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.” 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.

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. 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...
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 pharmparties, National Institute of Health-sponsored research 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.

**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 as well as a lower awareness of one’s environment—are consistently related to becoming the victim of a crime or accident.

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. 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). 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 reported 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. 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. 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—
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. 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.

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

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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/jae 200972023006.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.
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 displays 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

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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 instructions 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:


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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.

Gary L. Hopkins is currently a Research Professor at Andrews University in Berrien Springs, Michigan, where he is also Associate Director of the Institute for Prevention of Addiction, Director of the Center for Prevention Research, and Director of the Center for Media Impact Research. He is also on the faculty of the School of Public Health at Loma Linda University and an Associate Director in the Health Ministries Department of the General Conference. Dr. Hopkins holds doctorates in both medicine and public health, as well as a Master of Public Health degree, has authored many articles and books, and works with communities and governmental agencies to design effective programs to prevent high-risk behaviors among adolescents.

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NOTES AND REFERENCES
2. Ibid.
4. Ibid.
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 in 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), CBN C, 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).

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REFERENCES