What's causing the epidemic in drug-related deaths among whites?

November 5, 2018

MarketWatch Blog by Alicia H. Munnell



Alicia H. Munnell is a columnist for *MarketWatch* and director of the Center for Retirement Research at Boston College.

Researchers debate whether the cause is primarily "despair" or the availability of drugs

A fascinating debate is occurring about the reason for the increase in drugrelated deaths and the decline in life expectancy since 1999 among 45-54 year old non–Hispanic whites, **observed by Anne Case and Angus Deaton**. The pattern is extraordinary since previously life expectancy had been increasing for this age group and no similar decline can be found in other OECD countries. Case and Deaton have attributed this rise in mortality primarily to "deaths of despair" brought on by long-term economic distress and social dysfunction. That is, they put most of the blame on economic and social factors, while acknowledging the harm caused by the increased availability of opioids and other drugs.

While researchers do not dispute this startling pattern of declining life expectancy, some have put more weight on alternative explanations. In **a recent paper**, Christopher Ruhm builds a fairly compelling case that the recent increases in drug-related deaths are due to changes in the drug environment. Yes, the particularly large rise in drug mortality in the Appalachia region and the Rust Belt seems to support "death by despair," but overdose fatalities have also surged in areas where the economy is not declining. And it's difficult to understand why whites have been hit harder than blacks, who often face worse economic conditions. Ruhm contends that the drug environment may be the key driver. Whites may have been particularly affected because they are more likely to have been prescribed opioids, and the United States may have been more affected than other countries because it is the major consumer of opioids.

To test his hypothesis, Ruhm explores whether the affected populations change as the nature of the drugs shift. Specifically, during the first decade of the 2000s, the major cause of drug deaths was opioid medications; since 2010, the major cause was illicit opioids, such as heroin and fentanyl. If despair is the driver, the same people should be dying regardless of the drug availability; if the drug environment is the key driver, then different people would be dying. Ruhm finds that indeed the populations dying did change. A growing share of the deaths after 2010, when heroin and fentanyl killed people, was accounted for by males and relatively young adults. Thus, the drug environment – rather than economics – may be the better explanation.

An even more recent paper by Amy Finkelstein, Matthew Gentzkow, and Heidi Williams seems to provide support for the drug-environment hypothesis. The researchers focus on what happens to the drug use (as reported in Medicare claims) of individuals in the Social Security Disability program when they move. If drug use depends on the characteristics of individuals, their drug use should not change when they move to an area where physicians readily supply opioids. If it depends on the availability of drugs, then opioid intake should increase when they move to a high-abuse area. The researchers found that opioid use did depend on place: "… individuals moving to higher-abuse areas immediately begin abusing at higher rates following the move, and those moving to lower-abuse areas immediately begin abusing at lower rates." Specifically, movement to a county with a 20-percent higher rate of opioid abuse increases the individual's rate of abuse by 6 percent. That is, place-specific variation explains about 30 percent of the gap between the two areas.

I'm sure that will not be the last word, because identifying the reason for the epidemic has important policy implications. If drug availability – rather than despair – is the immediate cause of the increase in drug-related deaths, efforts to improve economic conditions in distressed locations – while definitely desirable – will not solve the problem.