

# Misinformation About Illicit Drugs

A Response to a Letter in the *New England Journal of Medicine*

In August, the *New England Journal of Medicine* published a letter to the editor by Boyer, Shannon and Hibberd entitled “Web Sites with Misinformation about Illicit Drugs”.<sup>1</sup> In this article, Boyer *et al.* criticize government websites for not competing successfully with “partisan” drug information web sites, name sites they consider partisan, and offer specific criticism of information found on those sites.

The authors made several comments about Erowid.org, pointing out the large amount of traffic the site gets, as well as implying that the information we provide is both less reliable than government sponsored anti-drug websites and likely to cause harm.

## Internet Drug Information

Boyer *et al.* cite a study (Wax 2000) which looked at the effects of internet drug information on the use of drugs by students. Their letter states that this study found:

“24 percent of college students used the Internet to obtain information on illicit substances, and 27 percent of Internet-using college students reported that Internet use increased the likelihood that they would use drugs.”

While this certainly *implies* that drug use increased after exposure to information on the internet, a closer examination of the study cited reveals that an even higher percentage of students reported that internet drug information *reduced* the likelihood that they would use illicit drugs.

From the study itself, 168 students were surveyed (94 college and 74 first year medical students). Nineteen percent reported having used the internet to find information on recreational drugs (24% college and 14% medical). Of those who surfed for drug information, 9% said this increased their likelihood of using recreational drugs (27% college and 0% medical) while 19% said it decreased their likelihood of using recreational drugs (27% college and 10% medical).<sup>2</sup>

## MDMA & SSRIs

Boyer’s primary criticism of Erowid was in reference to a comment made about the potential use of SSRIs to reduce negative side

effects of MDMA. They commented that “The combined use of SSRIs (selective serotonin reuptake inhibitors) or MAOIs (monoamine oxidase inhibitors) with drugs possessing serotonergic activity such as MDMA has led to serotonin syndrome in selected patients.”

While it is true that combining MAOIs with MDMA increases risks of serotonin syndrome, there is little evidence to suggest the same is true about SSRIs. We submitted a formal response to the *New England Journal of Medicine* (below) which they declined to publish, citing space limitations.

It should be noted that Boyer’s original submission was a 30 page article cut to two pages by the editors of the *NEJM*. It is unclear whether the problems with the final content were part of the original or a result of these cuts, but we were disappointed that the *NEJM* would publish such a letter and not allow space for a response. ●

1. Boyer EW, Shannon M, Hibberd PL. 2001. “Web Sites with Misinformation about Illicit Drugs” *NEJM* 345:469-471. <http://erowid.org/extracts/v1/2-nejm.shtml>
2. Wax P. 2000. “Just a Click Away” *J Toxicol Clin Toxicol* 38:531.

**To the Editor of the *New England Journal of Medicine*:** In their article discussing online drug information resources, Boyer *et al.* express concern over a comment made on Erowid.org that taking an SSRI after Ecstasy may reduce the risk of MDMA neurotoxicity.<sup>1</sup> They state that taking an SSRI after MDMA might lead to serotonin syndrome, but their concern is unsubstantiated.

SSRI coadministration has been practiced by MDMA users for many years, without evidence of serotonin syndrome, as documented by published papers<sup>2</sup> and dozens of unpublished reports collected by Erowid. Additionally, one clinical study administered 1.5 mg/kg MDMA (po) after citalopram with no evidence of increased medical risk.<sup>3</sup> By blocking MDMA interactions with the serotonin transporter, SSRIs reduce the physiological and experiential effects of MDMA in humans<sup>2,3</sup> and neurotoxicity in rodents.<sup>4</sup> This includes attenuation of both heart rate and blood pressure increases.

No drug or drug combination is without risks. At least one adverse event (not involving serotonin syndrome) has been reported after this combination.<sup>5</sup> Attempting to decrease risk of MDMA neurotoxicity with an SSRI may increase other risks, but serotonin syndrome is not known to be one of them.

The well meaning but misinformed concerns of Boyer *et al.* illustrate why many people rely on Erowid.org and other alternative information sources rather than biased “anti-drug” or government-sponsored sites. Unlike those sources, the Erowid.org archive maintains reliability through literature reviews, expert critiques, interviews with users and input from readers. We welcome comments and corrections.

1. Boyer EW, Shannon M, Hibberd PL. 2001. “Web Sites with Misinformation about Illicit Drugs” *N Engl J Med* 345:469-471.
2. Stein DJ, Rink J. 1999. “Effects of ‘Ecstasy’ blocked by serotonin reuptake inhibitors” *J Clin Psychiatry* 60:485.
3. Liechti ME, Vollenweider FX. 2000. “The serotonin uptake inhibitor citalopram reduces acute cardiovascular and vegetative effects of 3,4-methylenedioxymethamphetamine (‘Ecstasy’) in healthy volunteers” *J Psychopharmacol* 14:269-74.
4. Shankaran M, Yamamoto BK, Gudelsky GA. 1999. “Involvement of the serotonin transporter in the formation of hydroxyl radicals induced by 3,4-methylenedioxymethamphetamine” *Eur J Pharmacol* 385:103-10.
5. Lauerma H, Wuorela M, Halme M. 1998. “Interaction of serotonin reuptake inhibitor and 3,4-methylenedioxymethamphetamine?” *Biol Psychiatry* 43:929.