



Fake medical news

Is it better to be treated by a male physician or a female physician?

Roger Ladouceur MD MSc CCMF(SP) FCFP, ASSOCIATE SCIENTIFIC EDITOR

According to an article published in the February 2017 issue of *JAMA Internal Medicine*, elderly hospitalized patients fare better in the care of female internists.¹ The authors pored over the outcomes of more than 1.5 million elderly hospitalized patients cared for by close to 60 000 American internists between 2011 and 2014 and found some notable differences. Thirty-day mortality was 11.07% for patients treated by female internists compared with 11.49% for those treated by male internists—a difference of 0.43% that was deemed statistically significant. Thirty-day readmissions were found to be 15.02% for patients treated by female internists compared with 15.57% for those treated by male internists—a difference of 0.55% that was once again deemed statistically significant. The authors concluded that the differences in favour of female internists were such that the numbers of patients who needed to be treated in order to prevent 1 additional bad outcome were 233 for mortality and 182 for readmission.


These figures are troubling. Anyone reading these results would say to themselves, surely it is better to be treated by a female physician! In fact, supporting documents in hand, the authors provide a long list of other areas in which female physicians practise better than their male counterparts: female physicians might be more likely to adhere to clinical guidelines, provide preventive care more often, use more patient-centred communication, perform as well or better on standardized examinations, and provide more psychosocial counseling to their patients than their male peers do. After reading this long enumeration, one might well wonder what men are doing practising medicine!

However, if you read this study critically, the results are less convincing than they seem at first glance. First, this is an observational study, so the independent variables are not controlled by the researchers. Right away, we note important differences between the female physicians and the male physicians. The female physicians are younger (5 years younger); they are more likely to work for a not-for-profit organization (78% vs 76%); they are more likely to work in a large teaching hospital (29% vs 21%); and they care for fewer patients than their male colleagues do (132 vs 181 per year). These 4 factors alone can explain the favourable rates for female physicians.

Cet article se trouve aussi en français à la page 423.

Any group that is made up of younger care providers who have more support from residents and on-site access to academic consultants, and who care for fewer patients, will have better rates. We also note that although there are statistically significant differences, these differences are minimal: the numbers needed to treat were 233 for mortality and 182 for readmissions. These numbers are larger than the number of patients the physicians in question treat in an entire year. What's more, anyone familiar with the workings of a hospital knows that hospitalized patients are rarely cared for by one physician exclusively; transfers of care for on-calls, weekends, and rotations make that virtually impossible. As a result, it is difficult to isolate the sole preserve of the attending physician, whether male or female.

In spite of its obvious flaws, this study and others like it will create and perpetuate the myth that women are better at medicine than men. As of April 19, 2017, the study had been viewed more than 230 000 times.¹ The counter tracking non-academic (immediate) activity (ie, coverage in conventional media [newspapers] and social media [Twitter, Facebook, blogs, etc]) indicated a view rate of close to 4000, which is very high. It is almost as though, when it comes to medical headlines, popularity beats out the evidence.²

Regardless of whether this is true, and setting aside the results of this study for a moment, there has been a phenomenal increase in the number of women practising medicine in Canada over the past 20 years. In 1995, 30% (8916) of Canada's 29 775 family physicians were female; in 2016, this proportion had increased to 44% (18 487 female physicians out of a total of 41 719 physicians).³ At this rate, there is a strong likelihood that there will be as many female physicians as male physicians in Canada in a few years. This is a very good thing, but not for the reasons cited in the study. 

References

1. Tsugawa Y, Jena AB, Figueroa JF, Orav EJ, Blumenthal DM, Jha AK. Comparison of hospital mortality and readmission rates for Medicare patients treated by male vs female physicians. *JAMA Intern Med* 2017;177(2):206-13. Available from: <http://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2593255>. Accessed 2017 Apr 19.
2. Être traité par une femme médecin réduit le risque de mortalité, selon une étude. *La Presse* 2016 Dec 19. Available from: www.lapresse.ca/sciences/medecine/201612/19/01-5052835-etre-traite-par-une-femme-medecin-reduit-le-risque-de-mortalite-selon-une-etude.php. Accessed 2017 Apr 27.
3. Canadian Medical Association. *Number and changing demographics of Canada's physicians over the years*. Ottawa, ON: Canadian Medical Association; 2017. Available from: www.cma.ca/En/Pages/physician-historical-data.aspx. Accessed 2017 Apr 26.