UCSF heart doctors uncover significant bias in TASER safety studies

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The ongoing controversy surrounding the safety of using TASER® electrical stun guns took a new turn today when a team of cardiologists at the University of California, San Francisco announced findings suggesting that much of the current TASER-related safety research may be biased due to ties to the devices' manufacturer, TASER International, Inc.

In a research abstract presented at the Heart Rhythm Society's 32nd Annual Scientific Sessions at the Moscone Center in San Francisco, study author Peyman N. Azadani, MD, research associate at UCSF's Department of Medicine, Division of Cardiac Electrophysiology, and senior author Byron K. Lee, MD, associate professor of medicine in UCSF's cardiology division, set out to gauge the accuracy of 50 published studies on the potential dangers of using TASER® products. Lee directs the Electrophysiology Laboratories and Clinics in UCSF's Cardiology Division, and first published research on the safety of law enforcement use of TASERs in 2009.

The new study's authors report that among the product safety studies they analyzed, the likelihood of a study concluding TASER® devices are safe was 75 percent higher when the studies were either funded by the manufacturer or written by authors affiliated with the company, than when studies were conducted independently.

Azadani, Lee and three colleagues divided TASER safety study outcomes into four categories: harmful, probably harmful, unlikely

harmful and not harmful. Of the 50 articles studied, 23 were funded by TASER International, Inc. or written by an author affiliated with the company. Nearly all (96 percent) of the TASER-supported articles concluded the devices were either "unlikely harmful" (26 percent) or "not harmful" (70 percent). In contrast, of the 27 studies not affiliated with TASER International, 55 percent found that TASERs are either "unlikely harmful" (29 percent) or "not harmful" (26 percent).

TASERs are the most popular brand of electrical stun guns, used primarily by law enforcement agencies to incapacitate combative suspects. The devices, also marketed for home use, deliver electrical pulses that stimulate the nervous system and cause involuntary muscle contractions. Advocates of using such conductive energy devices, or CEDs, say that they are effective and cause only temporary physical symptoms. Critics and scientists have raised concerns about the potential dangers of using TASER® devices, particularly on pregnant women, the elderly and very young, and individuals with underlying medical conditions.

Provided by University of California, San Francisco