



Serving Persons
Affected by Epilepsy

August 2006

Volume 6 Issue 8



hotline

Proper Pill Takers Are Healthier

Taking Medications as Prescribed Linked to Better Health

People who take pills as prescribed do better than those who don't -- even if they're only getting sugar pills, Canadian researchers find.

To see if drugs really work, researchers usually split study participants into two groups. One group gets the active drug. The other gets placebos -- identical-looking but inactive sugar pills. If people taking the drug do better than the people who take a placebo, the drug is thought to work.

Time and again, researchers have found that people who take placebo pills do better than expected. It's called the placebo effect. Now Scot H. Simpson, PharmD, and colleagues at the University of Alberta, Canada, report that at least part of the placebo effect depends on how properly people take their pills.

Simpson's team analyzed 21 clinical trials that studied nearly 47,000 people. Nearly 20,000 of them got placebos instead of active drugs.

Regardless of whether they took active drugs or placebos, those who took their pills the way they were supposed to had 44% fewer deaths than those who didn't take their pills as prescribed.

"Good adherence to drug therapy is associated with positive health outcomes," Simpson and colleagues conclude. This "supports the existence of the healthy adherer effect, whereby adherence to drug therapy may be a [characteristic of people with] overall healthy behavior."

The Canadian researchers looked at studies of drugs used to help people with heart attacks, HIV infection, type 2 diabetes, immune suppression after heart transplant, and other conditions. Except in the two studies where the drug being tested was harmful, proper pill takers did better than those who missed doses.

There's a message here about what actually heals patients, suggests Betty Chewning, PhD, director of the Sonderegger Research Center at the University of Wisconsin, Madison, School of Pharmacy. Chewning's editorial accompanies the Simpson study.

"Healing lies not in the treatment but rather in patients' emotional and cognitive processes of 'feeling cared for' and 'caring for oneself,'" Chewning writes. "The meanings people attach to the 'pill' and 'behavior of the healer' are the key to the mind-body connection leading to health outcomes."

Taking pills as prescribed, Chewning says, simply shows that patients are caring for themselves -- and that they believe their doctors are caring for them, too.

The Simpson study, and the Chewning editorial, appear in the July 1 issue of the *British Medical Journal*. BY WEB MD

Extended Cell Phone Use Excites Brain

Italian researchers have reported that radiation from cell phones can have an effect on the brain's cortex when a phone is used for an extended period of time. The study monitored young men who used the phones for 45 minutes at a time and found that this continued use elevated the brain's electrical activity in the cortex, which is responsible for many high level functions.

The study did not conclude that cell phones are bad for people, but researchers did recommend further study of intense daily use of cell phones, particularly of people with epilepsy and other neurological conditions. BY EPILEPSY FOUNDATION

Steady "Theta" Rhythm Reduces Seizures

The June issue of the *Journal of Neurophysiology* released the results of a study that could lead to development of new epilepsy treatments. The study, conducted by researchers at the University of Texas-Brownsville and Texas Southmost College, found that inducing a steady "theta" rhythm in the brain's septum prevented seizures in anesthetized laboratory rats.



Neurons in the septum send signals to the hippocampus, an area of the brain that plays a role in memory, spatial navigation and sensory motor integration. During a seizure, the rate of brain waves in this area increase dramatically from their normal 3-12 Hz, a frequency that is called the theta rhythm.

Researchers used a variety of methods, from regulating the rats' anesthesia, injecting the rats' septum with an antiepileptic drug and pinching the tail, to induce the theta rhythm, thus stopping seizures.

Idiopathic seizures (sometimes called primary or cryptogenic seizures) are the most common in childhood (67%) and occur as a result of an unknown genetic or physiological disposition. For individuals with idiopathic seizures, this research could lead to the development of new medications and treatment methods. BY E F

Medication Compliance Critical



If you don't use some method for self-assessment, you probably don't have a clue about how often you accidentally forget to take some pills. Watching your pill usage is critical to see potential compliance problems.

Do you organize your pills in a plastic dose-box that can be filled once a week? Using this type of box, you can see the dose you forgot to take because it is still in the box at the end of the day.

Do you check the date that you expect to need a refill? Does your supply of pills last longer than the 30 or 90 days of the prescription? You can count the number of pills remaining when it's time for your 30- or 90-day refills to get an estimate of the number of doses you missed.

Poor seizure control sometimes is not always the fault of the drug. Obviously, medicine won't work if you don't take it. So did the drug fail or did the patient fail to take the drug? Overall, people take about 75% of doses as prescribed. That is, they take the correct number of doses on about 3 days out of 4.

It doesn't matter how severe the consequences of missed doses may be. Even people who risk death do not follow their prescriptions perfectly. The possibility that missed doses may result in having a major seizure in public, at work, at school, or while driving does not produce perfect compliance with schedules for taking seizure medicines.

Why do people forget to take an important medicine? Things happen that can throw you off schedule, even if you have a good system for taking your pills. Most missed doses are simply overlooked or forgotten and you're not even aware of what happened.

Any change in routine: weekends, vacations, and special events can be a hazard to compliance with your meds.

Next Month: Compliance Tips

Epilepsy & Cancer Risk

Epilepsy Does Not Appear to Increase Cancer Risk



The results of a study published in the June issue of the Journal of Neurology, Neurosurgery and Psychiatry suggest that epilepsy is not associated with an increased risk of cancer.

"Epilepsy and long-term use of anti-epileptic drugs have been suggested to be associated with an increased risk of cancer," writes study author Dr. Cecilia Adelow of the Karolinska University Hospital, Stockholm.

In a case-control study, researchers identified 52,861 incident cases of leukemia, lymphoma, myeloma, and pancreatic cancer in the Swedish Cancer Registry from 1987 to 1999. Over 137,000 controls were randomly selected from the Swedish Population Registry and were stratified by age, sex, and year of cancer diagnosis. The team linked cases and controls to the Swedish Hospital Discharge Registry from 1969 to 1999 to identify patients with a diagnosis of epilepsy.

An epilepsy diagnosis in the same year as a cancer diagnosis was associated with an increased risk of non-Hodgkin's Lymphoma, Hodgkin's disease, leukemia, acute myeloid leukemia and pancreatic cancer.

A diagnosis of epilepsy 2 years or more before a cancer diagnosis was not associated with an increased risk of any types of cancer studied. This lack of association was also seen when an epilepsy diagnosis preceded a cancer diagnosis by more than 10 years.

"Although we have studied the association between a prior diagnosis of epilepsy and the risk of cancer, our negative findings also suggest that there is no major increase in risk with long-term use of...antiepileptic drugs regarding the types of cancer studied," Dr. Adelow's team writes.

The researchers suggest that complete clinical examinations that were probably conducted after seizure onset most likely explain the relationship between epilepsy and cancers diagnosed in the same year.

While no evidence was found that epilepsy increases the risk of cancer, the investigators recommend that additional studies be performed to confirm these results.

↵ NEUROL NEUROSUG PSYCHIATRY 2006

Lamotrigine : Pregnancy WARNING

New research has suggested a link between the use of the anti-epileptic drug lamotrigine by women with epilepsy early in their pregnancy and the risk of oral clefts (cleft lip and/or cleft palate) in their babies. Lamotrigine is known by other names including Lamictal.

The findings in the North American AED Pregnancy Registry and five other registries shows a very significant risk of oral clefts among infants exposed in pregnancy to lamotrigine as monotherapy.

↵ EPILEPSY ACTION

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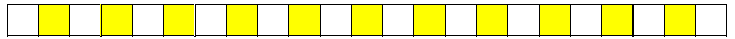
a support group for parents & caregivers

(This group meets quarterly at 2919 West Second Street)

"Back 2 School"

Saturday, SEPT 2, 2006 10 AM — Noon

Whether they are 6 or 16, going back to school after a relaxing summertime break can be stressful. The group will discuss techniques, tools and tricks of the trade that can help your student adjust to a successful semester.



Pacemaker may help avoid seizures

Researchers at the Massachusetts Institute of Technology have developed a 'neurological pacemaker' that they claim can treat seizures before they happen.

Using electrodes attached to a cap, the system monitors brain activity and can determine when a seizure is likely. A signal is sent to a vagus nerve stimulation device implanted in the body which then sends a specific impulse to the brain, preventing the seizure, instead of the series of impulses currently used.

Its creators, led by Professor John Guttag, say they are still a long way from making the device available to the public. "There will be some serious development work to make it small and portable – not in the sense of needing a scientific breakthrough, but lots of hard engineering." ↵ EPILEPSY FOUNDATION

Adult Epilepsy Support Group

Meets Second Tuesday of Month, 6:30 PM • 2919 W. 2nd Street, Wichita

Aug 8th: "Seizures & Sexuality"
Sept 12th: "Medication Compliance"

Cyberonics®

and



Via Christi
Regional Medical Center
Comprehensive
Epilepsy Center

host a monthly info session on
VNS Therapy®

11:30 - 12:30

Third Wednesday of the month

Lunch is served. **RSVP is required to attend.**
(316) 268-8562

Note: The meetings are subject to cancellation.

Special Thanks to the Optimist
Club for their financial support of
our ERC Family Camp Day 2006!



Wichita Southeast
Optimist Club