

**Public Release: 14-Jun-2015**

## **Power of the media's impact on medicine use revealed**

How ABC TV's Catalyst changed patients' use of statins

University of Sydney

More than 60,000 Australians are estimated to have reduced or discontinued their use of prescribed cholesterol-lowering statin medications following the airing of a two-part series critical of statins by ABC TV's science program, Catalyst, a University of Sydney study reveals in the latest *Medical Journal of Australia*.

The analysis of the Pharmaceutical Benefits Scheme medication records of 191,000 people revealed that there was an immediate impact after Catalyst was aired in October 2013, with 14,000 fewer people dispensed statins per week than expected.

"In the eight months following the Catalyst broadcast, an estimated 60,897 fewer people had statins dispensed than expected. If patients continue to avoid statins over the next five years, this could result in between 1,522 and 2,900 preventable, and potentially fatal, heart attacks and strokes," the authors report.

The Catalyst program questioned the link between cholesterol and heart disease and suggested that the benefit of statins for preventing cardiovascular disease had been exaggerated.

Statin are widely used drugs recommended nationally and internationally to prevent and manage the risk of cardiovascular events such as heart attacks and strokes, in people at risk of cardiovascular disease. Following the broadcasts, health experts, including ABC presenter Dr Norman Swan, were highly critical of the program for misrepresenting scientific evidence and scaring people away from prescribed medications.

The ABC subsequently removed the episodes from the Catalyst website after an internal review found that the episodes on statins had breached its impartiality standards.

Lead author, Andrea Schaffer from the University of Sydney's Faculty of Pharmacy, stated: "The impact of the program was not only immediate, but long-lasting. Statin dispensings were significantly lower than expected for the entire 8-month post-broadcast period we examined. It is unclear how long this change will last."

"What is particularly concerning is that this drop in statin use was seen in people who were at high risk of cardiovascular disease - for example, those who were also taking medications for diabetes," said Associate Professor Sallie Parson, senior author on the study and Scientific Director of the Centre of Research Excellence in Medicines and Ageing.

"Heart attacks and strokes are the main killers of people with diabetes. Statins are recommended for people at high risk of cardiovascular disease because they have been shown to be effective. However, like all medications, they have risks and benefits and should only be used as recommended."

The authors of the MJA paper said that even though the observed effect was relatively small, the prevalence of statin use in Australia and their established efficacy means that a large number of people are affected, and may suffer unnecessary consequences.

### **Early warning: concerns were raised prior to the airing of the Catalyst program on statins**

Prior to the airing of the Catalyst episode on statins, ANU Professor Emily Banks - a co-author of the new MJA study - raised concerns that the program could have adverse health impacts.

"The media has a critical role to play in questioning the status quo and in helping people to make sense of health information. These findings demonstrate the power of the media and how serious the consequences can be if reporting is not balanced and informed." She stated: "The ABC should be praised for facilitating dialogue about concerns raised by the program and for withdrawing the program when it was found to have breached their standards."

NPS MedicineWise, which provides guidance to health professionals and consumers on medicines, highlighted the importance of reliable information on medicines for health professionals and consumers.

"At the time the Catalyst program went to air, we expressed concern that people prescribed statins may stop taking their medicine without talking to a health professional," said NPS MedicineWise CEO, Dr Lynn Weekes. "In light of the findings of this study, we would like to re-emphasise how important it is to have a conversation with your doctor before making decisions about your prescription medicines."

The CEO of the Consumers Health Forum, Leanne Wells, said, "this study highlights the hazards for consumers of accepting media stories on medicine and applying them unquestioningly to their own health care.

"It is a timely warning to the very many people who may depend on the internet and the mass media to guide their medical care. The statins story was particularly problematic because of the millions of Australians who need to take this medication daily.

"As we said at the time, patients should consult their doctor before stopping their medication. Consumers need balanced information about medicines and their health," Ms Wells said.

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### **Fast facts about the study**

- Study design: Interrupted time series with control group
- Study period: July 2009 to June 2014
- Sample size: 191,833 people
- Average age: 72 years
- Gender: 55 per cent female

The research was funded by the National Health and Medical Research Council (NHMRC) Centre of Research Excellence (CRE) in Medicines in Ageing.

Andrea Schaffer has received the Stanley A. Edlavitch Award for the Best Student Abstract submitted for the 31st International Conference on Pharmacoepidemiology & Therapeutic Risk Management for this research. She will receive this award and present her findings at the ICPE meeting in Boston in August 2015.