



## Statins, news, and nuance

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Journalism that exposes the public to ongoing controversies in science should be nurtured

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Did news coverage of questions about the risk:benefit balance of statins influence their use in the United Kingdom? In a linked paper, Matthews and colleagues (doi:10.1136/bmj.i3283) assert that it did, describing “impact,” “the effect of negative media coverage,” and “a transient rise in the proportion of people who stopped taking statins.”<sup>1</sup> They assumed causality but did not prove it, despite the causal language used.

The news in question was not all negative. Stories swung between extremes. One newspaper headline claimed that “statins do not have major side effects” just days after another newspaper headlined “millions face terrible side effects as [statin] prescription escalates.” Those two stories might have had very different effects on current or potential statin users.

Two stories are a slim sample on which to base conclusions, but that is all the authors cited, after describing “widespread media coverage” over a six month period that was both “intense” and “negative.” In one story, less than 20% of the text discusses potential harms.<sup>2</sup> The headline of the other story was “Doctors’ fears over statins may cost lives, says top medical researcher.”<sup>3</sup> We should not rush to judge the media’s role in this episode. The authors provide no patient survey data to support the belief that people stopped because of news reports.

It is noteworthy that another linked paper about discontinued use of statins (doi:10.1136/bmj.i3305) included this limitation: “Because of the lack of data on reasons for discontinuations, this study cannot directly address why patients discontinue statins.”<sup>4</sup> Vinogradova and colleagues concluded, “Although a large proportion of statin users discontinue, many of them restart.”

But what if news coverage did have an effect, by alerting people to the debate and uncertainty that still exist about the extent of potential benefits and harms of statin use? Is that such a bad thing? As Montori and others have said, “Informed patients may choose not to follow a guideline that does not incorporate their preferences.”<sup>5</sup>

What do we know about patients’ preferences in this case? Perhaps news stories inspired patients to question trade-offs in ways they never did when they started taking statins because they had not been fully informed. We know nothing about the

quality of the clinical decision making encounters before the start of treatment. We know nothing about why these patients stopped. Matthews and colleagues acknowledge that they did not engage patients in the development of the study protocol. It might have helped if they had done so. A survey in the United States found that patients perceive that physicians tend to emphasise the advantages more than the disadvantages in 10 common decisions about care.<sup>6</sup> Furthermore, patients in that survey reported that treatment of raised cholesterol concentration was one of the decisions for which they were least likely to be asked for input.

So we do not know whether the news coverage on statins had any causal effects on people taking statins, what other factors could have influenced patients’ decisions to stop, and why initiation of new use did not decline after this same “negative” news coverage. Hanging over all of this are questions about what manufacturers’ data that have not been made public or what better studies of statins in routine use might further reveal about harms. Statin intolerance is not a myth.<sup>7</sup>

For 10 years I have published HealthNewsReview.org, a US based project that systematically reviews media messages that make claims about healthcare interventions.<sup>8</sup> Our data on several thousand stories show that most emphasize or exaggerate potential benefits while minimizing or ignoring potential harms.<sup>9</sup> We rarely see journalism about overdiagnosis, overtreatment, or shared decision making. Few stories clearly communicate the trade-offs involved in medical decisions. Far more stories fawningly promote more use of more interventions, evidence be damned. Journalism that exposes the public to ongoing controversies in science should be nurtured, not branded as negative.

Matthews and colleagues projected excess cardiovascular events as a result of discontinued statin use.<sup>1</sup> They did not explore the possibility of reduced reports of muscle pain, rhabdomyolysis, liver damage, diabetes, or cognitive side effects.

The debate over the harms and benefits of statins is not over. Journals, journalists, clinicians, and researchers could help people to grasp the uncertainty that still exists and to attack it

by asking more questions. But they must avoid suggesting absolute certainty exists where it does not.

If news stories generate new questions from patients, or more complete conversations between patients and clinicians including better discussions on trade-offs, personal preferences, and values, that is an outcome to embrace. In the end, I suggest that this episode is far less about journalism than about how science and medicine deal with uncertainty.

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- 1 Matthews A, Herrett E, Gasparrini A, et al. Impact of statin related media coverage on use of statins: interrupted time series analysis with UK primary care data. *BMJ* 2016;353:i3283.
- 2 Statins do not have major side effects, claims study: Research finds users less likely to suffer maladies than control group. *Daily Mail* 2014 March 12. <http://www.dailymail.co.uk/health/article-2579739/Statins-NOT-major-effects-claims-study-Research-finds-users-likely-suffer-maladies-control-group.html>

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