

One of the criteria for making a decision it is an accident rather than a suicide, is that the metabolite level (nor-propoxyphene) is higher than the blood propoxyphene level.

San Francisco chief coroner Dr. Boyd Stevens told me that "if you double the Darvon dosage and take just one to two bar drinks, you can get into the toxic or lethal range." These remarks have to do, I would imagine, with chronic use, but they may even refer to acute ingestion.

Dr. Stevens points out that partly because of its relative weakness as a painkiller, patients may well be inclined to take two pills or more instead of one, finding that one did not work as well as they thought it would. He says, therefore that many of the Darvon accidental deaths are not abuse—in the strict sense.

This very low margin of safety is very likely related in many cases to the accumulation, as described above, of the toxic metabolite nor-propoxyphene in people regularly using the drug.

In the above-mentioned study by Simonsen, the author himself discussed the fact that we may be just seeing the tip of the iceberg as far as Darvon deaths.

The study describes two elderly people found dead with no evidence of suicide whose deaths would otherwise have been attributed to natural causes but for a Danish law requiring autopsy on those dying alone. Subsequent toxicologic analysis showed both to be Darvon deaths.

Since Darvon's effectiveness in relieving pain is somewhere between that of aspirin, or acetaminophen (as in Datril, Tylenol) and a placebo and substantially less than that of codeine (in schedule II and III), it is of interest to look at the number of deaths and the death rate of these preferable analgesics in comparison to Darvon.

Drug	Deaths, 1977 ¹	Deaths per million prescriptions ²
Darvon.....	590	19
Codeine.....	255	5
Aspirin ³	150	<1
Acetaminophen ³	77	<1

¹ DAWN Quarterly Report January-March 1978.

² 1977 prescriptions filled from National Prescription Audit, I.M.S.

³ 1977 retail sales of aspirin of \$500,000,000 and acetaminophen, \$150,000,000—assume average cost of \$1 for aspirin, \$1.50 for acetaminophen and use deaths per million bottles.

When the possibility of controlling Darvon by putting it into the weak control of schedule IV was first raised in 1973, Lilly responded by saying that if the drug should wind up in schedule IV, despite its protests, "we believe it wouldn't have any material effect on sales of the product."¹

In the year before Darvon was put into schedule IV (March 1976 to February 1977), there were 459 deaths related to its use.

In the first year of schedule IV (March 1977 to February 1978), the number was 510. Although there appears to be a decrease in deaths during the latter part of 1978, these data underestimate the eventual

¹ Wall Street Journal, Aug. 6, 1973.