Words Over Deeds - Lowering Legal Blood Alcohol Levels Alone Does Not Reduce Accidents

By Chuck Dinerstein, MD, MBA — December 13, 2018

Reducing the legal limit for a driver’s blood alcohol level (BAL) is considered “best practice” for reducing injuries and deaths from motor vehicle accidents (MVA). But a new study in The Lancet suggests that this best practice may need to be refined. Before proceeding, let me clearly state that being impaired while moving a ton of steel through space is stupid, rightly condemned, and should be more than “discouraged.”

In 2016, Scotland reduced the BAL to 0.05 g/dL from 0.08 g/dL; the latter value is the same for impaired driving in the US. Wales and England maintained their 0.08 g/dL level and, thus, provided a control in this "natural experiment." The researchers’ outcomes of interest were the rate of motor vehicle accidents and the changes in alcohol purchases.

- After BAL reduction, there were no significant changes in the weekly rates of motor vehicle accidents. In fact, they noted a non-significant 7% increase.
- Sales of alcohol that was taken home from the point of sale, e.g., liquor stores, were unchanged.
- Sales of alcohol that was consumed on the premises, e.g., bars did decrease 0.7%, which was statistically significant.

Why?

The researchers did their best to take into account changing rates of MVA which by the way continue to decline in all three sites. And they recognize that they had no useful data on which accidents were alcohol-related because that information was not always included in accident reports and not all accidents were reported. They also noted that the study period continued over
two years, long enough for any lag effect associated with the change in rules to be washed out.

The reduction in BAL was part of a “package” of recommendations which included increased enforcement and education. As it turns out, the initial investment in education was not maintained, and enforcement, as measured by breathalyzer tests, also seems to have declined. It takes only a moment to realize that reducing BAL is a one and done process, with little cost. Education and enforcement cost money and random stops or checkpoints, the kind we see during the holidays, may produce more complaints of interfering with our day or civil rights than being considered a public health and safety measure. In essence, legislation can provide favorable “optics” at little cost, while implementation can be a costly headache.

The study is inconclusive because it doesn’t look at BALs, so we never know whether the proportion of alcohol-related accidents ever changes. For those with an optimistic bent, perhaps the decrease in sales in bars is a promising sign, but again, maybe those more conscientious drinkers are not the cause of accidents, to begin with, we just don’t know.

No one can stand up and say they believe that impaired driving is safe. Lowering the BAL provides legislators with an opportunity to appear virtuous. Not funding enforcement is often buried in budget discussions that are not even on the “optics” horizon. As the authors suggest, reducing BALs without accompanying enforcement is not effective. How many of our regulations are honored in word rather than deed?


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