



## NEWS RELEASE

UNDER EMBARGO UNTIL SEPTEMBER 20, 2013, 12:01 AM ET

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### **“Guns Do Not Make a Nation Safer,” Say Doctors**

Countries With Lower Gun Ownership Are Safer than Those with Higher Gun Ownership,  
Reports *The American Journal of Medicine*

Philadelphia, PA, September 20, 2013 – A new study reports that countries with lower gun ownership are safer than those with higher gun ownership, debunking the widely quoted hypothesis that guns make a nation safer. Researchers evaluated the possible associations between gun ownership rates, mental illness, and the risk of firearm-related death by studying the data for 27 developed countries. Their findings are published in the current issue of *The American Journal of Medicine*.

Gun ownership in the US has been a hotly debated issue for more than 200 years. A popular notion in the US, where there are almost as many guns as people, is that “guns make a nation safer,” although there has been little evidence either way. The shootings in Aurora, Tucson, Oak Creek, at Virginia Tech, among others in recent years, have demonstrated that there may be a relationship between mental illness and easy access to guns, and that lack of treatment for mental illness may be more of a pressing problem than mere availability of guns.

Ever since the second amendment stating “A well regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed” was passed in 1791, there has been a fierce debate over guns in the US. At one end is the argument that gun control laws are an infringement on the right to self-defense and on constitutional rights, and that there is no evidence that banning assault weapons would reduce crime. At the other end is the view that fewer firearms would reduce crime rates and overall lead to greater safety.

Sripal Bangalore, MD, MHA, of NYU Langone Medical Center, and Franz H. Messerli, MD, of St. Luke’s Roosevelt Hospital, Columbia University College of Physicians and Surgeons, New York, examined data for 27 developed countries. The gun ownership data were obtained from the Small Arms Survey, and the data for firearm-related deaths were obtained from a European detailed mortality database (World Health Organization), the National Center for Health Statistics, and others. The crime rate was used as an indicator of safety of the nation and was obtained from the United Nations Surveys of Crime Trends.

“The gun ownership rate was a strong and independent predictor of firearm-related death,” says Bangalore. “Private gun ownership was highest in the US. Japan, on the other end, had an extremely low gun ownership rate. Similarly, South Africa (9.4 per 100,000) and the US (10.2 per 100,000) had

extremely high firearm-related deaths, whereas the United Kingdom (0.25 per 100,000) had an extremely low rate of firearm-related deaths. There was a significant correlation between guns per head per country and the rate of firearm-related deaths with Japan being on one end of the spectrum and the US being on the other. This argues against the notion of more guns translating into less crime. South Africa was the only outlier in that the observed firearms-related death rate was several times higher than expected from gun ownership.”

The investigators also evaluated whether mental illness, and not merely the access to guns, is the driving force for criminal activities. They used age-standardized disability-adjusted life-year rates due to major depressive disorder per 100,000 inhabitants with data obtained from the World Health Organization database as a presumed indicator for mental illness burden in each country to assess whether there was a correlation between mental illness burden of a country and the crime rate in a country, but found no significant correlation between mental illness and crime rate.

Says Messerli and Bangalore, “Although correlation is not the same as causation, it seems conceivable that abundant gun availability facilitates firearm-related deaths. Conversely, high crime rates may instigate widespread anxiety and fear, thereby motivating people to arm themselves and give rise to increased gun ownership, which, in turn, increases availability. The resulting vicious cycle could, bit by bit, lead to the polarized status that is now the case with the US.” They conclude that, “Regardless of exact cause and effect, the current study debunks the widely quoted hypothesis that countries with higher gun ownership are safer than those with low gun ownership.”

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#### **NOTES FOR EDITORS**

"Gun Ownership and Firearm-related Deaths," by Sripal Bangalore, MD, MHA, and Franz H. Messerli, MD (DOI: 10.1016/j.amjmed.2013.04.012). *The American Journal of Medicine*, Volume 126, Issue 10 (October 2013) published by Elsevier.

Full text of the article is available to credentialed journalists upon request. Contact Jane Grochowski at 406-542-8397 or [ajmmedia@elsevier.com](mailto:ajmmedia@elsevier.com) to obtain copies. Dr Bangalore may be reached through the NYU Langone Medical Center at 212-404-3753 or [allison.clair@nyumc.org](mailto:allison.clair@nyumc.org). Dr Messerli may be reached at 212 523 7373.

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