

BOOK REVIEW

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Review of: *Methamphetamine Use: Clinical and Forensic Aspects*

REFERENCE: McPherson SB, Hall HV, Yudlko E. *Methamphetamine use: clinical and forensic aspects*, 2nd ed. Boca Raton, FL: CRC Press, 2009, 379 pp.

More often than not, books promising to demolish “myths” are agenda driven, and they may not always prove to be the most reliable source of scientific fact. On the first page of *Methamphetamine Use, 2nd edition* (CRC Press), we are told that a respected researcher, who has made major contributions to the field of psychoactive drug studies (and a consultant for the Armed Forces) has “made something of a specialty of methamphetamine (meth) murders,” in a way that seems to imply that a legitimate researcher is doing something unethical when he testifies about his findings.

The prologue also tells us “it was not until 1887 that amphetamine was first manufactured synthetically.” Actually, Gordon Alles first synthesized amphetamine in 1929 for his doctoral thesis at UCLA. We are then informed “Homemade or even mass-produced methamphetamine for the nonlegitimate market involves high levels of inconsistency and potential harm due to lack of quality control...” Well, the potential is certainly there, but the harm is a bit difficult to demonstrate, as there are essentially no case reports except, perhaps, for the occasional first responder who must deal with toxic fumes—some citations would have been helpful. As far as drug takers are concerned, the major toxic component of methamphetamine is methamphetamine.

Paging through the first half of the book is depressing. In the section on MDMA, the authors actually cite a paper that was **RETRACTED** from *Science* to support their arguments about drug metabolism. And then things really go downhill. An entire chapter is devoted to the “Effects and Diagnosis of Methamphetamine,” but the chapter does not contain a single reference to the problem of methamphetamine vascular toxicity. This is an unfortunate omission as so many methamphetamine addicts die of heart and vascular disease every year.

The section on neurotoxicity is brief and dated. Nowhere does it mention that for the last quarter century the problem of recurrent methamphetamine-psychosis has been under active investigation. The fascinating thing about some forms of methamphetamine psychosis is that they reoccur, sometimes years after the last episode of drug use. COMT (catecholamine *o*-methyl transferase) polymorphisms are thought to account for some of these cases, and possibly even susceptibility to addiction, but you will not find that out by reading this book. COMT polymorphisms are not the only important omission. There is no mention of neurochemical and MRI studies suggesting that methamphetamine is demyelinating. How is it even possible to write a book chapter about methamphetamine neurotoxicity and not even mention the syndrome known as “excited delirium”—one of the most difficult problems forensic pathologists and toxicologists have to face?

To be fair, it appears that the book is not intended for use by experts but, rather, by those who work in other fields, such as social work, law enforcement, and in the sentencing and evaluation of methamphetamine abusers. These sections are better written than those dealing with the scientific issues, but even then, the discussions are very superficial, and will not be of much help to anyone who does have to testify in a methamphetamine-related murder, especially if they do not “make something of a specialty” of doing it.

The legal section, while generally accurate, is written in a simplistic and inappropriate tone. For example, one table suggests helpful questions for lawyers to ask expert witnesses, advising them to be “familiar with literature showing the opposite findings” so that they may counter suggestions made by experts for the other side. It seems to me the authors have missed the whole point—they need to be familiar with all of the literature so that they can supply judge and jury with the information they need to make an informed decision. We are supposed to be forensic scientists, not advocates. Lawyers should make the arguments. Our job is just to provide the facts, and this book does not.

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