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Prescription Drugs: Deadly Combinations

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INSIDE THIS ISSUE

PRESCRIPTION DRUGS: DEADLY COMBINATIONS 1

PRESCRIPTION DRUGS: DEADLY COMBINATIONS 2

ONE PILL CAN KILL 3

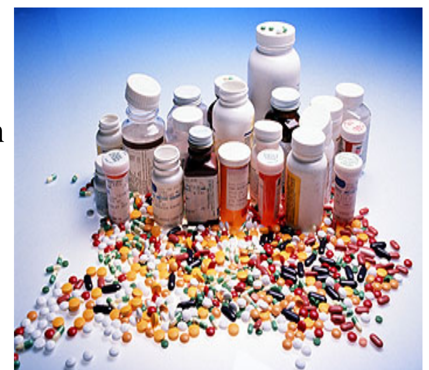
PREVENTION RESEARCH UNIT: PRUdent MATTERS

POCWA 4

Over the past several years use of prescription medications has largely moved from a hospital or clinical setting to patients' homes. This shift has led to an increase in fatal medication errors at home. A study published in the Archives of Internal Medicine[1] reported more than a three fold increase in the number of fatal medication errors since 1983. Of those fatalities, the largest groups were comprised of individuals who died when combining prescription medications with alcohol and/or street drugs in the home setting.

More and more people are legitimately prescribed strong prescription medications in the out patient setting. Often these medications are prescribed by multiple physicians who are unaware of the patient's complete medical/medication history. Frequently patients are left to manage a potentially large number of medications on their own. Many of the medications consumed at home can cause drowsiness and sedation as well as confusion. Strong opiate pain medications such as Vicodin ®, Percocet ®, OxyContin ®, Dilaudid ® are one class of drugs expected to cause those symptoms, potentially impairing the patient. Other medications associated with lethargy and confusion include tranquilizers and sleeping pills, such as Xanax®, Valium®, Klonopin®, Ambien® and many others.

Unintentional medication errors and overdoses may result from this impairment. Common medication errors include: double doses, mixtures of multiple medications, medications taken at the wrong time or medications forgotten. Addition of over-the-counter medications may contribute to the effects of prescription drugs or may interact in other ways with prescription drugs, resulting in severe symptoms including decreased breathing rate, heart rate and level of consciousness. Patients managing their own medications at home are often not aware of the potential additive effects of some medications or possible drug interactions. Alcohol is often forgotten as a key player in drug interactions. It is common practice for some patients who require medications in the above categories to use alcohol to help numb their pain, help them fall asleep or other coping reasons. They may not recognize the combination of alcohol and their medications is much more potent than either one alone.



Introduction of illicit or street drugs in combination with prescription medications could result in increased fatalities. Additionally, the Internet has made it possible to obtain drugs with ease. It is now possible to import drugs and have them delivered straight to the user's door with no doctor consultation. Some choose to 'doctor shop' or visit multiple doctors complaining of the same ailments, then get their prescriptions filled at different pharmacies. Others may choose to buy or even steal prescription drugs. Prescription medications when mixed with heroin, cocaine or other illicit substances may result in respiratory depression, coma, seizures and death, depending on which drugs are involved. The uninformed mixture of prescription medications with over-the-counter medications or combining them with illicit drugs or alcohol may be deadly.

SPECIAL POINTS OF INTEREST:

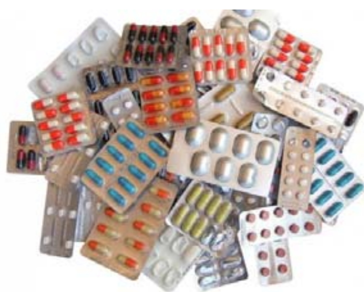
EDUCATE ON THE DANGERS OF MIXING PRESCRIPTION DRUGS WITH OVER THE COUNTER MEDICATIONS AND ALCOHOL

Not only do prescription medications have acute health effects, they have also been proven to have long term health effects. Narcotic pain relievers and anti-anxiety medications may lead to physical tolerance which can ultimately progress to physical and psychological dependence. Abrupt discontinuation of these medications could result in withdrawal effects. In some cases, withdrawal can be life threatening.

It is important for everyone, not only health care professionals, to understand the significance of potential drug interactions and additive effects of prescription medications. Many medications are not dangerous when taken alone; however, they may be dangerous if mixed with other prescriptions, over-the counter medications, alcohol or illicit drugs.

It is possible to lower these risks with education and awareness. Spread the word about the potential dangers of prescription drugs and advocate for your clients and patients, as well as your family, friends, co-workers and yourself. You may end up saving a life. The Cincinnati Drug and Poison Information Center is available to both the public and health care professionals who have drug information questions 24 hours a day.

1. Phillips DP, Barker GEC, Eguchi M.M. A steep increase in domestic fatal medication errors with use of alcohol and/or street drugs. Archives of Internal Medicine 2008:168(14):1561-1566.



One Pill Can Kill

Alysha D. Behrman RNII, BSN, CSPI, OCPSII, CARN

Childhood exposures are another danger from the increasing number of potent prescription medications available in the home.

Children are the victims in 68% of all poisoning exposures. Most of the reported exposures involve children less than 6 years of age. Young children often explore their environment by putting objects into their mouths. Because of the potential for a child to come in contact with medications in the home, it is important to be aware of the toxic potential of medications that members of the home may use and to keep them out of the reach of children. The following information concerns medications that can be harmful even if only a small amount (1-2 tablets) is swallowed by a young child.

Narcotic pain medications are some of the most common medications available in the home. These medications can cause breathing difficulties, decreased body temperature, pupil constriction, seizures and coma. Medications included in this category include: Methadone®, Codeine®, oxycodone (OxyContin®) and hydrocodone (Vicodin®). Many times these medications may be dosed on an as needed basis. This may make it difficult to have an accurate count of the medications remaining in a bottle. If a child obtains access to a pill container holding these medications, it may be difficult to narrow down the amount of medication missing.

Heart medications including beta-blockers, calcium channel blockers, Clonidine® and Quinidine® are all considered dangerous medications in which only one could be hazardous to a small child causing serious medical concerns or even fatality. These medications have various effects including: severe drops in blood pressure and heart rate, heart rhythm problems, seizures and coma.

Type 2 diabetic medications are another category of drugs in which 'one pill can kill'. Sulfonylureas such as glyburide, glucotrol, Amaryl®, glipizide, Glucovance® and Diabenese® are of a particular concern. When even a single tablet is ingested by a child, these medications may significantly lower the blood sugar and potentially lead to seizures and coma. Conversely, insulin is not associated with toxicity and is in fact non-toxic when swallowed.

Other medications that may cause fatality if one pill is ingested by a child are: antidepressants, antipsychotics, antimalarial medications, theophylline and diphenoxylate. Dangerous topical medications include: methyl salicylate, camphor, benzocaine and lindane.

It is important to keep in mind that only one tablet/capsule or even part of one of the above medications may be fatal to a crawling toddler. Prescription bottles have 'child resistant' caps on them; however these are not child proof. It often takes a toddler only a few minutes to successfully open a prescription bottle. Another danger includes medications held in a weekly or daily pill planner. These are usually easier to access and open by a small child. It is important to understand the dangers of prescription medications, especially those in the 'one pill can kill' category and to keep all medications out of the reach of children at all times.

PREVENTION RESEARCH UNIT
PRUdent MATTERS

People of Color Wellness Alliance (POCWA)

For over 15 years the Prevention Research Unit (PRU) has provided drug abuse prevention programs, health and wellness services, education initiatives and outreach services in communities throughout Hamilton County. To enhance existing collaborative relationships, the PRU convened a meeting of agencies in Hamilton County, Ohio that provide services to disparate populations. As result, in 2005 the POCWA Coalition was formed to address health disparities and wellness issues prevalent among African Americans and other minorities. The POCWA is comprised of Hamilton County community service agencies that are positioned to best respond to the pressing needs of people of color. In addition, POCWA members represent sectors of the community that include: youth, parents, business, law enforcement, education, civic organizations, state government, religious organizations, media, healthcare professionals, and youth-serving organizations. The agency representatives present came to a consensus and identified service gaps in the following areas:

- drug abuse prevention strategies specific to youth in the urban core
- support for families of chemically dependent clients
- support for those infected/affected by HIV/AIDS
- programs to address special needs of the re-entry population
- programs to address special needs of the homeless

POCWA members agreed that environmental strategies and enhanced collaboration between service providers and the community is needed. A consensus was also reached to prioritize strategies, and to begin by addressing drug abuse prevention among youth in the urban core.

The POCWA engaged in aggressive funding pursuits to support this endeavor, and in August of 2008 received funding from the Substance Abuse Mental Health Services Administration/Office of National Drug Control Policy, Drug Free Communities (DFC) Initiative.

The POCWA coalition looks forward to empowering residents of the urban core to address drug abuse at a community level. Special thanks to the founding members of the POCWA coalition: Urban Minority Alcoholism and Drug Abuse Outreach Program, the Central Community Health Board - EPIP, the Minority AIDS Prevention Alliance, the Cincinnati Children's Hospital-No More Alcohol and Drugs project of the Drug and Poison Information Center, the Greater Cincinnati AIDS Consortium, IV-CHARIS, Alcoholism Council of Greater Cincinnati, Cincinnati Public Schools, University of Cincinnati Department of Sociology, and the Cincinnati Health Network.

Congratulations to the PRU staff for their active involvement in the growth and development of POCWA (Marsha Polk, Alysia Longmire, Miyohnna Terry, Rudy Smith, and Chris Nelms). For more information on the POCWA contact Alysia Longmire, POCWA Coalition Coordinator, (513) 636-5094 or Alysia. Longmire@cchmc.org.

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