Understanding War on Drugs
Statistics

5. Denominator Abuse and the “Chilling Effect”


A 2003 Drug Enforcement Agency DEA press release entitled "The Myth of the Chilling Effect" [DEA, 2003] is a very interesting document. It is brief, a mere 182 words in seven sentences formed into four paragraphs, and contains a table and six pie charts. Every sentence is entirely true, and the text as a whole is odd only in that the content of the first three paragraphs make no particular point regarding the "chilling effect" the document purports to debunk. The overall message is: "DEA only brings actions against a miniscule proportion of doctors, therefore actions against doctors for violations of the Controlled Substances Act (CSA) cannot be causing other doctors to seek to avoid such actions by failing to use opioid analgesics appropriately or by refusing to prescribe them at all."

Let's start with the title. What is a "chilling effect"? The phrase does not exist in most dictionaries as such. "Chilling" is an adjective meaning 'so scary as to cause chills and shudders,' and as a verb "chill" can mean 'to depress or discourage.' Let me propose the following working definition of a "chilling effect" that is consistent with what the DEA is addressing in its press release: The “chilling effect” is the withdrawal, for fear of litigation, by physicians from the appropriate treatment of pain.

It is important to note that much of the public health damage here is caused not by the doctors accused of wrongdoing, rather it is caused by doctors-in-good-standing who, faced with a patient in pain and therefore at risk of being targeted by the DEA, modify their treatment in an attempt to avoid regulatory attention. This distortion of the doctor-patient relationship is complex and can be gross or subtle. Examples include a blanket refusal to prescribe controlled substances even when clearly indicated, or selecting less effective and more toxic non-controlled medications when a trial of opioid analgesics would be in the best interests of a particular patient. At the very least, some degree of suspicion and mistrust will surely arise in any medical relationship involving controlled substances.
There is very little a well-intentioned physician can do to mitigate this risk, to correct these distortions in medical values, ethics, and in the doctor-patient relationship that always arise in the course of treatment for pain and/or substance abuse problems. Even experts in the medical treatment of addiction and pain cannot make the crucial distinction, the identification of the 'legitimate pain patient,' with confidence. [PAIN_CHEM_DEP listServ, 2003] Quite simply, the core presumption, that the states-of-being: 'legitimate pain patient,' 'drug abuser,' 'diverter,' 'frequent flyer,' etc., are mutually exclusive and dichotomous is, medically, false.

The legal punishment for mistaking a drug abuser for a pain patient can be extremely severe; doctors are being threatened with 28-year prison terms (Dr. Hasman), have been likened to "crack dealers" (Dr. Hurwitz) and tried as "drug kingpins" (Dr. Bordeaux). [Orient, 2003]; [White & Kaufman, 2003] On the other hand, mistaking a pain patient for a drug addict, and thereby committing the error of failure to appropriately treat pain, is highly unlikely to have any legal consequences at all. This set of legal and psychological imperatives with their attendant severe punishments has created a near ideal environment for manifestation of a “chilling effect,” which inexorably leads to the under-treatment and non-treatment of pain in America.

The Controlled Substances Act (CSA) of 1972, which supersedes and replaces the Harrison Act and all intervening federal drug legislation, makes it a federal offence to prescribe controlled substances to a drug addict for the purposes of treating or maintaining their addiction, except where the physician holds a separate DEA license to provide methadone maintenance. This is what defines the "bounds of accepted medical practice" referred to in the subtitle of the DEA press release under consideration. Defining the medical treatment of addiction as 'outside the bounds of accepted medical practice' is a legacy of the Harrison Narcotics Tax Act of 1914 as discussed earlier in this paper.

The one table contains the only comprehensible data in the DEA press release and makes, somewhat obliquely, the point as stated in the beginning of this analysis. Here is the table which presents partial Fiscal Year (FY) 2003 data:

<table>
<thead>
<tr>
<th>Total registrants = 963,385</th>
<th>Number</th>
<th>% Total Registrants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investigations Initiated:</strong></td>
<td>557</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Actions Against MDs:</strong></td>
<td>441</td>
<td>0.05</td>
</tr>
<tr>
<td><strong>Arrests of MDs:</strong></td>
<td>34</td>
<td>0.01</td>
</tr>
</tbody>
</table>

The table is presented without caption or discussion except what is contained in paragraph four:

Since FY 1999 the DEA registrant population has continually increased reaching almost 1 million doctors (as of June 30, 2003). During this same
time, DEA has pursued sanctions on less than one tenth of one percent of the registered doctors…" [DEA, 2003]

We are talking about risk here and the appropriate statistic is a rate. The Numbers in the table above can correctly be used as numerators to compute this statistic, however, Total registrants is not the appropriate denominator because the denominator used must include only physicians who could possibly come to DEA attention. I call this misleading use of an incorrectly computed rate Denominator Abuse.

Having a DEA license is necessary but not sufficient to put a physician at risk of investigation, loss of license and arrest. The other requirement for being a physician-at-risk, thereby earning a rightful place in the denominator, is prescribing controlled substances in regimens that DEA finds questionable, and this number is far, far smaller. It should be noted in this regard, that DEA licensure is commonly required for hospital employment or privileges regardless of whether a physician ever intends to prescribe controlled substances or even possesses the special prescription pad necessary to do so.

Exactly how much smaller is the appropriate denominator? The answer is open to interpretation and affected by assumptions; only the DEA could provide the precise number and they do not publish this datum. For example, using the full year’s numbers from the same 2002 data set, 622 physicians were investigated, charges were brought against 586, and in 426 cases medical licenses were revoked "for cause." [Hoffman, 2003]

Dr. Hochman, a pain specialist and the Executive Director of the National Foundation of the Treatment of Pain, estimates that the number of physicians practicing "chronic opioid therapy" was 5000 in 2002. This estimate is somewhat close to the “3000 pain specialists” estimated by Eric Chevlen. [Chevlen, 2001] If we use Hochman’s “5000 doctors practicing chronic opioid therapy” number to compute the rate statistic (and assuming that all in the numerator are also members of the denominator): 622/5000 = 0.1244 = a DEA investigation-or-action rate of 12.44 percent, orders of magnitude higher than the incorrectly computed DEA rate statistic of “less than one tenth of one percent of the registered doctors." The comparable rate using Chevlen’s “3000 pain specialists in the U.S.” is 20.73 percent of at-risk physicians had DEA action initiated against them in 2002.

I do not know exactly how either Hochman or Chevlen arrived at that their estimates. If reasonably derived, either estimate could be a statistically appropriate denominator to compute a risk statistic. On the other hand, the DEA’s choice for the denominator is most certainly wrong. I am trying here to give a sense of how important it is to be explicit about one’s assumptions in these matters and of how difficult it is, given the available DEA data, to construct even simple rates that are more enlightening than misleading. Regardless of how the rate statistic is computed, a "chilling effect," as operationally defined in this paper, is not a solely a function of risk as defined by an appropriate rate; severity of risk, highly publicized trials of prominent physicians, and the perceived rationality or irrationality of the DEA criteria used to set the "bounds of accepted medical practice" also play a significant role in how physicians react to the fear of litigation.
Finally, as Dr. William Hurwitz pointed out in a December 7, 2003 message to the PAIN_CHEM_DEP listServ, the DEA presents statistics relating only to their actions against doctors and not the consequent distortion of medical practice that is the 'chilling effect' they are claiming to examine. “The same purportedly low rate of disciplinary action cannot logically serve as an index of both cause and effect. How can one determine if there has been a chilling effect without looking at what doctors really do? There has been no attempt by the DEA to do so.” [Hurwitz, 2003] I call this misleading confusion of outcome for index event, "Outcome Obfuscation."

One can only conclude that The Myth of the Chilling Effect DEA press release is grossly and purposefully misleading, and statistically childish.

References:


Hurwitz W. The same disciplinary rate cannot serve as an index of both cause and effect. PAIN_CHEM_DEP listServ moderated by Dr. Ian Buttfield . 12-7-2003.

I hope you found this document helpful. The "Understanding Drug War Statistics" series continues with Part 6: "Flash Trash"