LETTER TO THE EDITOR

"Medical marijuana"

To the Editor:

I deeply respect you and your work and I would hate to see your views on the possible role of THC in the amelioration of some destructive or dangerous behaviors in some autistic persons (which I agree with) "hijacked" by advocates for the legalization of marijuana for recreational use to support their position.

In my view, unless you make a clear distinction between the use of Marinol (dronabinol—delta-9-THC), which is now a legitimately available, by prescription, schedule II controlled substance, and the use of smoked marijuana—"smoked dope"—you will be unwittingly drawn into the sham of using the "medical marijuana" debate as a front to make marijuana more generally available for recreational use. The mantra goes, "If marijuana is good for cancer patients (and now autistic patients) it can't be all that bad for the rest of us." In my practice and drug treatment programs I have established, I have seen too much damage to too many children and adolescents for that to occur.

As my 1991 article (see Ref. 1) explains, Marinol is presently available as a Schedule II drug for prescription in all states. While treatment of some autistic behaviors is an "off-label" use according to the PDR, it is a presently available, standardized dose of a pure substance in a conventional delivery method (capsule). If smoked marijuana were to be cleared by the FDA for medical purposes, it would be the only drug using smoking as a delivery system (and a very poor one) at the time when, I thought, we were discouraging smoking. The reasons why advocates for legalizing marijuana for recreational use are so disinterested in Marinol are also outlined in my article: the onset of action is slow and gradual, it is only weakly reinforcing, it has no street value, and it produces dysphoria rather than euphoria. What is needed is some careful study of Marinol's effectiveness in treating the kind of behaviors you list, followed by an effort to get those behaviors listed as "on label" if Marinol proves to be effective in reducing these behaviors.

My 1983 article (Ref. 2) notes that TCH relieved symptoms in some cancer chemotherapy patients, but that adverse side effects were prevalent and that questions about the drug's safety and effectiveness needed to be resolved. Since that time Marinol has become available, and later studies echo our earlier results. The third reference is an article I did on the detrimental effects of marijuana on some cases of otherwise well-controlled schizophrenia.

I support the study of THC and its use in autism by prescription if it proves to be effective, but that is not "medical marijuana" use as advocates for legalized recreational marijuana refer to it, and should not be used to do the wrong thing for the wrong reasons.

Darold A. Treffert, M.D.

1. "Medical marijuana: It's déjà vu all over again," Darold A. Treffert, *Wisconsin Psychiatrist*, Spring 1999.

2. Delta-9-Tetrahydrocannabinol and therapeutic research legislation for cancer patients," Darold A. Treffert and David E. Joranson, *Journal of the American Medical Association*, Vol. 249, No. 11, March 18, 1983, 1469-72.

3. "Marijuana use in schizophrenia: A clear hazard," Darold A. Treffert, *American Journal of Psychiatry*, Vol. 135, No. 10, October 1978, 1213-5.

Editor's Note: Dr. Treffert is a longtime researcher on autism and the author of the excellent book on autistic and other savants, *Extraordinary People*.

B6 and sulfation

A journal article, "Inhibition of phenol sulfotransferase by pyridoxal phosphate," By R. Bartzatt and J. D. Beckmann (*Biochemical Pharmacology*, 1994) has raised some concern among parents who use vitamin B6 to help their autistic children. The study is of questionable revelance, since it involved an in vitro (test tube) experiment rather than living subjects, and used cells of bovine rather than human origin. Nevertheless, ARI decided to investigate this matter, and provided a grant to Dr. Rosemary Waring, of the University of Birmingham School of Medicine in England, a preeminent researcher on sulfation problems in autism.

Dr. Waring's results confirm what ARI had first reported in 1973: whenever extra vitamin B6 is given, it must be accompanied by extra magnesium, or adverse effects may be seen. In our first study of vitamin B6 in autistic children, conducted in the late 1960s, a small number of the autistic children in the experiment showed increased sound sensitivity, irritability and enuresis when the B6 was started. When magnesium was added, these side effects immediately disappeared and the beneficial effects of the B6 were enhanced. Three studies by the research team led by Dr. Gilbert LeLord of Tours University Medical School, in France, confirmed our report that the combination of vitamin B6 and magnesium was markedly more effective than either vitamin B6 or magnesium alone.

Dr. Waring's report on B6 and sulfation may be accessed online at www.AutismResearchInstitute.com.

—Bernard Rimland, Ph.D.

WHO, Brazil study: are 'safe' mercury levels too high?

An expert committee of the World Health Organization (WHO) and U.N. Food and Agriculture Organization (FAO) has issued a report calling for allowable levels of exposure to methylmercury to be cut to half the levels currently set by the Food and Drug Administration (FDA).

Michael Bender, of the Mercury Policy Project, comments, "While WHO appears to be moving in the right direction, FDA continues to lag behind with an outdated and indefensible standard, allowing millions of pregnant moms and kids to unnecessarily be exposed to methylmercury at unsafe levels."

Methylmercury, the organic form of mercury, is found in high levels in many fish. Mercury also is released into the environment by coal-fired power plants, waste disposal, and mining. The Centers for Disease Control and Prevention estimates that one in 12 American women of childbearing age has mercury levels high enough to damage a developing fetus.

The FAO/WHO recommendation follows a new study which reports that even slightly elevated levels of mercury may be harmful to adults as well as children. Testing 129 men and women living in fishing communities in Brazil, Edna Yokoo and colleagues found that "hair mercury levels were associated with detectable alterations in performance on tests of fine motor speed and dexterity, and concentration." In addition, they say, "Some aspects of verbal learning and memory were also disrupted by mercury exposure." While the magnitude of the effects increased in a dose-dependent manner, the researchers note that the subjects they tested did not have markedly high mercury levels. (Hair concentrations averaged 4 micrograms of mercury per gram of hair, just one tenth of the level considered to be dangerous for an adult.)

The researchers conclude, "This study suggests that adults exposed to methylmercury may be at risk for deficits in neurocognitive function. The functional domains disrupted in adults, namely attention, fine-motor function and verbal memory, are similar to but not identical with those previously reported in children with prenatal exposures."

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"WHO committee recommends stricter mercury exposure standards; nonprofit group urges FDA to adopt more protective warnings," *USA Newswire*, June 26, 2003.

—and—

"Low level methylmercury exposure affects neuropsychological function in adults," Edna M. Yokoo, Joaquim G. Valente, Lynn Grattan, Sergio Luis Schmidt, Illeane Platt, and Ellen K. Silbergeld, *Environmental Health: A Global Access Science Source*, Vol. 2, No. 8, June 4, 2003. Address not listed.

—and—

"Even 'safe' mercury levels harm brain," James Randerson, *New Scientist*, June 14, 2003.