

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Wayne Terai

Adverse Drug Reactions: The Growing Risk of Painkillers

If you have ever taken a pain medication, you have probably noticed the side effect warnings printed on the package. Potential reactions can be as mild as nausea, vomiting, or constipation — or as serious as liver or kidney damage, hemorrhage, or seizure. The type and severity of side effects is influenced by an individual's age and health status. Dosage and other drugs taken concurrently also influence risk.

Dr. Terai is extremely concerned about the skyrocketing rate of adverse reactions from painkillers. Dr. Terai interprets the latest data on drug side effects and offers an alternative approach to pain relief.



How Common Are Adverse Drug Reactions?

Researchers frequently investigate the side effects of medications in terms of *adverse drug reactions* (ADRs) for various populations. Dr. Terai explains that the World Health Organization (WHO) defines an ADR as “a response to a drug which is noxious and unintended, and which occurs at doses normally used” (*Technical Report No 498* 1972).

In the United States alone, the number of reported ADRs has ballooned from 200,352 in 2000 to a staggering 490,836 in 2009, according to statistics kept by the Food and Drug Administration. Three areas of recent inquiry that scientists are examining

include hospital admissions, emergency department visits and deaths related to ADRs.

Hospital Admissions

The WHO estimates that over 10 percent of hospital admissions in many countries are due to ADRs (*Dept of Essential Drugs and Medicines Policy* 2002).

An analysis of admissions over six months at a hospital in Greece reveals that a whopping 12.8 percent of patients were there because of an ADR. The class of drugs most linked to these hospitalizations was nonsteroidal anti-inflammatory drugs (NSAIDs), a group of painkillers that includes common over-the-counter drugs such as aspirin, ibuprofen and naproxen (*Eur J Intern Med* 2008;19:505-10).

Furthermore, patients with ADRs on average spent nearly twice as many days in the hospital and had double the overall cost of care, compared to patients presenting for other reasons (*Ann Emerg Med* 2011;Epub).

Deaths

Scientists also attribute a growing percentage of deaths to ADRs, a trend that disturbs Dr. Terai.

Reviewing cause of death records in a Spanish hospital, doctors found that 5.9 percent of patient deaths were thought to be caused by adverse drug reactions. Among these, NSAIDs were the second most commonly implicated drugs (*Int J Clin Pharmacol Ther* 2009;47:596-602).

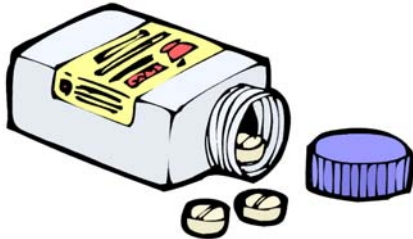
Emergency Department Visits

Adverse drug reactions are also a leading cause of emergency department visits. In a newly released study, researchers tracked adult patients receiving care in the emergency department of a Vancouver hospital. They found that 12.2 percent of the patients sought medical attention because of an ADR.



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In the US, official statistics show 63,846 deaths linked to ADRs in 2009 (over three times as many as in 2000). However, the WHO claims that the numbers are larger and that ADRs may be the fourth largest cause of death in the US (*Dept of Essential Drugs and Medicines Policy* 2002).



Painkillers and Children

Because of children's developing immune systems, their risk of adverse effects from pain medications is particularly disconcerting.

Data from the National Center for Health Statistics indicates that 585,922 children were brought to emergency departments, outpatient clinics and doctors' offices due to an adverse drug reaction between 1995 and 2005. Children aged 4 and under have the highest risk, accounting for 43 percent of reported cases (*Pediatrics* 2009;124:e744-50).

These numbers represent a significant trend — a systematic review of studies including over 100,000 pediatric hospital patients revealed that of hospitalized children, 4.1 percent had experienced adverse drug reactions (*Ann Pharmacother* 2008;42:1017).

Another study covering 158,520 young patients in 63 hospitals uncovered that unintentional drug overdose accounts for half of pediatric ADRs. A young child's body is simply too immature to detoxify itself if an overdose occurs (*J Pediatr* 2008;152:416-21).

Special Risks for Older Adults

Older adults are another group in particular danger of adverse drug reac-

tions from painkillers. In the US alone, ADRs account for an alarming 1.1 million emergency department visits each year for adults aged 50 and over. One third of these older patients are hospitalized for further treatment, says the latest report from the Substance Abuse & Mental Health Services Administration.

Several factors play into the high rate of ADRs for this age group. Advanced age alters how the body absorbs and metabolizes medications. Reduced blood flow and liver function may also up an older individual's odds of an ADR (*Clin Interv Aging* 2010;5:75).

Finally, older adults are more likely to use multiple medications to manage multiple health conditions. Combining potentially incompatible drugs makes an ADR more likely. One study shows that the risk of an ADR jumps from 13 percent for patients taking two medications to a frightening 82 percent for patients taking seven or more medications (*Am J Emerg Med* 1996;14:447).

Play It Safe With Chiropractic Care

Pain is an important signal from the body that something is wrong. Masking it with drugs only allows the underlying disease or dysfunction to worsen.



Instead of treating the symptom of pain, why not address the cause and prevent future health problems? Chiropractic care helps patients harness the body's power to heal itself. The **chiropractic lifestyle** is a proactive approach to health and wellness that focuses on natural prevention of disease through nutrition, exercise, stress reduction and self-care.

A key element of the chiropractic approach to wellness is assessing and maintaining spinal health. As the spinal cord is the central path of the nervous system, the integrity of the bones surrounding it — called *vertebrae* — is critical to optimal health.



The doctor examines the spine for **vertebral subluxations**, areas of misalignment or restricted movement in the spine. Research associates vertebral subluxation with not only musculoskeletal complaints like back, neck and head pain, but also with a myriad of other health problems like asthma, ear infections and digestive disorders.

Chiropractors correct vertebral subluxations with gentle and effective maneuvers called **chiropractic adjustments**. Regular chiropractic adjustments address potential aches and pains before they start, eliminating the need for pain medications. And, since it doesn't rely on possibly hazardous drugs, chiropractic care is safe and appropriate for all ages, from newborns to the elderly.

Learn more about how chiropractic can help you maintain optimal health without drugs. Call our office today to schedule a consultation.

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