- **Religion as protection.** Horton, et al.³² found an inverse relationship between religious attendance and health-risk behaviors among youth in the United States. Another study found that the most common reason teens (age 13-18) gave for not having sex was that it was against their religion or morals.³³ Religiosity also positively shapes choices about alcohol use for youth.³⁴ A study of at-risk youth in Hawaii³⁵ found that even troubled young people could experience positive outcomes when they joined a faith that provides structure and a sense of community.

Another study of young adults at state colleges and religious colleges in the U.S. found that the state schools had 27 times more heavy alcohol users and nine times more moderate users than religious colleges.³⁶ A study done on a Seventh-day Adventist college campus found a statistically significant inverse relationship between vaginal sex and alcohol use in the 12 months prior to the survey among those who were religious (attending church services, having personal prayer, having family worship, and feeling “God wants me to take care of my body”) versus those who were not.³⁷ This means that the more the college students participated in these religious behaviors and felt that God wanted them to take care of their bodies, the less likely they were to have had sex or consumed alcohol in the 12 months prior to the survey. Anything we can do to strengthen faith will be highly protective.

- **Parents as protection.** Parents have significant influence on their children’s health-risk behaviors. International research on a wide variety of populations has found that youth who de-

scribe their overall relationship with both parents as great are significantly less likely to use alcohol or be sexually active.³⁸ Parental influence occurs through monitoring, attachment, parenting style, communication, and involvement. Such monitoring during the adolescent years has been associated with less alcohol and drug use, which indirectly helps to curb high-risk drinking in the college years.³⁹ According to Arria and colleagues, the monitoring parents provide throughout the teen years leads to less alcohol and drug use during that time in the child's development and continues to reduce alcohol use through the college years. The opposite is also true: Alcohol and drug-use behaviors increase when there is less parental supervision.⁴⁰ In her study of several Caribbean countries, Flowers found that parental bonding and monitoring had a primary effect of reducing sexual-risk behavior and a secondary effect



relating to fewer sex partners and higher rates of condom use for those young people who did become sexually active.⁴¹

Attachment is an important aspect of parental influence. A longitudinal study in the U.S. measuring parental involvement and alcohol-related risks during the first year of college found that greater maternal attachment was associated with lower alcohol risk.⁴² Weaker attachment to the mother was associated with greater alcohol risk taking and with greater health and behavioral consequences by the end of the year. The male students with weaker attachments to parents had more alcohol-related consequences than males or females with stronger attachments.⁴³

Parenting style also has an influence on alcohol use by college students. A study of U.S. college students revealed some gender differences in those who perceived their parents to be permissive. Permissive parenting was associated with less monitoring and a higher incidence of impulsive behaviors, which were linked with more alcohol-related problems.⁴⁴ Authorita-

tive parenting was linked with more monitoring and fewer impulsive behaviors associated with risky alcohol-related behavior by young people.⁴⁵ Authoritative parenting is defined as parents being firm but warm, and setting clear behavioral expectation boundaries. Such parents encourage their adolescent children to be more independent, but still maintain rules and limits. They have open discussions with their children and listen to their point of view, but retain ultimate authority.⁴⁶

Clear communication of parental expectations about substance use is also protective. In a study of how parents of first-year college students in the U.S. communicate regarding substance use, the majority reported that their parents told them to just use their own judgment about alcohol and drug use. However, this advice was found to be generally ineffective and led to high levels of substance use.⁴⁷ Miller-Day⁴⁸ recommends

at least some parental engagement in order to implant anti-alcohol/drug attitudes. A clearly stated no-tolerance rule by parents inhibited all forms of drug use in the past 30 days for first-year college students. Opposite-sex parent/child relationships had a stronger association between parenting style and alcohol-risk behavior.⁴⁹

Feeling that parents care for them is also important to youth. Youth who postpone sexual activity have greater support, supervision, and parental involvement in their lives.⁵⁰ Various studies of first-year college students in the U.S. have found that students who perceived themselves as having high levels of parental and peer awareness and caring engaged in less sexual activity.⁵¹ A feeling of bonding with parents had a statistically significant

inverse relationship with alcohol use in 7th- to 9th-graders in a U.S. study.⁵² At one Seventh-day Adventist university in the U.S. with an international student population, positive parental involvement and open communication had a statistically significant inverse relationship with alcohol use and sexual behavior in the 12 months prior to the study.⁵³

• **Mentoring by other responsible adults also offers protection.** Some youth do not have stable relationships with their parents, but that does not inevitably predict high-risk behavior. In such cases, other people can play a major protective role (teachers, youth leaders, etc.). Having a close bond with at least one emotionally stable, competent adult who is sensitive to the young person's needs has been found to be protective for at-risk youth.⁵⁴ A study with a nationally representative sample of U.S. adolescents (ages 13-18) revealed that those who had mentors were more likely to finish high school and college, had higher self-esteem, and participated in healthy behaviors (including using

birth control if they were sexually active).⁵⁵ Resilient youth are good at recruiting substitute caregivers to provide them the support they need to survive life's difficulties.⁵⁶ Mentors, who can be any caring adult including teachers, ministers, youth leaders, and neighbors, facilitate resilience by giving youth positive role models to follow, engaging with them in individual and group activities, teaching them skills for success and monitoring their activities, and by showing they care and that the youth matters to them.⁵⁷ Schools can solicit mature, caring members of the faith community to mentor struggling students.

• **School involvement as protection.** Feeling connected to school can play a role in developing positive attributes in youth,



Researchers found that students who engaged in community service as a part of their Christian commitment were significantly less likely to engage in sexual activities or substance use.

particularly self-esteem.⁵⁸ In a nationally representative sample of adolescents (ages 13-18) in the United States, school connectedness was found to decrease substance use and the age of becoming sexually active.⁵⁹ Even after-school activities can have a protective influence. In many cases, such programs (and the responsible adults who lead them) provide primary support for youth.⁶⁰ Such programs do require adequate supervision, without which youth risk behavior may increase.⁶¹

• **Service learning as protection.** Service learning has also been found to be a protective guard against youthful participation in a wide variety of health-risk behaviors. A majority of schools in the U.S. require a certain number of volunteer hours as part of the curriculum.⁶² Surveys have found that almost 70 percent of U.S. K-12 schools have students engage in some form of community service.⁶³ According to Zeldin,⁶⁴ the decision-making involved in being engaged with service learning is associated with several positive outcomes: First, when service learning is integrated with educational objectives, youth are challenged with making decisions about how to serve their community. Second, youth can be encouraged to be reflective

during and after classroom instruction, to think about their new knowledge and skills and how to apply them within the community. However, these positive outcomes occur only as the result of intentional planning by school administrators and teachers. This should include assignments for students to prepare reflective papers, and debriefing exercises by teachers and/or community service leaders, to ensure that students reflect on and process their service experience.

Kirby⁶⁵ found a wide variety of positive results when youth engage in community service. These include lower rates of teen pregnancy and other problem behaviors, as well as an increase in pro-social behaviors. Nelson and Eckstein⁶⁶ point out that service learning benefits both the student and the community and also provides youth with an opportunity to think about and discuss their experiences. Integrating service learning into the academic curricula of high school and college provides an excellent opportunity for young people to learn positive values while enriching their skills and competencies and reducing their engagement in high-risk behavior. Amanda Moore McBride and her colleagues⁶⁷ have documented the international impact of service-learning initiatives that positively influenced youth pro-social behavior, and thus reduced high-risk behaviors.

Service learning is consistent with the core of Christianity. The judgment scene in Matthew 25 indicates that God judges His followers in terms of their positive impact on the lives of others in need. In the risk-behavior study of undergraduate and graduate students at a U. S. Adventist university with a high proportion of international students,⁶⁸ researchers found that

students who engaged in community service as a part of their Christian commitment were significantly less likely to engage in sexual activities or substance use. Quotes from students who took the Philosophy of Service class (a required general-education course that included academic material as well as community service) at Andrews University in the fall of 2012 revealed how the class helped them personally and motivated them to serve.

"I serve because I love Christ!"

"Serving benefits not only the people being helped but the person helping as well. This course helped me realize the importance of including service in my life."

"This class made me realize how much service is needed in the world, and the class inspired me to be a better person."

"I realize now how many opportunities I have missed to serve others. Now I know how to look for them."

Discussion and Recommendations

Adults can make a positive difference in young people's lives. This starts with parents being involved, caring, supportive, supervising, and communicating clear messages regarding health-

risk behaviors. Ideally, parental involvement occurs in combination with mentoring by other responsible adults—pastors, teachers, extended family, caring church members, and youth leaders. When this occurs, there is a strong positive impact on youth decision making. These adults can provide positive role models and nurturing support.

Schools are an especially important factor in shaping young people's lives because they provide structure, caring adults, opportunities to develop skills and confidence, a sense of community, and adult-supervised in- and after-school activities. Schools can also provide service-learning opportunities. Such strategies are especially effective when

- They are led by adults who play a mentoring role;
- They meet an actual community need;
- There is coordination between the school and the service organization;
- Students are required to reflect on their service activities, have opportunities to use their newly acquired educational skills, and a chance to practice service outside of the classroom; and
- The service-learning curriculum helps to foster in students a lifelong commitment to service.⁷⁰

Although the many protective ideas we have discussed in this article have strong empirical backing, no program comes with a 100-percent guarantee. But the core point is that we must never give up on our youth. God never gives up on His people and welcomes back all those who return to Him. As He does not give up on us, it is important for us as parents and teachers to never give up on our youth! ☞



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Yielding to Temptation:

HOW SHOULD WE DEAL WITH STUDENTS

Who Try Alcohol or Drugs?

The teen and young adult years can be challenging for both students and teachers. Even students who come from the best Christian homes will struggle to understand and integrate their personal, social, and sexual identities. Powerful internal struggles occur as young people move toward independence in their thinking, their relationships, and their choice of future occupations. The desire to fit in and to belong can be overwhelming, sometimes leading young people to try whatever their friends are doing. During this transitional time

when they are no longer children but not yet adults, experimentation with adult behaviors is fairly common. Such experimentation may include trying alcohol, cigarettes, or marijuana at a party or in the back seat of a car. Some students will get drunk or high; others will become sexually active (sometimes while drunk or high). For a relative few, such behaviors will lead to catastrophic consequences, including serious injury and death.¹

Mixed messages from adults can add to the confusion of teens and young adults, particularly those attending Seventh-day Adventist schools. Teachers often set firm boundaries on

teen behaviors, while at the same time encouraging them to think and act independently. Youth hear messages such as “grow up, but don’t challenge the rules,” which can, if not handled wisely, lead to resentment and open rebellion. Given the strong Adventist prohibitions against drug and alcohol use, it is likely that even casual experimentation with these substances is perceived by school officials and other church members as even more rebellious and risky for Adventist youth than for young people in secular settings.

How (and when) should teachers discuss issues relating to alcohol and

BY CURTIS J. VANDERWAAL, MARGARET D. HOWELL,
DESIREE DAVIS, and ANDREA R. OPEL

drugs with their students? How can they tell the difference between casual experimentation and more serious problems with drugs or alcohol? What should they do once they discover that a student is using these substances? The main purposes of this article are to properly identify whether a student is using addictive substances and then determine how best to deal with that use.² This begins with an understanding of who is using what substances.

Alcohol and Marijuana Use Among High School and College Students

This article will focus mainly on two substances—alcohol and marijuana, which account for most of the experimentation and subsequent problems experienced by Adventist students and are the most likely to be a problem in denominational school settings.³ We will first describe current use and abuse rates for these substances among American young people and then shift to known rates among Adventist adults in the North American Division and students at Adventist colleges, the only groups for whom published data currently exist on Adventist substance use.

The U.S. Government-sponsored Monitoring the Future study found that, in 2011, the rates of 8th, 10th, and 12th graders across the U.S. who reported drinking alcohol in the past year was 27 percent, 50 percent, and 64 percent, respectively, while rates in the past 30 days were 11 percent, 28 percent, and 42 percent. Rates of marijuana use in the past year by students at these grade levels were 13 percent, 29 percent, and 36 percent, while rates in the past 30 days before the survey were 7 percent, 17 percent and 23 percent.⁴

Compared to these figures for high school students, use of these substances is even more prevalent among students attending secular colleges in the United States. In 2011, 77 percent of full-time college students reported drinking alcohol in the past year, 61 percent said they were current drinkers (within the past 30 days), 39 percent admitted to binge drinking (usually drinking to get

drunk), and 14 percent classified themselves as heavy drinkers (drinking 10 or more drinks daily or almost daily). About a third of all college students (33 percent) said they had used marijuana in the past year; 19 percent admitted to using in the past 30 days.⁵

Alcohol and Marijuana Use Among Adults and Youth in the Church

While Adventist Church leaders would sometimes prefer to deny that alcohol and drugs are a problem in local churches and schools, the facts say otherwise. In 1988, the North American Division (NAD) and the American Health and Temperance Society commissioned the first and only study regarding the incidence of alcohol use and dependence among adult members in the NAD.⁶ The study found that 14.1 percent of these adults agreed with this statement: “In my congregation, using alcohol is socially acceptable.” More than 12 percent of those surveyed said that they had used alcohol (mostly wine) in the past year. Of those Adventists who said they had drunk wine, 64 percent said they used it one to three times a month, with an additional 15.2 percent using it weekly; 7.6 percent indicated near-daily use.

In the same NAD survey, more than 66 percent of the respondents expressed concern that youth in their church were drinking alcohol. This concern has some basis in reality: A 1996 survey conducted by the Institute for Prevention of Addictions, a General Conference-sponsored research and education organization, found that almost 40 percent of students in a cross-section of eight Adventist colleges and universities in the United States had used alcohol within the past year; almost 10 percent had used marijuana during that same time period.⁷

However, a more recent study⁸ comparing trends in the use of alcohol and other drug-use trends between an Adventist university and national college data sets revealed two pieces of good news: First, researchers found that although attending an Adventist university does not completely prevent substance use and abuse, the last-year rates

of alcohol use were about half of those reported at secular colleges and universities (43 percent vs. 81 percent). Better yet, binge drinking was about four-fifths less at the Adventist university compared to secular universities (7.5 percent vs. 41.1 percent). The same ongoing Adventist university study found that less than half of Adventist students had tried a drink even once. Almost one-fifth had smoked cigarettes once or twice in their lifetime and decided never to smoke again, and fewer than one percent said they smoked tobacco daily. Fewer than 10 percent said they drank alcohol occasionally at parties. Only three percent reported that they drank three or more times weekly.⁹

Second, the rates of tobacco, illegal drug, and alcohol use at the same university have remained roughly steady over 25 years, leading researchers to conclude that college students there have probably not increased their use of these substances through the years. Analyses have shown that religious beliefs and behaviors, combined with the prohibition of alcohol on campus, contribute greatly to the lower rates of substance abuse in Adventist schools and colleges.

While we can feel gratified that alcohol and drug use rates at one Adventist college with a very diverse and international population are half or less than half of those of their peers in non-Adventist settings, many of our students *are* using alcohol or marijuana on a regular basis, and some are experiencing severe consequences because of this use.

Why Adolescents Begin and Continue to Use Drugs

Teens and young adults try alcohol and marijuana, and continue to use them, for a number of different reasons. This section discusses the most common reasons.

To Fit in

One of the life tasks for adolescents is to become comfortable with their personal, social, and sexual identities as they prepare to become adults. Fitting in with peers, while at the same time



becoming independent, are critical concerns at this point in a teen's life. Unfortunately, society is flooded with messages that encourage young people to use alcohol, tobacco, and other dangerous substances to enhance their personal, sexual, and social lives. A strong desire to fit in and belong can sometimes lead teens to try alcohol or drugs when their friends are also exploring new experiences.

To Feel Grown Up

Children imitate adults, in part because they want to be independent. To a young person, being grown up means freedom to make his or her own decisions and being able to eat, drink, and do pretty much anything he or she wants. Children and teens learn how to make decisions by modeling the behaviors of the adults in their lives. They internalize attitudes about drugs and alcohol by watching whether/how the adults in their lives use these substances. If adults use alcohol or drugs, they may be giving youth these messages:

- The best way to cope with problems is to hide from them by drinking or using drugs;
- Drugs and alcohol are not really that bad for your health;
- It's OK to break the law if it stands

in the way of your own desires;

- It's acceptable to go against the teachings of the church;
- Getting drunk or high makes you feel happy and relaxed;
- It's easier to use drugs or alcohol to help you avoid or forget your problems than to solve them;
- Drinking is the way to fit in socially.

To Feel Good

Adults and children sometimes choose unhealthy ways of dealing with stress. Adolescents need to learn how to deal with stress effectively and positively, make healthy decisions, and relax in ways that do not have negative effects on their bodies and minds. Activities that promote these goals include regular exercise, creating a stress journal to write out feelings and possible solutions, expressing feelings to a trusted mentor or friend instead of bottling them up, and listening to relaxing music.

To Satisfy Curiosity

Many young people are very curious about drugs and alcohol. They quickly recognize the contradictions in the messages that they receive about these substances in the media, at school, and

at the dinner table. Even when adults have done an outstanding job of educating and nurturing the children in their care, some teens will express curiosity about alcohol and drugs. It's likely that they will acquire information about drugs from unreliable and inaccurate sources, so parents and teachers need to bring up the subject before young people hear about it from their peers and the media.

To Test Limits and Take Risks

Another major life task for adolescents is to achieve independence in their thinking, their relationships, and their choice of future occupation. Teens need to learn how to take appropriate risks as they attempt to balance the need to be cared for with the desire for independence. As children approach puberty, nearly every aspect of their lives is new and unexplored. Most young people will continue to look for opportunities to expand their horizons and to grow.

Some youth, however, take more risks than others. They want to try everything, and don't always know how to make smart and healthy decisions about potential risks. Furthermore, gifted students who feel bored or unchallenged intellectually may turn to alcohol or drugs as a way to test their mental capacity. Other teens see experimenting with drugs and alcohol as a chance to prove that they "can handle it."

Risk-taking is often revealed in clothing and music choices, body piercing, tattoos, hair styles, and general resistance to authority. It can also include behavior with the potential for dangerous consequences such as running away from home, becoming pregnant or getting someone pregnant, driving recklessly, or riding with a drunk driver. The strong desire to acquire the privileges of adulthood, combined with pervasive media images of attractive people drinking, smoking, and taking drugs, can be a powerful temptation to some teens. As mentioned earlier, given the strong Adventist prohibitions against drug and alcohol use, it is likely that experimentation with these substances is seen as even more rebellious and risky for Adventist teens than for secular young people.

Signs and Symptoms of Alcohol and Drug Use, Abuse, and Dependence

Despite all our best efforts to educate students and develop anti-drug and alcohol policies, some young people will still experiment with these substances, others will become regular users, and a few will become addicted. While teachers may suspect that a student is using alcohol or drugs, they may be unaware of some of the signs and symptoms that signal a need for help. Table 1 focuses on the differences between intoxication, abuse, and dependence for both alcohol and marijuana, as well as the physical and behavioral signs of each. The table was developed using a variety of resources that can be found in the references.

Signs of *alcohol or marijuana intoxication* are mostly physical in nature and indicate that the drug is still present in the body. *Alcohol or marijuana abuse* indicates heavier use (beyond experimentation), which generally affects daily activities such as school or job performance, and includes indirect consequences from drinking (e.g., dropping grade-point average) as well as more direct problems resulting from intoxication (e.g., impaired or drunk driving).

Alcohol or marijuana dependence (also known as addiction) is the most serious level, involving actual changes in brain chemistry. At this stage, the individual experiences overwhelming cravings and an inability to resist using the substance. Addiction usually results in increased tolerance for the drug, meaning that it requires progressively larger doses to achieve the same effect on the person. Addiction also involves withdrawal, a series of temporary physical or psychological symptoms that occur when the addict abruptly quits using the substance. Another defining feature of addiction is impaired judgment, rendering the addict unable of accurately predicting whether any use of the alcohol or drug will lead to unhealthy or unsafe behaviors. A final major feature of addiction is the negative consequences that often occur from misuse of the drug. These might include physical injury,

Table 1. Symptoms of Alcohol and Marijuana Intoxication, Abuse, and Dependence¹⁰

	ALCOHOL	MARIJUANA
INTOXICATION	Odor of alcohol on breath	Unusual sweet smell on breath, body, or clothing
	Unsteady gait	Dilated pupils and bloodshot eyes
	Impaired reaction time, inattention, and lack of concentration while driving a car/motorcycle, riding a bicycle, or operating machinery	Driving "stoned"
	Slurred speech	Relaxed and happy
	Poor eye-hand coordination and slowed reaction time	Tremors, slurred speech, slowed reaction time, or impaired coordination
	Missing school or work	Dry throat and intense thirst
	Uncontrollable eye movements	Coughing and dizziness
	Drowsiness or unconsciousness	Nausea and vomiting
ABUSE	Strong craving for alcohol	Sleep problems
	Loss of control regarding or neglect of work, home, or school activities	Physical pain
	Reduced anxiety	Impaired short-term memory, concentration, and knowledge retention
	Engaging in activities that could result in injury such as driving a car/motorcycle, riding a bike, or operating machinery while under the influence	Changes in appetite or sleep patterns. Sudden weight loss or gain

legal trouble, financial difficulties, academic failure, family conflict, or other severe problems associated with the use of the substance.¹¹

Teachers should also watch for other changes in normal behavior that may indicate that students are having a problem with alcohol or other drugs.

These could include:
Health Indicators

- Frequent accidents
- Frequent "flu" episodes, chronic cough, chest pains
- Unexplained mood changes, espe-

	ALCOHOL	MARIJUANA
	Loss of appetite	Deterioration of physical appearance, personal grooming habits
	Mood and attitude changes	Depression
	Depression	Sleep problems
	Fatigue	Fragmented thoughts
	Heightened secrecy about actions or possessions	Disoriented behavior
DEPENDENCE	Increased tolerance—requires more and more alcohol to get intoxicated	Talking loudly
	Withdrawal symptoms such as nausea, sweating, shakiness, anxiety, and even convulsions and death when the person stops drinking after a period of heavy use	Chronic respiratory irritation
	Inability to predict how much alcohol he or she will ingest	Increased tolerance—requires more marijuana to get high
	Continued use despite negative consequences	Mild to moderate withdrawal symptoms, including anxiety, irritability, insomnia, restlessness, and depression
	Strong cravings and loss of control over alcohol intake	Difficulty in adjusting to life's challenges
	Blackouts (although conscious, retains no memory of events)	Continued use despite negative consequences
		Strong cravings and loss of control over marijuana use

cially involving irritability and hostility

- Changes in health or grooming

Family Relationships

- Decreased interest in school or family social activities, sports, and hobbies
- Secrecy, lying, or reluctance to provide specific answers to questions about activities
- Strange phone calls or hang-ups

School Activities

- Deteriorating school performance
- Irregular school attendance
- Unexplained drop in grades

- Loss of interest in normal activities
- Confusion or inability to concentrate

Relationship With Peers

- Dropping old friends
- Acquiring new friends
- Attending parties where adults are not present to monitor behavior

Personal Issues

- Change in personal priorities
- Collecting beer cans or drug paraphernalia

Possession of drug materials

- Wearing clothing or jewelry that is symbolic of drug or gang culture, including promotional items from cigarette and beer companies

It is important to note that the presence of these changes or symptoms does not necessarily mean that a person is using drugs or alcohol, but these warning signs are often associated with such behaviors.

Ways Teachers Can Help

Although teachers are not trained to be substance-abuse counselors, they can take a number of actions to reduce the chances that a student will begin using alcohol or marijuana. There are also ways to lower the odds that students who have begun to experiment with drugs will continue to regularly use these substances. Finally, if a student is showing signs of substance addiction, teachers need to know how to make a referral for appropriate addiction assessment and treatment. Ways teachers can help include the following:

1. *Help children and teens learn to express their thoughts and feelings, and listen to what they say.*

Being able to express thoughts and feelings is the essence of being human. When we try to limit the thoughts and feelings of children and teens, we thereby make it more difficult for them to verbalize their joys and frustrations and to work through their problems. Young people who are taught to express themselves are likely to have an easier time dealing with peer pressure and resisting other temptations. If students are encouraged to participate in discussions about the dangers of drugs both formally in the classroom and informally in your presence, they are more likely to be able to say “no” to drugs in peer-pressure situations.

Ignoring students’ need to discuss their concerns, or being dismissive of their thoughts and feelings, could damage their connection to you and other people in their lives. This may make them more likely to rebel, hide out, or get even. We’ve all heard stories about young people who are ignored, abandoned, or bullied. Some will express their pain through violence or other

unhealthy forms of acting out. Others will repress their feelings, which often results in depression or seeking to ease the psychic pain through promiscuity, dysfunctional friendships, or consuming alcohol or other dangerous substances. Students can be encouraged to express their feelings by referring to real people or characters on TV, or in songs, movies, or books. Ask the student if he or she feels the way that person in the arts does and what that feels like.

2. Talk calmly and knowledgeably with students about drugs and alcohol.

Teachers can serve as role models for healthful living and also discuss experi-

mentations with dangerous substances with students *before* they are tempted to try alcohol, tobacco, or other drugs. Many youth begin to experiment with cigarettes, alcohol, and marijuana by age 11 or 12, so it's never too early to start talking about the risks of dangerous substances. It is important to frequently create openings to discuss with students the physical, psychological, and social consequences of drug and alcohol use. If children and teens feel comfortable talking about drugs and alcohol, they are less likely to see these subjects as taboo and therefore tantalizing, and more likely to ask questions or express their curiosities and concerns (the same argument holds true for open discussions

about sex and sexuality). It is particularly important that the teacher respond empathetically to questions and concerns rather than being judgmental and heavy-handed.

Conversations might include the following:

- discussing the dangers of alcohol, marijuana, and other drugs, with realistic descriptions of consequences rather than resorting to scare tactics
- pointing out the manipulation and lies of advertisers in promoting alcohol and other drugs, using examples from various media
- discussing how to make good decisions

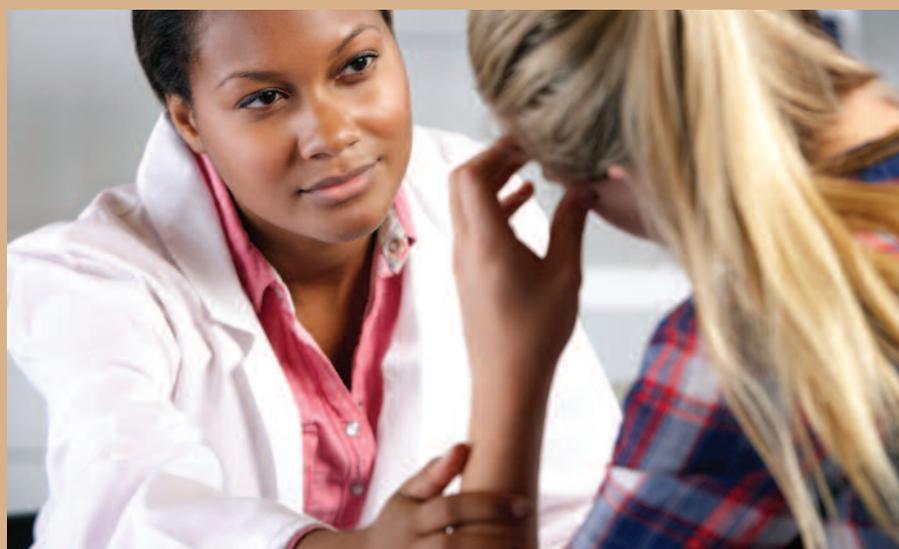
association between moderate alcohol consumption and certain health benefits. However, it's important for teachers and other authority figures to explain the complexities and shortcomings of such research because a teen can search the Internet for popularized (and oversimplified) reports on these studies, and a teacher's ability to respond in a calm, knowledgeable, and interactive manner will go a long way toward reassuring the student of the teacher's command of the facts. (The article by Drs. Landless and Williams on page 25 of this issue will help you prepare yourself for this discussion.) Such discussions help the teen or young adult to learn to make good decisions about which risks to take and which to avoid.

3. Learn about the popular culture of children and teens, and talk with them about it.

Today's youth are bombarded by many forms of media (such as lyrics of popular songs, fashion magazines, movies) that feature alcohol and drug use and promote the notion that it's normal, fun, and even healthy to drink alcohol and take drugs. While not all of these voices promote use, the majority of these messages contribute to many teens' inaccurate perception that everyone is getting drunk or high. Such perceptions are dangerous because youth who think that their peers' alcohol or drug-use rates are high are more likely to conclude that "everybody is doing it" and engage in the same behavior.¹² Ask students to recite the lyrics of their favorite songs and tell you what these lyrics mean to them. Ask them why some teens dress in a certain way. As you gain their confidence, you can bring moral principles into the discussion if you positively engage students without lecturing them.

4. Help young people build positive, solid relationships.

Young people today are often raised by and interact with a variety of different caregivers, such as grandparents, foster parents, babysitters, coaches, and mentors, in a variety of settings. Because of the shallowness and disintegration of many adult relationships that they ob-



mentations with dangerous substances with students *before* they are tempted to try alcohol, tobacco, or other drugs. Many youth begin to experiment with cigarettes, alcohol, and marijuana by age 11 or 12, so it's never too early to start talking about the risks of dangerous substances. It is important to frequently create openings to discuss with students the physical, psychological, and social consequences of drug and alcohol use. If children and teens feel comfortable talking about drugs and alcohol, they are less likely to see these subjects as taboo and therefore tantalizing, and more likely to ask questions or express their curiosities and concerns (the same argument holds true for open discussions

- talking about ways to deal with peer pressure to use alcohol or drugs, including role-playing how to resist negative peer pressure. (This will require lots of regular practice over time!)

Adolescence and young adulthood are developmental stages that involve a lot of questioning and dialogue. Adults should encourage young people to talk about risk taking and to explore the potential trade-offs and consequences. Risk taking is a natural, necessary part of growing up, and offers both healthy and harmful risks. For example, young people will hear that many people can regularly drink low amounts of alcohol without becoming alcoholics. They may also read that some studies have shown an

Drug- and alcohol-abuse prevention programs can help educate students about dangerous substances and provide an environment for important conversations about risk taking and dealing with peer pressure.

serve, young people may find it difficult to believe that interpersonal relationships can be counted on to meet their needs. But that doesn't mean that they don't want to believe. They crave the security of believing that their relationships are solid and will last, and that they can count on the people in their lives. Your positive relationships with students can provide this assurance. Value the young people with whom you interact, seek their input, and make your expectations clear as they grow and mature. They will test your commitment over and over again until they are very sure that you mean it.

Teachers, parents, and mentors can encourage young people to apply their craving for risk taking to positive social, emotional, and intellectual situations instead of experimenting with dangerous substances and activities. Caring adults can play a strong role in helping adolescents fight the pressure to use alcohol and drugs. Not wanting to hurt the adults in their lives is a common reason that young people give for not using alcohol and drugs. Adult role models need to clearly convey to students how important it is for them to avoid these substances. However, this message will register in a young person's mind only if the adult first models good behavior and then demonstrates a strong and consistent concern for that teen or young adult. That level of caring, along with clearly communicating that the teacher

or mentor does not want the child to use alcohol or drugs, provides a strong motivation for young people to refuse these substances.

5. Encourage children and youth to participate in prevention programs and after-school activities.

Drug- and alcohol-abuse prevention programs can help educate students about dangerous substances and provide an environment for important conversations about risk taking and dealing with peer pressure. The most effective programs include more than just facts about drugs. They show young people how to resist peer pressure to use dangerous substances and teach them how to make good decisions. Many of these programs train older youth to speak to younger children, as well as teach young people how to counsel their peers about avoiding or quitting substance use. These educational resources can be adapted to fit into Adventist school settings.

Teachers and parents must not underestimate the value of keeping teens busy. Most children and teens get into trouble between the hours of three and six p.m., after school closes and before working parents arrive home. Children and adolescents need to be provided with structured, supervised activities that teach good values, promote social skills, and consume their time and en-

ergy. Activities like sports, music, and regular employment can help to channel an adolescent's energy in positive directions.

6. Make referrals when needed.

Finally, some teens are going to become involved with alcohol or drugs despite the best intentions of parents and other involved adults. In many, and perhaps most cases, teens who experiment with cigarettes, alcohol, or other drugs will not become addicted or develop other serious problems as a result of their experimentation. However, some adolescents do develop long-term drug and alcohol problems. These cases require more than just prayers, lectures, or an automatic dismissal from school without attempting to address the underlying issues and challenges associated with the substance use. Most communities have programs and professionals available to help with drug and alcohol problems. Investigate referral options and build connections with local agencies and professionals who can help adolescents and young adults experiencing addiction problems.¹³ This will help teachers, mentors, and parents make appropriate decisions when the need for further help does arise. Feeling reassured that you are not alone and asking for qualified help helps provide a solid foundation for putting adolescents on the path toward recovery.

7. Ask for divine help.

Students who are struggling to resist or stop using drugs or alcohol will be empowered to overcome through their own prayers and those of people who care about them. Prayer can help students resist peer pressure—encourage them to pray for courage and the right words to say when friends urge them to drink at a party or to try tobacco or marijuana. Be sure to pray often for and with your students. Most students are strengthened and encouraged when teachers and mentors offer to pray with them about their struggles and temptations. Teachers can also pray for guidance to say the right words to young people who are challenged by drugs or alcohol or who are testing boundaries and exploring new ways of thinking and acting.

Conclusion

The teen and young adult years are full of changes and challenges. While most Adventist adolescents are relatively well-adjusted and do not regularly use dangerous substances, alcohol and marijuana experimentation is still quite common during the teen years, with some adolescents becoming more heavily involved than others. It is important for teachers, parents, and mentors to become informed about the signs and symptoms of a substance-use problem. Forming supportive relationships and strong communication patterns with teens lowers the risk of both experimentation and long-term substance use. In addition, teachers need to know what to say and do once an adolescent is identified as having a problem. Finally, while prayer provides valuable encouragement and strength to deal with this problem, it is important to allow God to work through human sources as well. For this reason, teachers should not hesitate to find professional help in dealing with this complex and difficult problem. This will ensure that addicted students and their families can receive both the spiritual and human help they need to overcome their involvement with alcohol or drugs. ☞



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Alcohol and Health— Sorting Through

THE MYTHS, THE DANGERS, AND THE FACTS

Have your students asked you about the possible health benefits of alcohol—especially for the heart? If you have questions regarding the benefits and risks of drinking, the scientific studies being done on this subject, and the current debate concerning alcohol, this article will help equip you to discuss these topics with your classes.

Alcohol Consumption and Global Health

Alcohol consumption varies widely among countries, depending on cultural traditions. Alcohol, like tobacco, is being exported to developing countries, adding significant burdens to already struggling health systems. According to the Global Status Report on Alcohol and Health released by the World Health Organization (WHO) in Geneva during February of 2011:¹

- Fifty-five percent of adults worldwide have consumed alcohol.
- Approximately 2.5 million people die from alcohol-related causes each year.

- Four percent of all deaths are related to alcohol through injuries, cancer, cardiovascular diseases, and cirrhosis of the liver.
- Globally, 6.2 percent of male deaths and 1.1 percent of female deaths are related to alcohol.

The pattern of alcohol consumption is not static. Figures for 2001–2005 released by the WHO² revealed that each year worldwide, on average, 6.3 liters of pure alcohol were consumed per person aged 15 years or older. This amount appeared to be stable in the Americas and the European, Eastern Mediterranean, and Western Pacific regions; however, marked increases were noted in Africa and Southeast Asia. Health risk increases even more with binge drinking, which is defined as five consecutive drinks over a short period of time for a male, four for a female, resulting in intoxication. Binge drinking is increasing in many parts of the world, mainly among youth, but all age groups are affected.³

Globally, the effect of alcohol consumption on young people is brought into frighteningly sharp relief by the following statistic: 320,000 young people between the age of 15 and 29 die

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from alcohol-related causes each year. This represents nine percent of all deaths in this age group.⁴ It is the world's third-largest risk factor for disease, but ranked as the leading risk factor in the Western Pacific and the Americas, and second-largest risk factor in Europe.⁵ Alcohol has become one of the leading causes of preventable death in many parts of the world. In fact, it is the third leading cause of preventable death in the United States!⁶ A 2010 ranking of drugs by the United Kingdom's Independent Scientific Committee, based on nine criteria of harm to self and to others, concluded that alcohol was the world's most dangerous drug.⁷ In the United States, the American Medical Association noted that underage drinking is a major factor in about half of all teen automobile crashes and is the leading cause of death among teens.

Alcohol—A Burden on Families

Alcohol consumption creates significant hardships for families.⁸ A report by the Schneider Institute for Health Policy notes that 20 percent of men and 25 percent of women indicate that drinking is a cause of family conflict and a major cause of divorce. Domestic violence and child abuse are more prevalent in homes with a problem drinker. Alcohol is also a major financial drain on many families. Children from alcoholic families are more likely to have emotional and adjustment problems that include aggressive behavior, difficulties with their peers, inappropriate conduct, hyperactivity, and poor adjustment to school. Additionally, they are more likely to miss days from school, suffer from more illnesses and injuries, and to become problem drinkers as adults. As the Schneider Institute report notes, the risk of becoming a problem drinker is especially high for boys.

Societal Costs of Alcohol

The societal costs of alcohol are very high.⁹ In the U.S., at least half of the persons convicted of violent crimes were under the influence of alcohol or drugs at the time the offense was committed. In one-half to two-thirds of homicides and serious assaults, alcohol is present in the offender, the victim, or both. The health-insurance costs for employees with alcohol problems are nearly double those of other employees. Another major issue with alcohol use is lost productivity. Problem drinkers miss work due to hangovers and illness; some even go to work while under the influence of alcohol. In the United States, the annual estimated economic costs for alcohol-related social, legal, and health problems are more than \$185 billion.¹⁰ These sobering statistics demand careful examination and scrutiny of the hypotheses that moderate alcohol consumption is beneficial to health.

Moderate Alcohol Consumption and Health

A large body of scientific evidence drawn from studies that follow individuals over time suggests that persons who drink moderately (typically defined as one drink per day for women and two drinks per day for men) have a lower rate of overall mortality and coronary heart disease (CHD) mortality than heavy drinkers and non-drinkers. More than a hundred of these types of studies have identified this relationship between alcohol and coronary heart disease mortality.¹¹ (The lowest rate of CHD mortality has been observed to occur with moderate levels of alcohol consumption.) However, additional research has identified mechanisms that could be responsible for the protective effect of moderate alcohol consumption¹²: increases



in good HDL (high-density lipoprotein) cholesterol, and lower levels of systemic inflammatory markers (C-reactive protein, fibrinogen plasma viscosity, and white-blood-cell count). Alcohol has also been shown to affect platelet function, coagulation, and fibrinolysis (dissolving of clots) in ways that protect against bleeding and clot formation. The identification of such potential explanatory mechanisms has lent credence to the observational findings that moderate alcohol consumption appears to reduce the risk of CHD.

Scientific evidence also suggests that moderate alcohol intake may have a beneficial effect on other health problems. A recent review concluded that moderate alcohol consumption was associated with reduced risk of myocardial infarction mortality (death from heart attack), heart failure, diabetes, ischemic stroke, vascular dementia, and osteoporosis.¹³ Some researchers report that there may be mental-health benefits associated with moderate drinking.¹⁴ However, it is unclear from these studies whether moderate drinking encourages better mental health or whether mentally healthy people are more likely to drink moderately.

Scientific evidence makes it clear that the benefits of alcohol use are clearly related to the pattern of use and the amount of alcohol consumed. Peele and Brodsky explain that “Having two drinks per day is associated with more benefits and fewer problems than having fourteen drinks over a weekend.”¹⁵ Similarly, the U.S. National Institutes of Health (NIH) “White Paper” on moderate alcohol consumption also emphasized that the protective effect of moderate alcohol was more a function of the frequency of use. In other words, binge drinking once or twice per week is more harmful than drinking the same amount, but spreading out the consumption over the entire week.¹⁶ This has been confirmed in numerous studies around the world, which show that consumption of large amounts of alcohol during a short period of time (i.e., binge drinking) and heavy drinking, even in the context of overall low use of alcohol, are associated with increased health risks.

There currently is little direct evidence to support the hypothesis that moderate drinkers differ from others in their personality characteristics. Some limited data suggest that among both abstainers and drinkers, persons scoring high on self-regulation have higher life expectancy and fewer chronic illnesses than persons scoring low on self-regulation.

Methodological Limitations in Assessing Benefits of Moderate Alcohol Consumption

The NIH “White Paper” on health risks and potential benefits of moderate alcohol consumption listed several complicating factors that influence data interpretation. These include the time over which the alcohol is consumed, interactions with individual genetic vulnerability, and compounding by lifestyle factors.¹⁷ Additionally, the authors highlighted significant variations in alcohol metabolism, as well as markedly different behavioral responses to alcohol consumption.

We will now provide a brief overview of several methodological limitations identified in the scientific literature:

1. Failure to record variations in alcohol intake over time. This can affect the association between moderate alcohol use and health. Most prospective studies have used a single baseline measure of alcohol consumption to predict a health outcome several years later. This method may overestimate the health benefits of moderate drinking.

2. Duration of follow-up. Some evidence indicates that the apparent protective effect of moderate alcohol consumption on all causes of death and on coronary heart disease mortality becomes less apparent with prolonged follow-up.¹⁸ In addition, the evidence for the negative effects of high alcohol consumption on cancer mortality increases with prolonged follow-up.

3. Potential confounding. This is a serious methodological limitation. Confounding occurs when the apparent benefits of some exposure (in this case, alcohol) on health are distorted because other factor(s) related to both alcohol and health account for some or all of the apparent relationship between the two. Unmeasured characteristics such as genetics, psychological variables, reaction to stress, and context of alcohol use, all of which are linked to health and related to moderate alcohol consumption, could lead to a distortion of the conclusions regarding the association between alcohol and health.

It is important to note that studies on the effects of alcohol on human health have been observational, rather than randomized. The randomization process tends to largely eliminate the confounders. Because of the dangerous properties of alcohol, especially its addictive propensity, it would be unethical to conduct randomized studies.

There is considerable evidence that high levels of residual confounding may occur in studies that seek to measure the relationship between moderate alcohol consumption and health. A study of 2,910 adults based on two national surveys of the general population of the United States documented that moderate drinkers had about twice the income level of non-drinkers, light drinkers, episodic drinkers, and heavy drinkers.¹⁹ Moderate drinkers in this study had an overall healthy profile that included regular exercise, low levels of cigarette use, and high consumption of fruits and vegetables.

Similarly, the NIH report on moderate alcohol consumption indicated that compared to moderate drinkers, abstainers were more likely to be older and poorer,²⁰ in bad health, overweight, disabled, depressed, and physically and socially inactive. They also included fewer servings of vegetables in their diets and consumed more fat. Moreover, moderate drinkers were more likely than the other groups to monitor their health through blood-pressure screening, preventive dental care, and mammograms.

Some of the most impressive proof of the differences between moderate drinkers and non-drinkers came from the large robust study by Naimi, et al.²¹ Compared to moderate drinkers, non-drinkers were older, more likely to be widowed or never married, more likely to be non-white and to have lower incomes and less education. They were more likely to be physically inactive and overweight and to have higher rates of chronic diseases. In fact, this study found that 90 percent (27 of 30) of cardiovascular disease (CVD)-associated risk factors were more common in non-drinkers than in moderate drinkers.²² The researchers concluded that moderate drinkers and abstainers comprised two very different populations and that alcohol use was unlikely to be the cause of most of these differences.

Thus, at least some of the reported protective effects of moderate drinking are likely due to residual confounding from dietary practices, levels of exercise, age, and poverty. It has become clear that a substantial proportion of the positive effects of moderate alcohol consumption found in the published scientific research are not due to alcohol but to unmeasured factors linked to the higher socioeconomic status and better health practices of moderate drinkers compared to non-drinkers. When Fillmore, et al. adjusted for a broad range of psychosocial factors including education, income, employment, smoking, race, and religious attendance, the odds of death were similar for the two groups.²³ Factors other than moderate alcohol consumption are at work here.

4. Misclassifications of drinking categories. Some evidence indicates that in much of the research on alcohol consumption and health, the abstainer category contains some previously high-risk drinkers.

First, there is the former drinker misclassification error. As

noted earlier, most prospective studies of moderate alcohol consumption do not inquire about changes in alcohol consumption over time. Many older people reduce or terminate drinking due to increased illness, disability, frailty, or potential interactions with needed medications. Second, people who drink infrequently are often inaccurately classified as non-drinkers. Both of these biases exaggerate or inflate the health risks of abstainers.

Fillmore and associates conducted a meta-analysis of 54 all-cause mortality studies and 35 CHD mortality studies to examine the effect of misclassifying. They found that many people classified as abstainers had recently reduced or stopped drinking.²⁴ Importantly, studies that took into consideration both classification errors concluded that there was no protective effect from moderate alcohol consumption.

Presumed Benefits of Alcohol Are Not Universal

The scientific evidence of the beneficial effects of moderate alcohol consumption clearly indicates that they do not apply to everyone.

- **Age Variation.** The studies uniformly indicate that the potential health benefits of moderate alcohol use are not evident among individuals aged 35 years or younger. This is important, as binge drinking and alcohol experimentation are surging among young people and will have long-term consequences on their health. Any potential benefits of alcohol should not be assumed to apply to all ages.

- **Racial/Ethnic Variation.** Some evidence suggests that the potential benefits of moderate alcohol consumption do not occur in all racial/ethnic groups. For example, a review of research studies of the association between moderate alcohol consumption and mental health noted that although moderate drinkers reported better mental health than most non-drinkers, this relationship was not seen in Mexican-Americans.²⁵ Other studies have confirmed that blacks (African-Americans) have a greater susceptibility than other ethnic groups to liver damage from alcohol. In fact, blacks have higher levels of common biomarkers of liver damage at every level of alcohol consumption.²⁶ Studies on CHD and all-cause mortality have confirmed different outcomes between black and Caucasian subjects, with poorer outcomes for black men and women.²⁷

Similarly, research on cardiovascular disease (CVD) risk that examined racial differences in the effects of moderate alcohol consumption has found that, unlike the positive effects observed for whites, moderate alcohol consumption adversely influences health outcomes for blacks.²⁸ Alcohol consumption equivalent to one drink a day was associated with an increased risk of CHD in black men, but a reduced risk in white men. Studies further found that consumption of low levels of alcohol was associated with an increased risk of hypertension or increases in blood-pressure levels in black men. A similar association was not found in whites.²⁹

When one examines the evidence regarding cardio-protective properties of alcohol, the findings of the CARDIA study highlight more questions.³⁰ In this study, a random sample of 3,037 participants aged 33 to 45 years was followed for 15 years to determine whether there was a connection between alcohol

consumption, binge drinking, and early coronary artery calcifications (CAC). A direct association between alcohol consumption and CAC was found. This was the first study to demonstrate an association between binge drinking and atherosclerosis of the coronary arteries as revealed by CAC. An important result of this study was the linear association between any alcohol consumption and CAC, a pattern that was strongest for black men. In addition, the study did not find evidence of a protective effect against atherosclerosis among light to moderate regular users of alcohol. One possible explanation for the findings is the relatively young age of this cohort, confirming the findings that there are no health benefits of alcohol consumption for young people. Another important implication of the study is that if there are in fact protective effects of alcohol on coronary artery disease, they are unlikely to be due to any effect of alcohol in modifying the course of atherosclerosis and arterial disease in general.

Negative Effects of Moderate Alcohol Consumption

A comprehensive evaluation of the impact of moderate alcohol consumption on health must consider the strong evidence that moderate alcohol consumption is linked to a broad range of negative outcomes and dangers.

- **Risk of Progression.** Stanbridge, et al.³¹ indicate that there “is a substantially unpredictable risk of progression to problem drinking.” Of the 113 million current drinkers in the United States, 24 percent of men and five percent of women meet DSM-IV criteria for alcohol dependence. Similarly, the NIH position paper on the risks of alcohol indicates that a “low estimate” is that five to seven percent of current abstainers and/or infrequent drinkers will develop diagnosable problems linked to alcohol use if they began to use alcohol moderately. This percentage is similar to the risk of the overall population. Alcohol dependence tends to occur within five to 10 years of the first regular use of this substance.

- **Risk of Addiction.** Alcohol is a known addictive substance. The likelihood of becoming a problem drinker (alcoholic) depends on numerous factors. In the overall population, there is a likelihood that 13 of every 100 people who regularly drink alcohol will become alcoholics. If the person has a first-degree relative (father, mother, uncle, aunt, or grandparent) who suffered from alcohol dependence, this percentage doubles. If alcohol consumption begins earlier than the age of 14, the percentage chance of dependence increases to 40 percent plus.³² This demonstrates the importance of alcohol-prevention education from an early age, focusing on parental bonding, adult mentoring, spirituality, and life skills that have been shown to relate to abstinence. This social support develops resilience, enabling youth to cope with difficult decisions and choices despite peer pressure.³³ An additional and vital layer of protection from at-risk behavior for young and old is commitment to a set of positive values, i.e. the principles of the Bible and faith in God.

- **Binge Drinking.** Research reveals that the level of binge drinking is very high among moderate users. Naimi and colleagues documented that binge-drinking episodes per person per year in the U.S. increased by 17 percent between 1993 and 2001. About 30 percent of male moderate drinkers admitted to



binge drinking in the past 30 days and, in fact, had the same rate of binge drinking as heavy drinkers.³⁴ Although three-quarters of binge drinkers are classified as moderate drinkers, they are 14 times more likely than non-binge drinkers to report that they have engaged in alcohol-impaired driving. Naime and colleagues also document that binge drinking is significantly related to violence, all types of accidents, and alcohol abuse in general.

The Preventive Paradox

Researchers have shown that although more heavy drinkers report problems related to their drinking, greater absolute numbers of moderate drinkers have alcohol-related problems.³⁵ The data cited above on binge drinking illuminate this phenomenon. This paradox makes it clear that preventive strategies that seek to reduce alcohol-related problems must be targeted at the *entire* range of drinkers. Other research emphasizes that even low levels of alcohol consumption are problematic and that there is no safe level of alcohol use.³⁶ Even with very low consumption (one or fewer drinks of alcohol per day, when averaged over a weekly or monthly period), there is an increased risk for work problems, alcohol dependence, and especially drunk driving.

Alcohol Fatalities

Moderate alcohol consumption is associated with fatal out-

comes. Voas and colleagues found that the risk of being in a fatal crash is lower for drivers who are moderate drinkers than for those who are heavy drinkers. Nevertheless, moderate drinkers account for fully 50 percent of all drinking drivers in fatal crashes.³⁷

Alcohol and Young People

As noted earlier, the negative consequences of alcohol use are especially severe among young adults. The increasing risks of accident, violence, and suicide linked to alcohol use are heavily concentrated among this group.³⁸ And, as noted earlier, the apparent cardiovascular benefits of alcohol are found only in middle-aged and older populations. There are no data supporting any benefit for young people from drinking alcohol. Young drinkers in the United States (18- to 25-year-olds) have the highest rates of binge drinking, and alcohol is a factor in all of the four leading causes of death for young people between the ages of 10 and 24: motor vehicle accidents, unintended injuries, homicide, and suicide.³⁹ It should come as no surprise that the alcoholic beverage industry targets young people because they are more likely to become heavy consumers of alcohol over their lifetime and contribute to the profitability of the industry. A study by Engels, et al. shows a causal relationship between alcohol commercials and the consumption of alcohol.⁴⁰

Alcohol and Cancer

Alcohol is a known carcinogen (cancer-causing agent) whose use is associated with breast, colorectal, and liver cancers. As with other deleterious effects of alcohol, there is a dose-response relationship; that is, the more alcohol consumed, the higher the level of ill health. The World Cancer Research Fund Report of 2007 confirmed that the consumption of alcoholic drinks is one cause of premenopausal and postmenopausal breast cancer. No safe level of alcohol intake has been identified that would not be carcinogenic. The risk for breast cancer showed an increase of 10 percent per 10 grams of ethanol per day (regardless of type of beverage). It is important to note that this dosage is within the range considered protective against cardiovascular disease.⁴¹

Similarly, the 2011 World Cancer Research Fund report showed a causal relationship between alcohol intake and colorectal cancer, calling the evidence convincing. The relationship is robust in men and probably likewise in women.⁴²

A recent publication in the *American Journal of Public Health* showed that even modest but regular alcohol consumption contributes to U.S. cancer deaths.⁴³ Overall, the study found that alcohol use accounted for 3.5 percent of U.S. cancer deaths in 2009. This represents approximately 19,500 deaths and 18 years of potential life lost for each alcohol-related cancer death. Between 48 percent and 60 percent of the alcohol-related victims consumed on average three or more drinks per day, and approximately one-third of the deaths (30 percent) occurred in people who had fewer than 1.5 drinks daily. The authors concluded that reducing alcohol consumption is an important and underemphasized cancer-prevention strategy. This observation highlights the negative effects of alcohol on health, which counterbalance any purported health benefits of alcohol.

Alcohol and Impaired Thinking and Behavior

Research indicates that even moderate intake of alcohol adversely affects driving and motor coordination. For example, one study found that with a blood-alcohol content higher than zero but less than .05 percent, both men and women took longer to detect driving hazards, responded to hazards more abruptly, and perceived situations as less dangerous than they actually were.⁴⁴

Research also reveals that alcohol, even at moderate levels, has a disinhibiting effect. It creates a relaxed and less-inhibited state that reduces awareness, consciousness, comprehension, memory, and understanding.⁴⁵ Studies on the impact of alcohol on sexuality indicates that alcohol, especially at low levels of use, lessens restraints on psychological sexual arousal and increases sexual aggression, whereas heavy use of alcohol suppresses physiological sexual response.⁴⁶

Alcohol Use and Cognitive Impairment

The experimental research by Fogarty and Vogel-Sprott⁴⁷ on the cognitive impairment that occurs even at low levels of alcohol use has significant implications for Christians. Cognitive impairment often results in life-destroying moral choices. Research shows a consistent statistical correlation between alcohol use and deviant behavior—ranging from domestic violence to date rape and other forms of aggressive behavior. Alcohol use is correlated with poor decision making in almost nearly every type of situation. Bushman and Cooper⁴⁸ found that in controlled laboratory situations, there was a complex but consistent relationship between alcohol consumption and willingness to engage in aggressive behavior. Further, laboratory studies using Kohlberg's moral development framework by Denton and Krebs⁴⁹ concluded that the ingestion of alcohol moves individuals from a conventional or post-conventional to a pre-conventional stage of moral development. Thus, alcohol ingestion increases the chance that in making decisions, people will be less likely to utilize societal or religious norms or pay attention to the interests or needs of others, choosing rather to gratify their own immediate perceived needs. Other research suggests that alcohol impairs the function of neurotransmitters that affect mood (making individuals more aggressive) and interferes with the accurate transmission of information.⁵⁰ Regardless of exactly how alcohol impairs moral thinking, clearly it very often does

so; even at low levels of use. *There is simply no safe level of alcohol use.* Human beings have enough difficulty making wise, moral decisions in a complex world. Even small levels of impairment will likely result in poor moral judgments and behavioral decisions.

KEY POINTS TO REMEMBER

- Worldwide, alcohol is the most widely used recreational drug, surpassing tobacco, marijuana, and other chemicals.
- Alcohol is the world's third-largest risk factor for disease.
- Alcohol consumption has a significantly negative effect on families. It frequently places a strain on finances and has a strong association with domestic violence, child abuse, and fetal-alcohol syndrome.
- Drinking alcohol can lead to alcoholism.
- Alcohol use negatively affects society through associated crime and violence of all types, and large numbers of innocent victims in accidents.
- Moderate alcohol use has a complex relationship with cardiovascular health.
- The purported health benefits of moderate alcohol consumption do not apply across age, ethnic, and gender variations.
- There is no benefit of alcohol use for young people (below age 35).
- Even moderate drinking is associated with many negative effects such as aggressive behavior and poor moral choices.
- Alcohol is a known carcinogen, even when consumed at very low levels.

The Need for Caution and Reassessment

A growing number of voices in the scientific literature are expressing concern about the widespread perception that moderate alcohol use is beneficial to health. This article has examined the research and attempted to arrive at an evidence-based consensus. Although many papers and studies support the cardio-protective effect of alcohol (moderate drinking), we, along with others, have concluded that this hypothesis is by no means definitive. Marchand and colleagues emphasize the many problems of alcohol

use that have been discussed in this article which include confounding, risk of abuse and dependence, methodological issues relating to assessing dosage, level and duration of use over one's lifetime and non-representativeness of study populations in reaching this conclusion.⁵¹ The diversity of nondrinkers only adds to the confounding and should receive greater analysis. A recent critique of the evidence showing beneficial effects for moderate alcohol consumption concluded that "the evidence for the harmful effects of alcohol is undoubtedly stronger than the evidence for beneficial effects."⁵²

Moral Implications

The Bible unequivocally teaches that the body is the dwelling place of the Holy Spirit. The Apostle Paul repeatedly refers to the human body as the temple of God and says that His Spirit lives in that temple. In addition, the Holy Spirit communicates with us through our conscious and reasoning mind. There is no safe level of alcohol intake that does not affect cognitive function, judgment, and reasoning. For optimal physical health and to keep the channels of communication between our minds and Heaven clear and open, alcohol should be avoided. Additionally, in keeping with God's command to "love your neighbor as yourself" (Leviticus 19:18, NIV)⁵³; given the widespread effects alcohol may have on the user, his or her family, friends, and community regarding trauma, domestic violence, accidents, highway fatalities, sexual immorality and spread of sexually transmitted diseases, the moral imperative for abstaining becomes even more pressing.

On the cross at Calvary, Jesus redeemed us with His own blood. Therefore, Paul concluded, "You are not your own; you were bought at a price. Therefore honor God with your body" (1 Corinthians 6:19, 20, NIV). These words summarize the most compelling argument in favor of abstinence. The science confirms the conclusion.

Conclusion

Considering the significant risks related to alcohol use, it does not make sense to promote its use for the sake of an unproven heart health benefit. This is especially so when there are proven ways to prevent and treat disease, including exercise, a healthful diet, and non-addictive, tested medications where needed that do not have significant negative health or behavioral consequences.

Certain lifestyle choices and measures offer protection against the problems alcohol inevitably brings in its wake: informed choices, exercise, rest, healthful eating, fresh air, sunshine, pure water (internally and externally), a trusting relationship with God, social support, a good dose of optimism, and of course, temperance, which encourages us to use wisely those things that are healthful and good, and to dispense entirely with all things harmful. Temperance, achieved through the enabling power of our Lord Jesus Christ, serves as a foundation for a Spirit-filled experience that can celebrate life free from alcohol and its attendant ills.

So, should people who don't drink alcohol start to use it? Based on the evidence, definitely not! Should those who currently drink alcohol quit? Based on the same evidence, un-

equivocally Yes! In the struggle to overcome, human beings may claim divine help, remembering that Paul states so clearly: "I can do all things through Christ who strengthens me" (Philippians 4:13, NKJV).⁵⁴



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D.A.R.E. DAY!

Implementing Evidence-Based Drug Education in an Adventist Educational Setting

The students in Mr. Brown's¹ 5th-grade classroom wait in excited anticipation for the arrival of a special guest who has been visiting each week since the beginning of the semester. Rebekah, the class helper for the day, passes out glossy workbooks to each student. On the cover of each is the warm, smiling face of a cartoon lion named Daren.

A few minutes before one o'clock, a uniformed police officer walks into the classroom with a big smile, carrying an 18-inch plush stuffed Daren the Lion, stickers, pencils, and a workbook.

The students sit quietly at their desks as Mr. Brown welcomes Officer

Burnett and assures him that all of the students have completed their homework from last week. Sergeant Burnett replies, "Fantastic! Students, I need your help today. Can you tell me what day today is?" The students eagerly respond, "D.A.R.E. Day!"

Since 1983, the Drug Abuse Resistance Education (D.A.R.E.) program has become one of the most popular and widely used school-based prevention programs to help empower youth to make responsible choices about drug use as well as to deal with violent behaviors such as bullying. Because young people in both Adventist and non-Adventist circles are often exposed to drugs through their peers, the media, or family members, incorporating programs like

D.A.R.E. within the Seventh-day Adventist educational environment can provide a vital tool in equipping our young people to make responsible and safe choices about drugs.

Overview of the Problem

According to the United Nations Office on Drugs and Crime (UNODC), globally from 2006-2010, illicit drug use remained stable with between 3.4 percent to 6.6 percent of 15- to 24-year-olds using.² UNODC also estimates that cannabis and amphetamine-type stimulant use are the most widely used illicit drugs by 15- to 24-year-olds, ranging from 2.6-5.0 percent and 0.3-1.2 percent, respectively.³ Further-

BY HARVEY J. BURNETT JR.

more, national studies indicate that some young people are already using and/or abusing alcohol, tobacco, marijuana, inhalants, and psychotherapeutic drugs by the age of 12 or 13.⁴

In America, alcohol remains the most widely used drug among adolescents, with three out of 10 reporting that they have consumed alcohol by the end of 8th grade—a figure that rises to seven out of 10 by the time they leave high school.⁵ Johnston and colleagues also found that marijuana use among 10th- and 12th-grade students has been rising for the past four years, with roughly one in 15 high school seniors reporting daily or near-daily use. On a more positive note, these researchers noted a continued decline in tobacco use in all grades studied since the mid-1990s, although there was a slight increase in 2010.⁶

Another concern is the growing use of electronic cigarettes or e-cigarettes (Electronic Nicotine Delivery Systems) amongst teenage youth. E-cigarettes are battery-powered devices that provide a dose of nicotine in aerosol form as well as flavoring (i.e., fruit or mint), depending on the brand. They have no therapeutic value. Legislation and public health investigations are currently pending in many countries.⁷ Between 2011 and 2012, e-cigarette experimentation and recent use doubled among U.S. middle school and high school students, with an estimated 1.78 million students having ever used e-cigarettes as of 2012.⁸ Furthermore, this national study estimated that 160,000 students who reported ever using e-cigarettes have never used conventional cigarettes or tobacco products. Goniewicz and Zielinska-Danch found that 23 percent of Polish high school students, aged 15 to 19 years, have tried e-cigarettes.⁹

Drug use among teens is commonly explained using the “gateway” hypothesis. This theory assumes that young people who use alcohol and cigarettes are more likely to experiment with marijuana, and those who use marijuana are more likely to progress to the use of other dependency-producing drugs, such as pills (e.g., barbiturates, stimulants), cocaine, and heroin.¹⁰

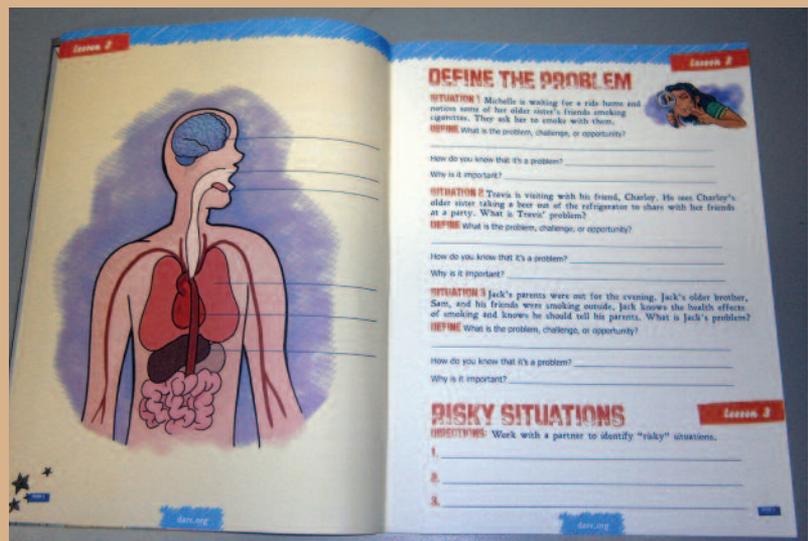
Based on biblical principles that

focus on the body as the temple of God (i.e., 1 Corinthians 6:19) and texts strongly critical of intoxication (i.e., Proverbs 20:1 and Ephesians 5:18), Seventh-day Adventists have been in the forefront of opposition to substance use, viewing abstinence as definitional to their faith. Unfortunately, drug use has occurred at Christian institutions, such as colleges, boarding and day academies, junior academies, and elementary schools, despite policies that prohibit such use. For instance, Helm et al.¹¹ found that in their sample from a religiously conservative university that approximately 42 percent of the students used alcohol, 35 percent engaged in binge drinking,¹² 35 percent used tobacco, and 34 percent

used marijuana. While this is about half the rate within the general United States population, these data indicate that prevention is crucial.¹³

Reasons for Teen Drug Use, Risk Factors, and Protective Factors

When considering what type of school-based prevention programming to develop or use, it is important to briefly review the causes of substance abuse. The best evidence-based prevention programs start with a clear understanding of the causes of drug use and abuse. People use drugs for various reasons such as obtaining pleasure and euphoria; meeting social expectations;



Top: Article author Harvey Burnett in his police sergeant uniform. Bottom: A page spread from the D.A.R.E. curriculum.

dealing with anxiety or stress; avoiding pain; and achieving an altered state of consciousness.¹⁴

However, a more important question centers around the reasons why a young person would accept an offer to use drugs, usually from his or her peers. Kobus and Henry¹⁵ found that peer-group use predicted individual alcohol, cigarette, and marijuana use. Miller et al. found several reasons why teens accept drug offers, including peer pressure/acceptance by one's peers; curiosity; rationalization (talked self into trying the drug offered); negative feelings; and role models who engage in the behavior.¹⁶ Peer pressure and rationalization were the most frequent reasons given for teen acceptance of a drug offer. A crucial factor was that many teens entered into a situation where drugs were being offered with an indecisive mindset that made them vulnerable to urging from their peers or from their own internal pressure.¹⁷ Thus, to be successful, any prevention program must address resistance to peer pressure and work to help young people develop a decisive mindset not to use drugs.

The Drug Abuse Resistance Education (D.A.R.E.) Program¹⁸

Schools have implemented a number of drug-prevention programs to help reduce drug use and enhance learning among students. One of the most popular is the Drug Abuse Resistance Education Program (D.A.R.E.).

D.A.R.E. was launched in 1983 in Los Angeles, California, as a collaborative prevention and education program between local law enforcement and local schools to address substance use/abuse and other high-risk behaviors among young people. D.A.R.E. focuses on developing "a world in which students everywhere are empowered to respect others and choose to lead lives free from violence, substance abuse, and other dangerous behaviors."¹⁹

The D.A.R.E. program's curricula are designed to be taught sequentially from grades K-12, with an elementary 5th- to 6th-grade core curriculum and curricula for middle school and senior high school (see Table 1). The elementary, middle, and senior high school

curricula are organized as 10-week, 10-lesson programs, with each lesson requiring one 40- to 45-minute class period that emphasizes interaction between instructors and students.

One of the unique aspects of D.A.R.E. is how it is taught. The program uses a specially trained local uniformed law-enforcement officer or presenter. In fact, D.A.R.E. officers must complete 80 hours of preparatory training before they can teach the curriculum in the classroom. There is usually no cost for the officer training program, other than expenses for travel, lodging, and per diem, which are normally paid for by the requesting agency. Hammond,

et al. found that students who received D.A.R.E. from police officers as instructors evaluated their instructors more positively than non-police instructors and tended to reinforce student intentions not to use drugs.²⁰

Since its inception, D.A.R.E. has been taught in hundreds of public and private American school districts, as well as in 44 other countries.²¹ With D.A.R.E.'s expansion throughout the world over the past decade, its program may be useful for Adventist schools in a variety of international settings. Mangham indicated in 2007 that D.A.R.E. was the most widely used substance-abuse education program in Canadian communities.²²

Table 1. D.A.R.E. *keepin' it REAL* Programs Curricula for Elementary, Middle/Junior High, and Senior High

Lessons	5th/6th Grade Core	Middle/Junior High	Senior High
1	Introduction to D.A.R.E.'s <i>keepin' it REAL</i> Program	Options and Choices	Introduction to D.A.R.E. Senior High
2	Drug Information for Responsible Decision Making	Risks	Costs, Supply and Demand
3	Risks and Consequences	Communication and Conflict	Decisions and Consequences
4	Peer Pressure	Refuse	Teenagers and the Law
5	Dealing With Stressful Situations	Explain	Driving While Impaired
6	Basics of Communication	Avoid	Zero Tolerance and Drug Testing
7	Nonverbal Communication and Listening	Leave	Drugs, Media, and Violence
8	Bullying	Norms	Managing Anger and Resolving Conflicts Without Drugs
9	Helping Others	Feelings	Choosing Alternatives to Violence
10	Getting Help From Others and Review	Support Network	Forming Safe and Healthy Teen Relationships

Criticisms of the D.A.R.E. Program

Despite the D.A.R.E. program's popularity, it has also come under criticism with regard to its effectiveness in preventing substance use among youth. For instance, Ennett, et al. found that D.A.R.E. had no significant influence on teen drug use or attitudes and skills related to preventing drug use.²³ Other research studies have also found the program to be ineffective in reducing substance use or preventing the future use of drugs among adolescents.²⁴

Unfortunately, these studies focused on students who received only the core curriculum and failed to compare their results to schools where the D.A.R.E. core curriculum was used in conjunction with a more holistic school health education approach that included additional school-based drug-prevention education strategies for middle school- and high school-level students.²⁵ Furthermore, these studies approached D.A.R.E. with a misperception or bias about what contributes to an effective drug-prevention program. D.A.R.E. is not a "cure-all" or "stand-alone" program for preventing drug use among youth. Effective strategies integrate school-based programs like D.A.R.E. with broader community partnerships that help reduce drug use among young people; such as youth involvement in local church-sponsored activities and mentoring programs.²⁶

The New D.A.R.E. *keepin' it REAL* Curriculum

As the result of criticisms of D.A.R.E., program leaders and researchers worked together to redesign the program. They sought to develop and implement the best evidence-based strategies to prevent substance abuse among youth. In 1989, Penn State University initiated the Drug Resistance Strategies Project (DRS) in order to study how adolescents perceive drugs and drug offers as well as how they determine risks and make good decisions. This project was funded by the National Institute on Drug Abuse. By using previous research related to teaching resistance and life skills, and employing a culturally based narrative preven-

Table 2. NIDA's 16 Principles for Effective Prevention Programs*	
Risk Factors and Protective Factors	
1	Should enhance protective factors and reverse or reduce risk factors.
2	Should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs, illicit drug use, and inhalant, prescription, and over-the-counter drug use.
3	Should address the type of drug-abuse problems in local community, target modifiable risk factors, and strengthen identified protective factors.
4	Should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity to improve program effectiveness.
Prevention Planning	
Family Programs	
5	Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information.
School Programs	
6	Can be designed to intervene as early as preschool to address risk factors for drug abuse and academic difficulties.
7	For elementary school children, should target improving academic and social-emotional learning to address risk factors for drug abuse, such as early aggression, academic failure, and school dropout.
8	For middle or junior high and high school students, should increase academic and social competence with the following skills: study habits; communication; peer relationships; self-efficacy and assertiveness; drug-resistance skills; reinforcement of antidrug attitudes; and strengthening of personal commitments against drug abuse.

tion approach, the DRS designed, implemented, and assessed D.A.R.E.'s new *keepin' it REAL* curriculum.²⁷ (The acronym *REAL* [Refuse, Explain, Avoid, and Leave] represents the four methods that adolescents use to resist drug offers.)

Research has shown that the initial decision to use drugs often involves peer pressure and no clear decision not to use. Students who were exposed to the *keepin' it REAL* curriculum were less likely to use gateway drugs (alcohol, cigarettes, and marijuana).²⁸ Hecht and his colleagues also found that these students were less supportive of their peers using drugs and had an increased ability to resist drug experimentation and use.

The original D.A.R.E. program has been redesigned to address the criticisms of researchers and utilize the best evidence-based practices documented

by researchers and the National Institute on Drug Abuse. D.A.R.E. America licensed the *keepin' it REAL* program from Penn State University in 2009 for national and international use. It is the most widely disseminated middle school substance-prevention program in the world. In fact, the program is currently listed as an evidence- and school-based, multicultural substance-abuse prevention program for students 12-14 years of age on the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-based Programs and Practices (NREPP) Website.²⁹

Evidence-based curriculum development was also applied to the D.A.R.E. elementary core curriculum.³⁰ By the end of 2013, the new *keepin' it*

Community Programs	
9	Should focus on the general population at key transition points, such as promotion to middle school. This can produce beneficial effects even among high-risk families.
10	Programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone.
11	Programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting.
Prevention Program Delivery	
12	When communities adapt programs to match their needs, community norms, or differing cultural requirements, they should retain core elements of the original research-based intervention, including structure, content, and delivery.
13	Should be long term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals.
14	Should include teacher training on good classroom-management practices.
15	Are most effective when they employ interactive techniques, such as peer discussion groups and parent role-playing, that allow for active involvement in learning about drug abuse and reinforcing skills.
16	Can be cost-effective. For each dollar invested in prevention, a saving of up to \$10 in treatment for alcohol or other substance abuse can be realized.
* E. B. Robertson, S. L. David, and S. A. Rao, <i>Preventing Drug Use Among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders</i> (Bethesda, Md.: National Institute on Drug Abuse, U.S. Department of Health and Human Services, 2003), 2nd edition.	

REAL elementary core curriculum for grades 5 and 6 will be implemented by D.A.R.E. officers. The new curriculum is based on social-emotional learning theory,³¹ which identifies and teaches several basic skills: how to control one's impulses and how to think about risks and consequences in order to engage in more responsible decision making, which should result in the young person's developing a determination to not use drugs. Furthermore, the curriculum has been aligned with the Common Core 5th-grade standards to provide a framework for core instruction in U.S. classrooms.³²

Evidence-Based Drug Prevention Programs for Schools

The National Institute on Drug Abuse has developed a comprehensive research-based guide for parents, educators, and community leaders to help prevent drug use and abuse among children and adolescents.³³ Table 2 provides

16 key research-based principles that characterize effective prevention strategies such as the D.A.R.E. *keepin' it REAL* program. The guide goes on to address risk and protective factors related to teen substance use, how to plan for drug-abuse prevention within any area of the community, and how to apply prevention principles in drug-prevention programs. The guide also provides examples of both universal and selective research-based drug-abuse prevention programs that can be implemented within a K-12 environment.

SAMHSA has established the National Registry of Evidence-based Programs and Practices (NREPP), a searchable online registry of more than 280 interventions in the areas of mental health promotion/treatment; and substance-abuse prevention/treatment. The NREPP lists 143 school-based substance-use/abuse prevention programs that can be implemented by educators.³⁴

Implementing an Evidence-Based Drug Prevention Program in Adventist Schools

Unfortunately, substance use does occur in Adventist educational institutions. While evidence suggests that Adventist youth use dangerous substances at a much lower rate than non-Adventist youth, a number of studies suggest that about half of Adventist youth have used alcohol, and about one-third have tried marijuana.³⁵ Therefore, it is important for Adventist educational leaders to take an active role in equipping our youth with the skills and support necessary to make good decisions when faced with offers to use or experiment with drugs. In addition to the information that has been shared in this article, the following suggestions should be used as a guide in implementing an evidence-based prevention program in an Adventist educational environment:

1. We must accept the fact that Adventist youth may be offered alcohol, tobacco, marijuana, and other drugs, and some currently use dangerous substances. Our students come from various socioeconomic, ethnic, cultural, parental, and experiential backgrounds and hence have different levels of exposure to drugs and attitudes toward using them. Therefore, we must equip them with the best strategies and knowledge to deal with drug offers.

2. Providing a spiritual foundation by incorporating our religious beliefs and creating youth-centered church activities can help to deter drug use. Koenig, McCullough, and Larson's³⁶ review of more than 100 studies noted that religion can help prevent involvement in substance use. More recent studies have also confirmed that religious belief and attitudes, pro-social behaviors, and involvement in church activities are protective against adolescent drug use.³⁷

3. Teachers, administrators, parents, and students need to collaborate in selecting an evidence-based substance-abuse prevention program that is the "best fit" to empower K-12 students to resist using drugs and other dangerous substances. This may mean budgeting to implement such curricula as *keepin' it REAL* or LifeSkills Training as early as

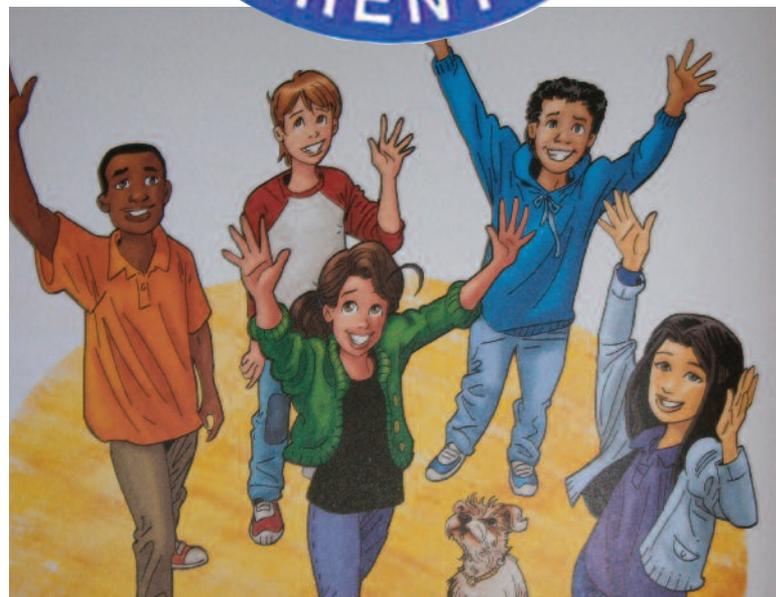
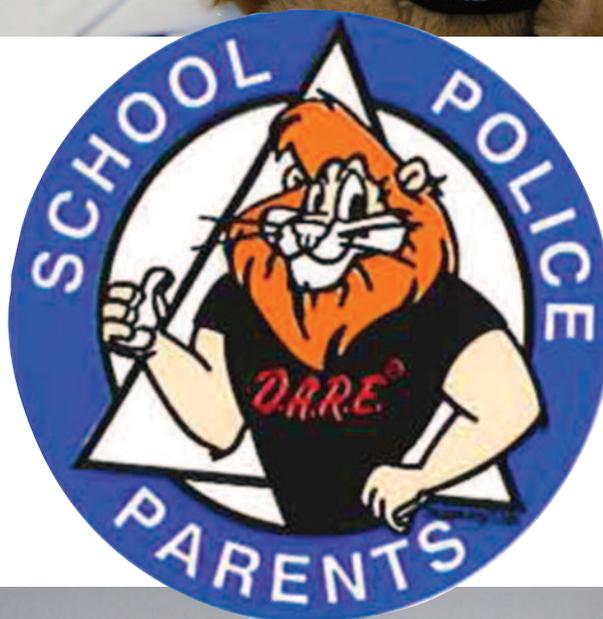
5th grade and to continue with booster curricula at the 8th, 10th, and 12th grades. Many evidence-based prevention programs are relatively inexpensive, and can be developed and implemented in cooperation with local law enforcement and public health departments.

4. The school's prevention curriculum should include an educational component for parents, the church community, and the local community that empowers them to help their youth make good decisions regarding substance use. For example, an Adventist school or youth club could host a seminar on youth drug use, its impact on the user, school, family, and community, and commitment to Christian principles about healthful living can help prevent and deter drug use. The D.A.R.E. Community Education Program provides a good foundation to build from and can be combined with other materials promoting healthful living.

5. The school should implement an ongoing assessment process to evaluate substance-use prevention curricula and their outcomes. This will provide important feedback regarding aspects of any program that need improvement or revision.

Conclusion

One of God's most inspirational and instructional messages regarding how parents and educational leaders should teach children is found in Proverbs 22:6, "Start children off on the way they should go, and even when they are old they will not turn from it" (NIV).³⁸ Ellen White succinctly described the goal of Christian education: "True education is that which will train children and youth for the life that now is, and in reference to that which is to come; for an inheritance in that better country, even in an heavenly [one]."³⁹ Drug-prevention programs such as D.A.R.E. are important educational tools that can and should be used by Adventist educators to help guide, teach, train, empower, mentor, and encourage safe and responsible behaviors among our students in regard to drug use as well as how to develop an intimate and lifelong relationship with their Savior, Jesus Christ. ✍



T-shirt, stuffed lion, and other D.A.R.E. materials.



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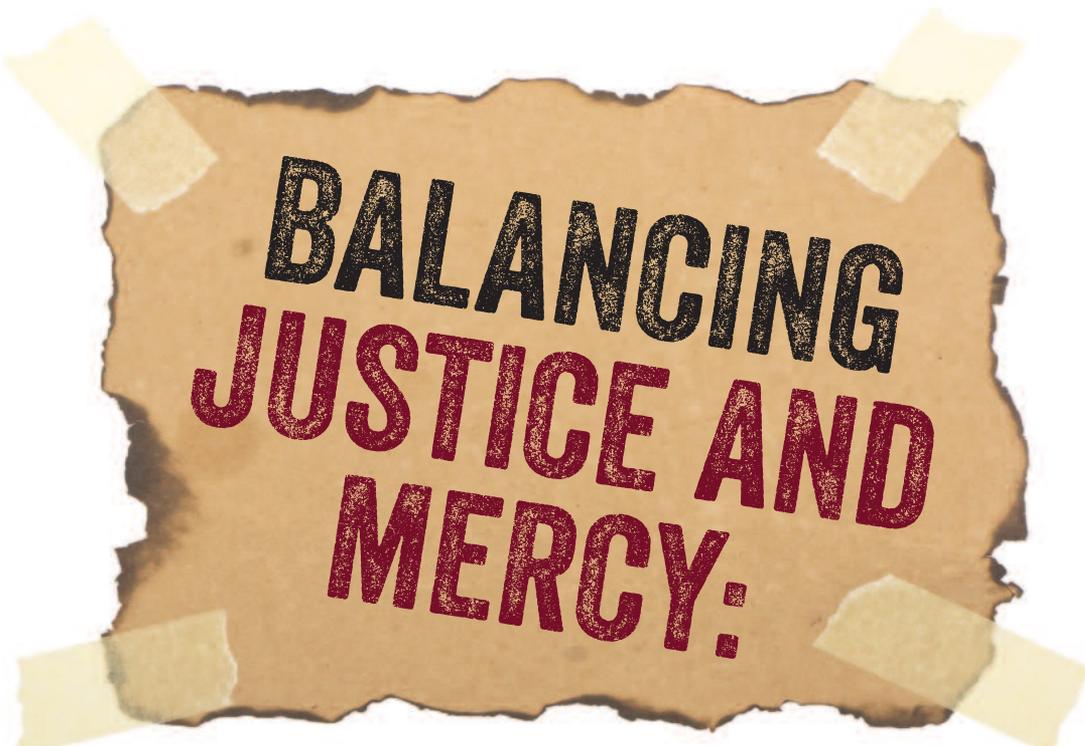
Department at Andrews University in Berrien Springs, Michigan. He has been a staff psychologist at the Andrews University Counseling and Testing Center and coordinated the center's substance abuse and campus outreach programs. Dr. Burnett received his Ph.D. in Counseling Psychology and a Master of Divinity from Andrews University. In addition, he has worked in law enforcement for the past 17 years and is presently a police sergeant and assistant emergency-management coordinator who teaches the 5th/6th-grade core Drug Abuse Resistance Education (D.A.R.E.) curriculum, and coordinates the Community Policing and Behavioral Science section with the Buchanan, Michigan, Police Department. Contact information: Harvey Burnett, Behavioral Sciences Department, Andrews University, 8488 E. Campus Circle Drive, Berrien Springs, MI 49107. E-mail: harveyb@andrews.edu.

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BALANCING JUSTICE AND MERCY:

Redemptive Ways of Dealing With Adolescent Substance Use

Part of growing up for teenagers and young adults in most Western cultures is the search to achieve independence and control of their lives, often through exploration and experimentation. Their curiosity frequently leads to experimentation with alcohol, tobacco, and other drugs.¹ Substance abuse² by teens and young adults has received widespread public and media attention in recent years. While popular movies and television programs focus on the fun and humor of high school and college parties (and binge drinking in particular), research clearly reveals that alcohol is a major contributing factor in injuries, assaults, sexual abuse, promiscuity and other unsafe sexual activities, academic problems, accidents, and death.³

For nearly the entire century and a half of their existence, Seventh-day Adventists have placed major emphasis on health

and healthy behaviors. As a part of this focus, the church's academies and higher education institutions have developed clear policies prohibiting alcohol and drug possession and use. However, even within the restrictive and protective environment of an Adventist school, some teens and young adults will experiment with alcohol, tobacco, and other drugs. These rates increase as students get older. Adventist college students are, however, much less likely to drink and smoke than the average student attending a secular university.⁴

Unfortunately, though most students know that these substances are harmful, temptation is not always overruled by good judgment. Whether it's at a party, in a car in the parking lot, or in the woods behind the school, many do experiment with harmful substances. Some will try a drink or smoke once or twice and decide never to do so again. Others will start drinking

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or smoking occasionally at parties. A few will continue to drink or smoke and will begin getting into trouble that rapidly spirals out of control.⁵

Given the reality that teens are often curious and want to try new things, how should Adventist academies respond when they have evidence that students are using alcohol and other dangerous substances?⁶ How can schools find a balance between rigid enforcement of a zero-tolerance policy⁷ and an overly permissive approach that turns a blind eye toward dangerous and unhealthy behaviors? Is it possible to be loving and redemptive toward a repentant student without making other students think they can get away with being a little bit bad without getting expelled? And perhaps the most important question: How can our schools create policies that uphold clear standards against harmful substances while at the same time responding to student mistakes in ways that acknowledge their error AND create pathways to resolution and redemption?

This article will briefly describe the range of policies relating to drug or substance possession and use that are found in the boarding and day academies of the Lake Union Conference (in the North American Division). Next, we will deal with the areas of screening, discipline, and referral to appropriate services. Finally, using case examples of two very different student experiences with illegal substances, we will offer some policy recommendations for dealing redemptively with substance abuse by students.

High School and University Substance-Abuse Policies

Before describing existing substance-use policies, it is important to briefly review the relevant literature on the role that institutional policies can play in deterring substance use. Because we were unable to find publications relating to substance-abuse policies on church-affiliated campuses, we are including a brief, selective review of high school- and university-based substance-abuse policies that are relevant to this article.

Research on zero-tolerance policies has shown that this approach is generally not effective in reducing high-risk youth behaviors. One study reviewed findings from a large number of articles that explored the impact of zero-tolerance policies relating to school disruption such as violence, bullying, drug and alcohol use, harassment, and other anti-social behaviors.⁸ The authors concluded that these policies did little or nothing to change the negative behaviors of students or improve school safety. Similarly, the American Psychological Association con-

ducted its own extensive review of the literature on zero-tolerance policies and found that the few good studies that did exist on this topic indicated that such policies were generally ineffective in changing student behavior and in some cases negatively affected the relationship between school officials and students.⁹

Researchers have found that one important factor in reducing substance use among youth is for the policies to be clearly communicated to all students. This includes knowing about the existing discipline steps and any rehabilitative policies. Researchers in one study found that although students were aware that the school had a policy on alcohol use, they could not recall the details. In addition, students did not know treatment options were available if a user was caught. This lack of knowledge would naturally diminish the effectiveness of a policy that encourages self-disclosure and treatment-seeking behaviors.¹⁰

Another study found that strict policies alone did not deter the use of alcohol and other drugs; however, their findings proposed an “environmental-management approach” where enforcement of substance-use policies was combined with prevention, educational programs, and student-centered, individualized responses to incidents involving alcohol and drug use. This approach reduced the frequency and severity of alcohol and drug use.¹¹ Other researchers found that schools with only prohibitive substance-use policies were less effective in deterring substance use on their campuses. However, strong policies with clear consequences, combined with treatment opportunities such as drug-awareness programs, individual therapy, or recovery support, were more successful in their quest to reduce harmful substance-use incidents.¹²

Research on compliance with treatment has shown that students who were given a choice of treatment options and received recovery support were more highly motivated to stay in treatment and to remain substance free.¹³ Another study revealed that students with substance-abuse problems were more likely to reach out for help and to self-report these problems when the school had an alternative to expulsion. In this particular study, the school policy encouraged substance-abuse treatment while allowing the student to remain in school.¹⁴

Research on compliance with treatment has shown that students who were given a choice of treatment options and received recovery support were more highly motivated to stay in treatment and to remain substance free.¹³ Another study revealed that students with substance-abuse problems were more likely to reach out for help and to self-report these problems when the school had an alternative to expulsion. In this particular study, the school policy encouraged substance-abuse treatment while allowing the student to remain in school.¹⁴

Seventh-day Adventist Academy Substance-Abuse Policies

While most colleges (both secular and religious) have adopted prevention and intervention programs to help their

Research on compliance with treatment has shown that students who were given a choice of treatment options and received recovery support were more highly motivated to stay in treatment and to remain substance free.

students deal with substance use and abuse on their campuses, the same is not always the case with high schools and academies. To better understand Adventist academy substance-use policies, we first referenced the online bulletins/student handbooks from all seven 12-grade boarding and day academies in the Lake Union Conference of the North American Division of Seventh-day Adventists, which encompasses the states of Michigan, Indiana, Wisconsin, and Illinois. While the number of academies is small and not a worldwide sample, the Lake Union's schools do provide examples of the broad range of policies in effect at Adventist secondary schools. All of the Lake Union academies have explicit statements in their school handbooks stating that their campus is a drug-free environment. However, while these schools also have more specific policies regarding drug use on their campuses, their policies take two distinct tracks in regard to disciplinary action.

We categorized academy policies on substance use from most restrictive/punitive (Approach No. 1) to least restrictive/most redemptive (Approach No. 2). Both approaches contain policies on drug searches and testing. Approach No. 1, followed by most academies, generally results in expulsion if the student is found to possess or use a banned substance; Approach No. 2 allows for individualized and graduated steps of action, which could include regular drug testing and referral to drug treatment. (It should be noted, however, that while the schools included in Approach No. 1 may describe a zero-tolerance policy, they may, in practice, sometimes allow for a more individualized approach.¹⁵)

Drug Search and Testing: Drug search policies usually include requiring the suspected student to submit to a search of his or her room, locker, or vehicle. Four of the seven academies (57 percent) state in their handbook that suspected students may also be required to submit to drug testing, while three academies (43 percent) state that refusal to submit to drug testing may result in suspension or expulsion. If a student tests positive for substance use, two of the seven academies (29 percent) state that they will notify local law enforcement and suspend the student.

Consequences—Approach No. 1

Immediate Dismissal or Expulsion: Immediate dismissal generally involves expelling the student if he or she is caught possessing, selling, or using drugs, alcohol, or tobacco. Five of the seven schools (71 percent) maintain this policy, although six (86 percent) allow for some flexibility by stating that such involvement will result in disciplinary action and *may* include expulsion. While these schools may include education on the dangers of substance use (in classes or other forums), the policies in their student handbooks do not describe these activities.

Consequences—Approach No. 2

Possible Suspension/Referral to Treatment: Two of the seven academies state that, if a drug test reveals that the student has been using banned substances, he or she will be suspended from school as an “alternative to expulsion,” and will be required to participate in a drug-education program or enter a drug-treatment center. One academy states that parents will be notified and must give permission for drug testing prior to the

administration of the test. If the student tests positive for drugs or alcohol, the parents must pay for their child's school-approved drug treatment in order for him or her to remain enrolled in the school. The other five academies do not specifically mention the possibility that the student could enroll in a treatment center or rehabilitation program as an alternative to suspension/expulsion.

Individualized Policy: Four of the seven academies state in their handbook that “disciplinary action” will be applied on an “individual basis” as deemed appropriate by the school administration.

Graduated Steps of Action: Two of the seven academies describe the steps that will be taken when disciplining a student involved in substance use. However, four of the academies provide various actions that must be undertaken by the student in order to maintain his or her enrollment status. These steps include submitting to discipline and/or a requirement to participate in a drug-education program, a referral to drug treatment, or monitoring and drug testing.¹⁶

• **Discipline and Drug-Education Programming:** For experimental substance use (generally first-time use), students may be disciplined and/or required to attend educational programming on the dangers of substance use.

• **Referral to Treatment:** If the student is assessed by a substance-abuse counselor (usually based on a referral to a local counseling or drug-treatment facility) as being chemically dependent on a substance, several schools require the student to enroll in either an inpatient or outpatient treatment program.

• **Monitoring and Drug Testing:** Referral to a treatment program generally includes signing a written behavioral contract between the school and the student, providing ongoing evidence of compliance with the treatment plan, and/or submitting to possible random drug testing as part of the compliance monitoring process. If a student fails to comply with all the disciplinary measures required by the school, he or she may be subject to mandatory withdrawal, dismissal, or expulsion.

Challenges in Initial Screening, Discipline, and Referral to Appropriate Services

Screening generally refers to the process used by early responders to determine if a teen might have an alcohol or drug-abuse problem. Several challenges often emerge for teachers and school administrators in relation to this initial screening process. First, students may not feel comfortable disclosing their substance use. If the student does not feel safe sharing this information with a teacher or other school official, either because the adult is obligated, by policy, to expose and expel the student, or because the student is not certain that he or she can trust the teacher or administrator to maintain confidentiality, the student is likely to lie or minimize his or her use. Research studies have shown that the presence of trusted adult mentors is strongly associated with young people making wise, accountable decisions.¹⁷ Providing a safe environment where students can talk openly about their struggles, without fearing that they will be exposed or condemned, is key to the success of a redemptive approach. However, the trusted adult must also

maintain consistency in holding the student accountable for his or her actions, implementing agreed-upon sanctions when the student fails to uphold the pact.

Second, many teachers and school administrators have not been trained how to accurately identify and inquire about the signs and symptoms of substance abuse. Although screening is a simple procedure that involves either preliminary physical



testing for the presence of alcohol or drugs or asking the student a series of structured questions about recent use, many teachers and administrators do not know how to do this. Accordingly, they may miss subtle signs and symptoms of substance use, resulting in a missed opportunity to obtain help for the student.

Some teachers or administrators may choose to perform a simple screening test to detect the presence of alcohol or other drugs, using one of the many available screening tools.¹⁸ However, great care should be taken when conducting these screening tests since the adult's lack of understanding about substance abuse could lead him or her to misdiagnose or overreact to a student's substance use. The best solution to this challenge is

to refer the student to a certified substance-abuse counselor who can provide a thorough assessment of the student's background and circumstances surrounding the substance use event(s). It is important for the counselor to be aware of the unique spiritual and cultural perspectives of Adventism so he or she clearly comprehends the student's situation and beliefs and the school's policies and can make appropriate recommendations.

A third reason screening is challenging is that, for some Adventist school administrators, any *use* of substances, whether experimental, recreational, or otherwise, is automatically classified as substance *abuse*. But even a guidance counselor or mental-health professional can have difficulty determining the difference between a teenager who has just experimented with a substance and a person who has a full-fledged chemical dependency or addiction. (This further underscores the importance of consulting a certified substance-abuse counselor who uses standardized, well-recognized tools in the screening and assessment process.)

For students who have been caught experimenting with cigarettes, alcohol, or marijuana at a party, the consequences of an inflexible, zero-tolerance policy can be devastating and humiliating for the youth and his or her family. The resulting suspension or expulsion from the school can have a significantly negative effect on the student's future. When the penalty is applied rigidly and automatically, this can lead to accusations of injustice and lack of compassion, which, if unresolved, can result in alienation from the school and church.¹⁹ One suggestion for avoiding this problem is to replace a zero-tolerance policy with an approach that acknowledges the complexity of each student's unique circumstances and attitudes regarding substance use. We suggest such a policy below.

Fourth, challenges can emerge in the discipline phase of a substance use/abuse event; it is possible to both over- and under-react to a student's transgression of the rules. As noted above, an overly harsh response such as automatic expulsion can drive the student away from the church and damage his or her future educational opportunities. We suggest a more nuanced approach to discipline. 2 Peter 3:9 says that "The Lord is . . . patient with you, not wanting any to perish, but all to come to repentance" (NRSV).²⁰ Peter argues that God is patient in dealing with erring humans as He encourages them along toward repentance and redemption. Similarly, school administrators can provide opportunities for students to redeem themselves through the graduated

steps of action we have proposed in this article. The Bible also encourages us to love and honor the Lord in a holistic manner. This point can be readily seen in Deuteronomy 6:5: "And you shall love the Lord your God with all your [mind and] heart and with your entire being and with all your might" (Amplified).²¹ This text implies that God not only wants us to foster a relationship with Him, but also that He realizes humans are not fragmented beings. Rather, the body, mind, and spirit are all interconnected. Ellen White underscores this point by stating, "True religion brings man into harmony with the laws of God, physical, mental, and moral."²² When a student steps outside of God's ideal by using alcohol or drugs, our redemptive approaches must focus on holistic rehabilitation, which addresses issues related to mind, body, and spirit, so the student's life course is not negatively altered due to the use of substances and foolish choices during this time period. Avoiding overreaction also means that students who experiment with alcohol or marijuana may not always need to enter a formal treatment facility, but they will need education on the consequences of drug use and individual or group counseling to help them sort out their spiritual, academic, and social priorities.

On the other hand, underreaction or, worse yet, no acknowledgement that a student has violated a school policy and has a problem, can cause students to think that using substances is no big deal and has no social or moral consequences. In this case, a student who used or abused substances at an early age but does not receive any sanctions or intervention may be set up for future negative consequences such as failing to graduate from high school or dropping out of college. Crafting an individualized response that is "just right" can be challenging, but we believe the use of graduated steps of action, including education about the dangers of substance use, random drug and/or alcohol testing, referral for drug treatment (if appropriate), and graduated penalties for failure to remain substance free can effectively and redemptively deal with these challenges.

A fifth challenge that many schools have to address is when students are caught dealing illegal drugs such as marijuana, methamphetamine, or cocaine to other students. When a student has made the choice to sell or supply drugs to other people, administrators will need to take firm action. At that point, the student has moved from experimentation or even occasional use into tempting and endangering other students. Thus,

the appropriate policy response is immediate expulsion and contact with local law-enforcement personnel in order to protect the rest of the students and others to whom the student may be supplying drugs. However, even when a student has been dismissed for dealing drugs, administrators or teachers should seek to maintain supportive contact with him or her in order to foster a redemptive relationship, which can convince the student that the school, and ultimately the church, cares about his or her wellbeing. The dean or principal may, for instance, go to court with a student who has been arrested for selling drugs to show his or her moral support.

One final challenge relates to finding appropriate treatment services for young people who are genuinely struggling to overcome an addiction. It can be particularly difficult to find good treatment services for adolescents in rural areas. One way to locate nearby drug treatment facilities in the U.S. is to visit <http://findtreatment.samhsa.gov/>. This Website uses mapping technology to identify both substance-abuse and mental health-treatment providers based on zip code locations. Although a few Adventist treatment facilities do exist, they are often far away and can be expensive.²³ Working with a competent, local substance-abuse counselor can help the student to sort out these issues and provide the school with guidance as to appropriate action to take as the student goes through the recovery stage.

Working with a competent, local substance-abuse counselor can help the student to sort out these issues and provide the school with guidance as to appropriate action to take as the student goes through the recovery stage.

A Redemptive Substance Abuse Policy Proposal

This article proposes a redemptive policy that can be implemented at the academy level (see Table 1). It incorporates elements from current policies in several Lake Union academies and integrates them into a single policy recommendation that contains two alternative tracks. Both tracks are redemptive in nature, with the first alternative designed to deal with situations where school administrators discover illegal substance use by a student. The second alternative is recommended when the student voluntarily seeks out a teacher or administrator to ask for help with a substance abuse problem. Both of these policy tracks can comfortably exist within the same school handbook.

Applying the Policy in a School Setting

We asked a school guidance counselor at one of the Lake Union academies to describe two cases that illustrated these

Table 1. Recommendations for Creating a Redemptive Substance-Abuse Policy for Students Using Harmful/Illegal Substances*

Suggested policy statement: “_____ Academy supports the Seventh-day Adventist ideal of abstaining from alcohol, tobacco, illegal drugs, and other harmful substances, believing that such a policy encourages spiritual formation, character development, and a healthy lifestyle. The school reserves the right to evaluate any substances that are in the possession of students to determine the appropriateness of their possession and use; and to discipline students for use of forbidden substances.”

* A list of commonly abused drugs can be found at <http://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs>. A list of emerging drugs that are becoming popular in some locations in the U.S. can be found at <http://www.drugabuse.gov/drugs-abuse/emerging-trends>.

Track 1	Track 2
<ul style="list-style-type: none"> • School administrator conducts or hires an organization to conduct drug searches and/or testing if a student is suspected of using illegal substances or alcohol. • Student is disciplined by school administration in accordance with school guidelines.²⁴ • Parents/guardians are notified of their child’s drug possession and/or use and of the school’s plan of action for their child. • Administration consults with community consultation team if necessary to formulate a redemptive, customized plan of action. • Student may be required to attend substance-abuse counseling and/or drug/alcohol education, with open communication between the counselor/organization and school administration.²⁵ • Student may be subject to monitoring via drug testing and accountability meetings with school counselor or other staff member. • Student may be subject to suspension/termination if he or she does not comply with redemptive measures. 	<ul style="list-style-type: none"> • Student can self-disclose to school counselor, residence hall dean, or to other trusted school official that he or she is struggling with a substance-use problem and in need of assistance. The student is provided with a conditional promise of confidentiality, contingent upon continued honesty and compliance with administrative requirements.²⁶ • Student and school counselor (or designated school official) develop a detailed and individualized plan of action to curtail substance use and provide a holistic approach to recovery within the framework of school policies and regulations. • School counselor advises the principal/dormitory dean of the situation in somewhat ambiguous terms in order to maintain student confidentiality. • School counselor or other designated person works with the student to develop a plan of action for dealing with his or her substance abuse problem. • School counselor or designated person closely monitors student’s progress and compliance with graduated plan of action, which may include education about the dangers of substance use, random drug or alcohol testing, referral for drug treatment (if appropriate), and escalating penalties for failure to remain substance free.

Expected Outcome

The student will be exposed to a supportive environment for healing from substance-abuse problems. He or she will be expected to be accountable for his or her actions while learning and practicing appropriate behavior in a redemptive environment.

policies in action. Although the situations were real, the counselor disguised the names and details of the cases to protect confidentiality.

Case Studies for Tracks 1 and 2: Brent and Robert

The following case studies describe two individuals who represent two different variations in how alcohol and drug-abuse policies were implemented at one Adventist academy. The names of both individuals are pseudonyms to protect their privacy and ensure confidentiality.

Track 1: Brent was an 11th-grade student with a history of family problems, some depression, and recent social changes that included acquiring a new group of public school friends. The guidance counselor became aware that Brent had attended a party where drugs and alcohol were available, and that the police had been called. The counselor took Brent aside, mentioning that she knew about the party, hoping that Brent would disclose his substance use to her. Instead, he was evasive and refused to discuss the party, other than to say that he was there but hadn’t been drinking.

A few weeks later, the academy principal received an official police report that included Brent's name. Because Brent had not taken the counselor's invitation to confess the situation and confidentially request help, the standard academy policy went into effect. The principal confronted Brent, took him to the nearby medical center to be tested for illegal drugs and alcohol, and then presented his case to an administrative committee whose responsibility was to recommend further action. The committee outlined the steps Brent needed to take in order to remain a student and notified his parents. A plan was developed that included regular sessions with a community counselor who specialized in substance-abuse issues. The school guidance counselor had full access to Brent's progress with the community counselor.

Brent had a few subsequent slip-ups, including drinking alcohol one weekend and using marijuana once, but since he maintained the therapeutic relationship with his community counselor, told the guidance counselor about his mistakes, and followed the required recommendations of the administrative committee, he was allowed to remain at the school. He graduated on time with his academy class the following year.

Track 2: The second case study involved Robert, also an 11th grader. Robert confidentially approached the guidance counselor and asked for help because he wanted to change his life. He had been heavily involved with marijuana, tobacco, and alcohol, although he had experimented with many other types of drugs. Since Robert had voluntarily initiated the request for help, the guidance counselor was able to keep him under a sort of "zone of protection." While the guidance counselor told the principal that she was working with a student on a substance-abuse issue, she did not volunteer, nor was she asked, to provide details about his situation. The guidance counselor sought the advice of a Community Counseling Team, comprised of a youth pastor and an educator with substance-abuse counseling background to determine how to proceed. The committee recommended that Robert maintain daily contact with the guidance counselor as he worked to overcome his addictions. Robert also decided to inform his parents about the situation.

Because Robert had become physically addicted to alcohol and cigarettes, he struggled to achieve sobriety. He sometimes checked in three to four times a day with the guidance counselor to get candy and encouragement, and to ask for occasional prayer. He sometimes slipped up, and although it was a struggle, Robert finally overcame his addictions and graduated on time with his class the following year.

The two case studies provide illustrations of two policy approaches described earlier. Brent's case illustrates a Track 1 policy approach. Because he was unwilling to talk openly with the school counselor about his involvement in the party, he became subject to a series of restrictive actions once school personnel were notified of underage drinking by the local authorities. These more restrictive policies allow less room for individualization, as the infraction had already passed through legal and administrative channels. In such cases, measures such as random drug screening, extensive parental involvement, and the use of a community substance-abuse specialist may be neces-

sary to provide holistic and redemptive treatment.

Robert's case provides an example of a Track 2 policy approach. Because he initiated the contact with the school counselor, he was able to maintain confidentiality, even though he was struggling with some very serious drug problems. When Robert self-reported his substance abuse, his verbal acknowledgement showed that he recognized that he had a problem and wished to receive assistance. Robert knew from the school substance-use policy that help was available, so once he brought the problem forward, the school counselor was able to offer assistance by developing an individualized plan that combined support, spiritual development, and accountability. *It is important to note that no matter which track is chosen, consistency in implementing the policy approach is key to its success.*

Throughout the Bible, we see that we as humans are fallen from God's ideal and, as such, we make mistakes and commit sin. The plan that God created to provide a way back to Him should also guide policy development so that we mirror Christ's example in tailoring His redemptive actions to people's needs. As such, substance-abuse policies should not provide either a harsh overreaction or an easy way out for students. Rather, the goal of a redemptive intervention is to provide a clear way for students to address their issues within a loving and supportive atmosphere, while at the same time training them to be accountable for their actions and the resulting consequences. To that end, we recommend a two-track policy that maintains clear standards against harmful substances while at the same time responding to student mistakes in ways that acknowledge their error and create pathways to resolution and redemption. ✍

The policy recommendations in this article were primarily developed from an American perspective. When developing policies for schools in other countries, readers should consult and follow the laws of their own nation. In addition, we recommend that all policies be reviewed by the legal counsel of the local conference or union to determine whether any statements or policies are out of compliance with the laws of the local jurisdiction.



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4. Herbert W. Helm, Jr., et al., "Comparison of Alcohol and Other Drug Use Trends Between a Prohibitionist University and National Data Sets," *Journal of Research on Christian Education* 18:2 (August 3, 2009):190-205.

5. Rates at one Adventist university have remained stable over 25 years, with students using most substances at about one-half to one-fifth the rates found in secular colleges and universities in the U.S.

6. A companion article on page 4 of this issue addresses policy issues on the university level.

7. A zero-tolerance policy is one that calls for the expulsion of a student when he or she is caught with *any* amount of a prohibited substance.

8. Russell J. Skiba and Kimberly Knesting, "Zero Tolerance, Zero Evidence: An Analysis of School Disciplinary Practice," *New Directions in Youth Development* 92 (2001):17-43.

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12. West and Graham, "A Survey of Substance Abuse Prevention Efforts at Virginia's Colleges and Universities," *op. cit.*

13. Kate B. Carey, et al., "Effects of Choice on Intervention Outcomes for College Students Sanctioned for Campus Alcohol Policy Violations," *Psychology of Addictive Behaviors*: doi:10.1037/a0030333.

14. Todd Monroe, "Addressing Substance Abuse Among Nursing Students:

Development of a Prototype Alternative-to-Dismissal Policy," *Journal of Nursing Education* 48:5 (May 2009):272-278.

15. Although this article is advocating a more nuanced and redemptive approach to student drug use, there may be schools that wish to retain their current zero-tolerance policy. In this case, we would strongly advocate high levels of prevention education for both parents and students to help convey the seriousness of the school's commitment to zero tolerance, as well as the possible health, legal, and relationship consequences that can result from alcohol and drug use. Such education should occur before the student is admitted into the school and in a more general way through class discussions and assemblies throughout the school's curriculum. We would also recommend that, following an expulsion, parents are provided with drug-treatment options and other resources to help them get their child the appropriate assistance.

16. Many North American Adventist colleges and universities have substance-use policies that are much more detailed than the policies found in the Adventist academy handbooks that we reviewed. For example, some of the schools differentiate between experimental substance use and chemical dependency or addiction. Specific steps and consequences for non-compliance are then outlined based on the nature of the substance use.

17. Gary L. Hopkins, et al., "Developing Healthy Kids in Healthy Communities: Eight Evidence-Based Strategies for Preventing High-Risk Behavior," *Medical Journal of Australia* 186:10 (2007):S70-S73.

18. Iowa Substance Abuse Information Center, "Assessment Tools": <http://www.drugfreeinfo.org/for-professionals/tools/assessment-tools/>. Retrieved March 29, 2013.

19. A zero-tolerance policy that includes continuing concern and support from the school after a student has been expelled may result in respect and appreciation for the school and the church as a whole. However, it is difficult to maintain a close, ongoing relationship with a student after he or she has been removed from the school. We have observed that the student is more likely to become alienated than reconciled to the church in such circumstances.

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21. Bible text credited to Amplified is from *The Amplified Bible*, Old Testament copyright © 1965, 1987 by Zondervan Corporation. The *Amplified New Testament* copyright © 1958, 1987 by The Lockman Foundation. Used by permission.

22. Ellen G. White, *Patriarchs and Prophets* (Mountain View, Calif.: Pacific Press Publ. Assn., 1958), p. 600.

23. Further information on Adventist drug and alcohol treatment centers can be found in the online article by Curtis J. VanderWaal, *Adventists and Addictions*: <http://www.adventsource.org/as30/plusLine.article.aspx?id=703>. Retrieved April 23, 2013.

24. Private schools in the United States are not generally subject to U.S. Constitutional provisions. Instead, there is a *contract* between the parents (or student, if he or she is an adult) and the school that largely determines a student's rights. "As private institutions, private schools are not subject to any restrictions in terms of violations of the rights of students. Hence, while a public school might have to prove that its violations are for a higher purpose or stem from its *in loco parentis* [school officials acting as parents] responsibilities, a private school may set limits arbitrarily": <http://www.usconstitution.net>. Retrieved September 5, 2013. This means that the school can set its own policies regarding drug searches and can even decide whether to tell the parents if their child has been found in possession of drugs or alcohol. However, parental permission would generally be required if the school wished to send the student to a substance-abuse treatment program.

25. Schools can develop a variety of counseling partnerships or educational alternatives to fit their needs and resources. For example, one school requires students who are caught with harmful substances to complete the D.A.R.E. Program (Drug Abuse Resistance Education)—see article on page 33 of this issue. Another school partners with the local police department's healthy-choices program, which pairs students up with adult mentors and requires the students to attend a number of evening educational classes.

26. Within the United States, state laws vary widely regarding reporting procedures for possession of drugs and alcohol. See the Website for the National Association of State Boards of Education at http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=3130. Retrieved September 5, 2013. Reporting requirements also vary a great deal at the local/community level. Educators are advised to consult with state and local law enforcement agencies when developing substance-abuse policies to make sure they are in compliance with the law.

The Abuse of Prescription and

OVER-THE-COUNTER DRUGS

Our young people currently face a fairly new substance-abuse problem: experimentation with prescription drugs and increasingly powerful over-the-counter (OTC) medications. The National Institute on Drug Abuse (NIDA) defines prescription drug abuse as taking these medications “for reasons or in ways or amounts not intended by a doctor or taken by someone other than the person for whom they are prescribed.”¹ NIDA applies the same definition to over-the-counter medications. According to

several surveys in the U.S., these types of medications—including drugs used to treat pain, attention-deficit disorders, anxiety, and even the common cold—are increasingly being abused. The consequences of the abuse of these drugs have been steadily worsening and are reflected in increased treatment admissions, emergency-room visits, and overdose deaths.²

Which Prescription Drugs Are Most Abused?

Analysis of the data from the 2012 Monitoring the Future (MTF) research conducted in the U.S. by the University of Michigan showed that prescription

and nonmedical use of over-the-counter drugs as well as some alternative medications accounted for most of the commonly abused drugs other than alcohol and marijuana.³ The substances most abused included Vicodin (pain-relieving narcotic), cough medicine (both prescription and OTC), Adderall and Ritalin (for treating attention-deficit disorders), tranquilizers (for treating insomnia and stress), salvia (a hallucinogen from the mint family that can be chewed or smoked; its extract can be consumed as a drink), Oxycontin (narcotic for treating pain), and sedatives (similar to

BY GARY L. HOPKINS, ALINA BALTAZAR, and DUANE C. MCBRIDE

tranquilizers). In the first year, about 36 percent of the high school seniors who were included in the 2012 MTF survey said they had used marijuana, and between 2.7 percent and 8.0 percent had used one or more of the prescription or OTC drugs mentioned. The reason given for their non-medical use was to just experience the effect of the drug(s). Adderall and Vicodin had the highest reported incidence of use—almost seven percent of the high school seniors—while nearly six percent reported abusing cough medicine. It should also be noted that

Where Do Young People Get These Drugs?

The Kaiser Family Foundation in their Website called “TeensHealth” tells this story:⁶

“Angie overheard her parents talking about how her brother’s ADHD medicine was making him less hungry. Because Angie was worried about her weight, she started sneaking one of her brother’s pills every few days.

“Todd found an old bottle of painkillers that had been left over from his dad’s operation. He decided to try

“Taking prescription drugs in a way that hasn’t been recommended by a doctor can be more dangerous than people think. In fact, it’s drug abuse. And it’s just as illegal or as dangerous as taking street drugs.”

Scores of online sources sell prescription medications and potentially dangerous OTC drugs. Some sites are legitimate, but others are not. For example, almost anyone with Internet access and a credit card can get a prescription filled online, even without seeing a doctor. The new drug dealer is not necessarily a seedy character standing under a street light on the tough side of town, he or she is an unscrupulous entrepreneur with a glitzy Website beamed to the unsuspecting and gullible.⁷ The drugs sold by these dealers often do not contain what they advertise, and/or they are not manufactured at the dosage or purity levels expected,⁸ making them even more dangerous. Compounding the problem is the fact that different countries have varying definitions of illegal drugs, prescription drugs, and OTC drugs. What is illegal in the U.S. may be legal in other countries (marijuana, for example). In addition, at least according to media and tourist reports, medications like Xanax that are classified as controlled prescription drugs in the U.S. are available over the counter in many countries.⁹ Pharmacies selling these drugs online may not be violating local laws.

Theft is another common way for young people to get prescription and OTC drugs. They raid the medicine cabinet in their own homes, steal from friends and/or relatives, or shoplift powerful OTC medications that are age-restricted in local stores.

Context of Use

During the past decade, there has been considerable discussion about a new form of youth activity called “pharm parties.” Media report kids getting together, bringing their liquor and pills from home, and putting all of the pills into a single bowl, from which they grab a few or even a handful, and wash them down with an alcoholic drink. While these young people may



for 8th graders, the drug of choice was cough medicine, with three percent reporting its use, more than any other prescription or OTC medication.⁴ A recent study by the Partnership for a Drug-Free America found that the abuse of prescription medicine is relatively high: About 17 percent of teens reported that they had used a prescription medication to get high at least once in their lives, with 10 percent having done so in the past year. In addition, about 12 percent of teens reported that they had used OTC cold medications to get high.⁵

them. Because a doctor had prescribed the pills, Todd figured that meant they’d be OK to try.

“Both Todd and Angie are taking risks. Prescription painkillers and other medications help lots of people live more productive lives, freeing them from the symptoms of medical conditions like depression or attention deficit hyperactivity disorder (ADHD). But that’s only when they’re prescribed for a particular individual to treat a specific condition.

think everyone has brought pain pills and tranquilizers to the party, there are reports of the mixture including heart medicine, blood thinners, ephedrine and pseudoephedrine from cold medications, Parkinson's disease medication, or even cancer drugs. Young people who take a handful of these drugs mixed with alcohol often have no idea what drugs they took or how the drugs relate to the perceptions/feelings they are experiencing, and cannot accurately report to medical personnel in an emergency room what they ingested. While researchers have been skeptical about the frequency of these pharm parties, National Institute of Health-sponsored research¹⁰ has documented that prescription medications are well integrated into the recreational drug-use patterns of youth.

In addition to recreational use in a social context, youth get medications not only from relatives but also from one another. Some have friends from whom they can purchase medications or whom they can encourage to go home and search their family's medicine cabinet to see what's available. Teenagers often learn to search for pills in the lockers and backpacks of their classmates.¹¹

Potential Risks of Abusing Prescription and OTC Drugs

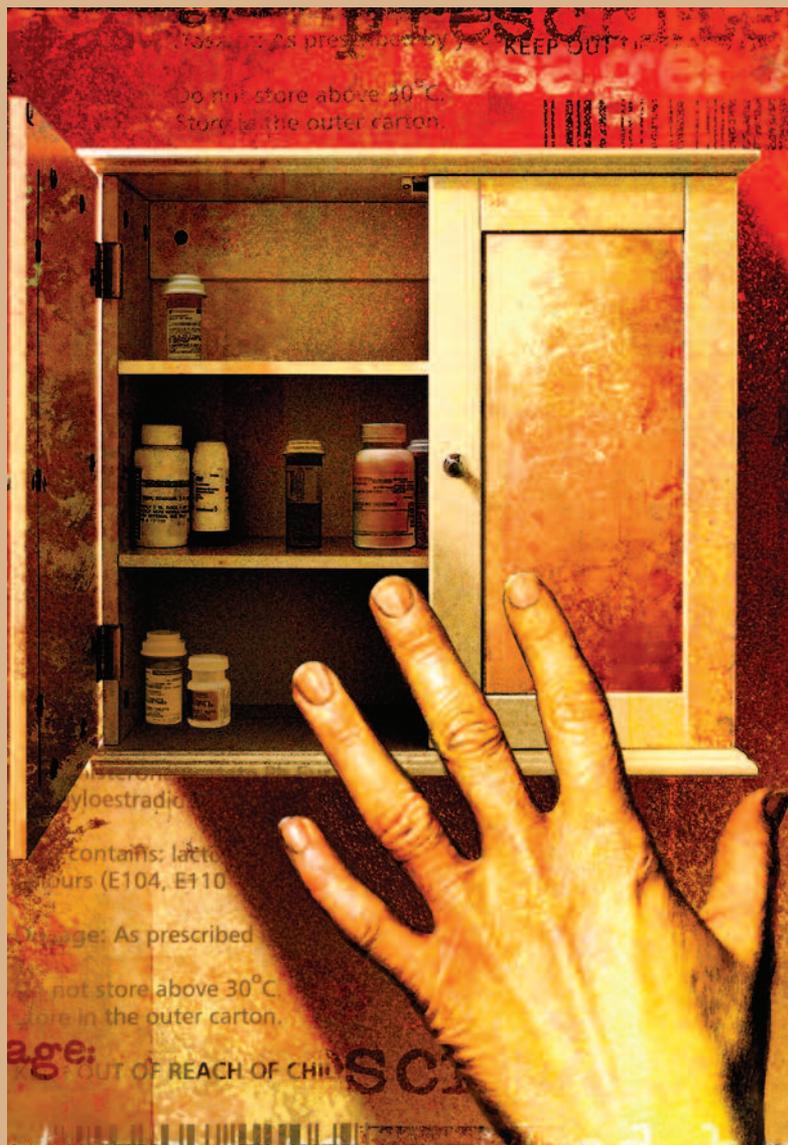
Whether they are using street drugs, prescribed medications, or OTC drugs, drug abusers often get into trouble at school, at home, with friends, and with the law. The likelihood that a person will commit a crime, be a victim of a crime, or have an accident is higher when he or she is abusing any type of drug. Disinhibition, diminished motor control, and reduced cognitive functioning—as well as a lower awareness of one's environment—are consistently related to becoming the victim of a crime¹² or accident.¹³

Like all drug abuse, using prescription or OTC drugs for the wrong reasons poses serious health risks. Opioid abuse (including pain medications such as Vicodin, Oxycontin, and others) can lead to vomiting, mood

changes, decrease in the ability to think (cognitive function), and even decreased respiratory function, coma, or death.¹⁴ This risk increases when prescription drugs like opioids are taken with central nervous system (CNS) depressants like Xanax and alcohol. Even OTC drugs containing antihistamines used to treat colds may have powerful CNS depression effects like drowsiness that significantly increase reaction time, increasing the likelihood of all types of accidents. When combined with alcohol, the impact increases dramatically and can even cause death due to respiratory suppression.

Abusing stimulants (like some

ADHD drugs) may cause heart failure or seizures. These risks increase when stimulants are mixed with alcohol and other substances—even OTC drugs like certain cold medicines that contain ephedrine and pseudoephedrine (which can be used to make methamphetamine).¹⁵ A stimulant overdose can cause a dangerously high body temperature or an irregular heartbeat. Taking several high doses over a short period of time may make the drug abuser aggressive or paranoid. Although stimulant abuse may not lead to physical dependence and withdrawal, the sensations these drugs provide can cause



users to ingest the drugs more and more often until this produces a habit that's hard to break.

The Myth of Safe Drug Use

Young people often think prescription and OTC drugs are not dangerous because physicians would prescribe only safe drugs and certainly anything over the counter must be safe. However, safety lies only in ingesting the medication for the use for which it was intended, at the dosage recommended, and by the person for whom it is prescribed. Even then, many drugs come with warnings about a long list of potential side-effects. The dangers of prescription drug abuse can be exacerbated if people take drugs in a way they were not intended to be used. Ritalin may seem harmless because it's prescribed for little kids with ADHD. But when a person takes it either unnecessarily or in a way it wasn't intended to

be used, such as by snorting or injection, Ritalin can be toxic. And because there can be many variations and dosages of the same medication, the effects and length of time it stays in the body can vary. The person who does not have a prescription might not really know what he or she is taking.

Probably the two most common outcomes of prescription and OTC drug abuse are overdose and/or addiction. When people take higher dosages of drugs than recommended, combine several drugs, or drink alcohol in combination with drugs, they have a significant risk of developing an addiction or accidentally overdosing. The Drug Abuse Warning Network reported¹⁶ that in 2010, more than half a million emergency-room (E.R.) visits were for the misuse of prescription drugs. This report further noted that between 2004 and 2010, there was a 45 percent increase in the number of children and teenagers visiting an emergency room because of the misuse of prescription

medications!¹⁷ Overall, the most common drugs misused were narcotic pain relievers, followed by benzodiazepines and antidepressants. Among children and teenagers, benzodiazepines were the most common prescription drugs that caused an E.R. visit. In fact, as this report makes clear, for young people, pharmaceutical drug misuse was more likely than illicit drug use to lead to an emergency room!

People who abuse medications can become addicted just as easily as if they were taking street drugs. National surveys have found that about 26 percent of first-time illicit drug users began with the abuse of prescription drugs.¹⁸ The reasons drugs have to be prescribed by a doctor is because some of them are quite addictive and can have serious side effects if not taken properly. That's one of the reasons most doctors will not usually renew a prescription unless they see the patient—

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they want to make sure he or she is not getting addicted and is using the medication appropriately, as well as to determine whether the drug is still medically necessary.¹⁹ Over-the-counter medication is much more difficult for parents or physicians to monitor. Recently, there has been a trend to move

prescription medication to OTC. This can result in the misperception that these drugs must be safe since they are now available to everyone. Some U.S. states do require some sort of identification to purchase many OTC cold/sinus medications (because they are often used to make methamphetamine), but the enforcement of these regulations is inconsistent.²⁰

Recommendations for Teachers

Teachers must discuss medication safety with parents and incorporate the topic in health classes. This discussion should include not only illegal drugs, but also prescription and OTC medications. Ask parents to keep you informed if and when their children are on medication for conditions from a

Recommendations for Administration/Use of Prescription Drugs and Over-the-Counter Drugs at School

Compiled by R. Patti Herring

Each school should have an established **Medication and Substance Administration Policy Manual** delineating the school's principles, practices, and procedures for administering any type of medication or substance whether they are prescribed, over the counter, or herbal.

Where states and nations do not regulate school medication practices, school health professionals, consulting physicians, and the district's health and safety advisory council should contribute to the development of these policies. When these individuals and entities are not available, it then becomes the responsibility of teachers, school administrators, or other school staff members to research information to be included in these policies. First, the school should designate a staff member knowledgeable about methods of administration (e.g., how, when, and how often the substance should be given); contraindications (e.g., situations or circumstances when the substance should not be given), and adverse drug reactions that could occur after administration (e.g., allergic reaction to the substance).

Your school's **Policy Manual** should include what to do in case of:

An Emergency

1. Emergency Medication: Your school policy must state clearly which types of medications should be kept "in stock" for use during emergency situations: i.e., when a highly allergic child sustains a bee sting or accidentally ingests peanuts. Allergic reactions can become deadly in a matter of minutes, so quick administration of a medication may be life-saving (see <http://circle.adventist.org/files/jae/en/jae200972023006.pdf>). Because of the dangers (contraindications, adverse reactions) of giving these types of medications, it is vital to train staff members.

Urgent situations requiring immediate treatment (e.g., a very high fever, toothache, or extreme pain from menstrual cramps)

2. Urgent medications: Some schools keep "in stock" medications such as acetaminophen, ibuprofen, or antihistamines for these situations.

Seasonal, Situational, or Periodic Circumstances

3. Substances stocked on an as-needed basis: Other types of "in-stock" over-the-counter medications (e.g., stimulants for attention-deficit disorders, episodic administration of antibiotics, Tylenol, cough drops, first-aid creams) might be stored at school to be given to children on an "as-needed/prescribed" basis, and which trained staff administer at their discretion. These medications should be listed on the permission form in the policy manual, and parents/guardians should be notified in writing when any type of medication is given. All medication given at school—whether prescription, over the counter, or herbal—should require a physician's prescription or at minimal a physician's note of approval specifically stating that she or he recommends these substances on a regular or as-needed basis. In a life-threatening situation, the parent's or guardian's permission is not needed.

Notify parents that it is their responsibility to provide labeled containers, supply medical devices (e.g., insulin pumps, spacers for inhaled asthma medications) and to keep medications current. Report all errors in medication administration to an assigned staff person to ensure that patterns of error are detected. Policy changes made as the result for medication errors must be carefully considered to ensure that they do not discourage staff from reporting errors.

common cold to more serious ailments. (See the sidebar for school drug policy recommendations.)

Many parents are unaware of the dangers in their medicine cabinet. Ask a medical professional to make a presentation for parents to discuss drug safety. This will inform parents about the importance of keeping drugs locked up and disposing of them safely,

especially those medications that are the most commonly abused. The parents may be liable if prescription drugs are used illegally in their home.

Think about the last time you walked through the grocery store or pharmacy and passed the long displays of medications, supplements, and remedies. Your students pass these dis-

plays as well, and they hear and see advertisements in the media about the benefits of various drugs. The prominence and ubiquity of all of these substances can make them seem safe. The advertisements touting the benefits of these medications rarely present a complete picture of side effects or consequences of dosage level or age of use. In modern society, people have come

4. Self-administering medication for chronic, long-term illnesses:

Older and responsible students may be allowed to self-medicate at school with over-the-counter medications and certain rescue and prescription medications (e.g., albuterol for asthma, insulin for diabetes) when this is requested in writing by the parent/guardian with a physician's note, in which both parties agree the student is responsible. However, schools should obtain written notification from the parent/guardian that the school bears no responsibility for ensuring the medication is taken. If students are caught sharing medication, the substance should be immediately confiscated, followed by written notification to both the parents and the physician.

This medication policy should be updated each year, and parents/guardians should be required to sign an acknowledgment that they received a copy and agree to its stipulations. Parents or guardians should be required to sign a separate permission form if their child needs special medication or any other substance at school. This permission should cover the entire school year and be signed at the beginning of each new year.

Permission Form

- Require each family (parent/guardian) to sign a detailed permission form stipulating which medication or substance their child(ren) should take.

- Attached to the permission form should be a written statement from the physician detailing the name of the substance, when it should be taken, and the reason the medication is needed.

- Herbal and over-the-counter medications taken on a regular basis should be included in this recommendation, specially stating that the non-prescription medication is "prescribed" to the student. "Schools should always retain the right to require a prescription or physician's note."

- Parents should be required to supply the medication in its original package, labeled with their child's name, with in-

structions as to when and how it should be given. The container should be returned to the parents at the end of the school year or disposed of according to existing laws.

- A form must be filled out for each child. Each child should have his or her own medication in its original package, with instructions.
- All medications should be administered according to the manufacturers' guidelines.
- Permission forms should be kept in a secure location and updated each school year.

You can find many online examples of how various schools throughout the U.S. adapted the general recommendation and created a form for their special needs. See the following links for examples:

- <http://www.usd385.org/vnews/display.v/ART/453d0c8f7da38>.
- <http://www.fairmontschools.com/pdfs/Parent%20Permission%20for%20Administration%20of%20NonPrescription%20Medication.pdf>
- http://les.lexington1.net:8012/wp-content/uploads/2013/06/2013-Medication_Permission_Form.pdf

Unless otherwise indicated, information included in these guidelines is drawn from the American Academy of Pediatrics' 2013 guidelines: <http://www.nationalguidelines.org/guideline.cfm?guideNum=4-19>.



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to believe that there is a pill for everything; to stay awake longer, and work harder, to deal with all types of discomfort, and to reverse the damage from unhealthy diet and lifestyle. It is necessary to teach our students, even very young ones, to be informed consumers. Many pills, powders, and potions are safe when used properly but are dangerous when used otherwise. Sharing these facts should be part of regular discussions and curriculum units. Teachers should emphasize healthy choices in diet, exercise, the careful use of medicine only under the supervision of a physician, as well as the importance of avoiding all illicit drugs. ✍



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Guest Editorial *Continued from page 3*

supposed health benefits as well as the negative consequences of alcohol use and abuse. Harvey Burnett's article, which focuses on a major international school-based prevention program called D.A.R.E., provides excellent practical suggestions on how to adapt its activities to Adventist schools. Finally, an article led by Gary Hopkins focuses on a more recent phenomenon, the abuse of prescription and over-the-counter drugs, and offers recommendations for school policymaking.

Throughout the world today, substance abuse is a major health and human tragedy. Seventh-day Adventists play a major role in research and policy in this health area. This special issue of the JOURNAL was produced in collaboration with the two church-sponsored organizations most active in substance-abuse policy and research: the International Commission for the Prevention of Alcoholism and Drug Dependency (ICPA) and the Institute for the Prevention of Addiction (IPA). The ICPA, directed by Peter Landless, has been recognized by the United Nations, and plays an active role throughout the world promoting policies and practices to reduce substance abuse. The IPA, directed by Duane McBride, conducts primary outreach on the etiology and prevention of substance abuse as well as best-practice policies. We believe that it is important for the Seventh-day Adventist Church to continue to support and conduct primary research on preventing substance abuse and to advocate at the highest global levels for policies and practices that address this major global health issue.—Peter N. Landless and Duane C. McBride.

Peter N. Landless, M.B., B.Ch., MFGP (SA), M.Med., FCP (SA), CBNC, FACC, FASNC, is Director of Health Ministries at the General Conference of Seventh-day Adventists in Silver Spring, Maryland, and Executive Director of the International Commission for the Prevention of Alcoholism and Drug Dependency (ICPA).

The Coordinator for this special issue, Duane C. McBride, Ph.D., is Professor and Chair of the Behavioral Science Department at An-

draws University in Berrien Springs, Michigan, and Director of the Institute for the Prevention of Addictions, also at Andrews University. He has conducted and published research on a wide variety of topics including drug abuse, enhancing adolescent resilience, and public health policy. For a number of years, Dr. McBride has served in a consulting capacity to the National Institutes of Health, the University of Miami School of Medicine, the National Institute of Justice, and the National Institute on Drug Abuse. The editorial staff of the JOURNAL express heartfelt appreciation for his commitment to getting this special issue into print, and for the many hours he spent identifying authors, topics, and peer reviewers, evaluating manuscripts, chasing down sources and miscellaneous information, and cheerfully responding to hundreds of questions from the Editor.

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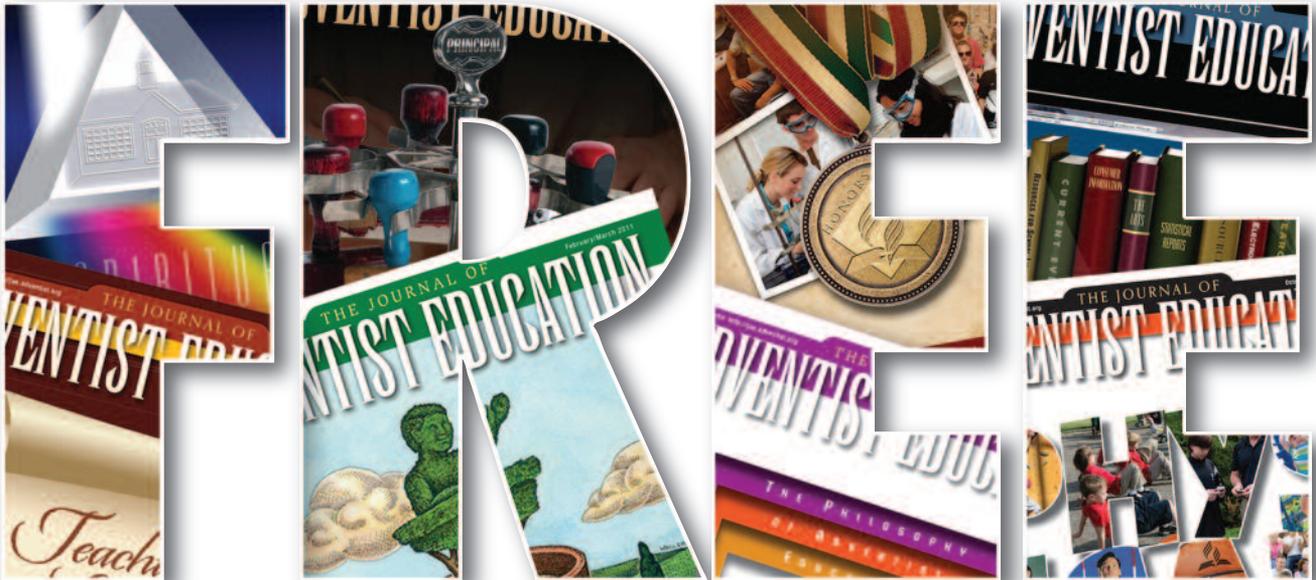
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