Does the ride-sharing service Uber reduce drunk-driving deaths in South Africa?

“No. The evidence does not support that such benefits are accruing at the population level,” says Farhan Majid, Ph.D., the L.E. and Virginia Simmons Fellow in Health and Technology Policy at Rice University’s Baker Institute for Public Policy. Majid is a co-author of a study that is the first of its kind to examine the impact of Uber on drunk-driving deaths in a low- and middle-income country.

Majid and his co-investigators found that while weekly traffic-related deaths dropped in South African provinces with Uber compared to those without it, the difference was almost negligible. The size of the effect was larger in the province that had Uber the longest (Gauteng) and among young adult males (ages 17–39). But the absolute effects were very small (fewer than two deaths per year) and may just reflect a seasonal variation, the authors said.

To reach their conclusions, the researchers used a so-called “difference-in-differences” approach. Analyzing certification data from all deaths reported in South Africa between 2010 and 2014, they examined the relative change in weekly traffic fatalities between provinces that did and did not receive Uber services beginning in 2013. The study was particularly salient for South Africa, where the traffic injury mortality rate of 27 deaths per 100,000 people is twice the global average, and over 60 percent of those accidents are alcohol-related. What’s more, the country’s “road-traffic injury mortality represents the fourth-largest contributor to lost life years, and costs associated with road traffic injury account for about 3 percent of gross domestic product,” said Majid.

While Uber has not had a significant impact on drunk driving deaths in South Africa, technological solutions that can reduce the incidence of drunk driving have the potential to save lives: other studies have suggested that ride-sharing services such as Uber, which now spans over 630 cities in more than 80 countries globally, could reduce drunk driving and traffic mortality rates in the United States.

Globally, over 1.25 million people die each year in road traffic accidents. Auto collisions are the world’s number one killer of 15- to 29-year-olds, and over 90 percent of fatal crashes occur in low- and middle-income countries. Alcohol use is a leading risk factor in low-income countries, where alcohol has been detected in 33 to 69 percent of fatally injured drivers.

The unintended benefits of Uber in terms of fewer drunk-driving deaths are yet to be seen in South Africa, but “reducing road-traffic injury mortality is a global priority and mobile-based ride sharing technologies like Uber promise to be a novel solution,” the authors wrote in their study. “Replications of this study in other low-and middle-income settings are critically needed, given how little is currently known about the impact of Uber and other ride-sharing services.”
HEALTH POLICY research presents a summary of findings on current health policy issues. It is provided by Vivian Ho, Ph.D., James A. Baker III Institute Chair in Health Economics and director of the Center for Health and Biosciences at Rice University’s Baker Institute for Public Policy, in collaboration with Laura Petersen, M.D., MPH, chief of the Section of Health Services Research in the Department of Medicine at Baylor College of Medicine.

This publication aims to make research results accessible to regional and national health policymakers. The views expressed herein are those of the study authors and do not necessarily represent those of the Baker Institute or of Baylor College of Medicine.

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For further information about the program, please contact:
Rice University MS-40
Center for Health and Biosciences
P.O. Box 1892
Houston, Texas 77251-1892
phone: 713.348.2735
email: bakerchb@rice.edu

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