



Stop invoking evidence-based data!

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A few years ago, Family Medicine Forum introduced its annual Dangerous Ideas Soapbox. This event

offers a platform for you as an innovator to share an important idea that is not being heard but needs to be heard in the family medicine community. A dangerous idea could be very controversial, completely novel, blue-sky thinking, or something that challenges current thinking. But it must also demonstrate a commitment to moving the idea forward.¹

Every year, I attend to listen to these ideas and witness the controversies that unfold. No one is indifferent to statements like “Stop telling people to lose weight”¹; “Making family physicians primary in primary care guidelines”²; or “Prescribing income.”³

If there were even the remotest chance that my dangerous idea would make it through, I would propose the following: Stop invoking evidence-based data as though it guarantees certainty.

Consider the case of corticosteroid injections for knee osteoarthritis discussed in “Top studies relevant to primary care practice.”⁴ It tells us that “steroid injections might marginally ... increase erosion of knee cartilage” (page 280).⁴

This is news that will surprise more than a few people, considering the procedure is fairly standard, has been performed by physicians for decades, and appears to provide relief to patients suffering from knee osteoarthritis, for whom other therapeutic methods have proven ineffective.

The authors have tried to reinterpret the results by casting doubt on their clinical significance, alleging that the tests’ timing was suboptimal and that several previous studies have demonstrated that cortisone injections are effective. However, this interpretation does not correspond with the conclusions drawn by these researchers:

Among patients with symptomatic knee osteoarthritis, 2 years of intra-articular triamcinolone, compared with intra-articular saline, resulted in significantly greater cartilage volume loss and no significant difference in knee pain. These findings do not support this treatment for patients with symptomatic knee osteoarthritis.⁵

These results are not very reassuring: no physician wishes to use a treatment that is ineffective or creates further erosion in already deteriorating knee cartilage.

The recommendations published on this procedure are contradictory: The American Academy of Orthopaedic Surgeons states that “We are unable to recommend for or against the use of intraarticular corticosteroids for patients with symptomatic osteoarthritis of the knee”⁶; the American College of Rheumatology opines that “We conditionally recommend that patients with knee [osteoarthritis] should use ... intraarticular corticosteroids injections.”⁷ Tools for Practice states that “Corticosteroid intra-articular knee injections reduce osteoarthritis pain [about] 40% more than placebo and one in every 3-5 patients injected will have global symptom improvement in the first four weeks.”⁸ In short, these are contradictory recommendations that leave clinicians to their own devices, even though they claim to rely upon evidence-based data.

To prove my point, I could have just as easily discussed prostate cancer screening or annual medical examination recommendation sagas that have seen credible organizations publish contradictory recommendations while relying on the same evidence, claiming that their opinions are evidence-based. Evidently, the GRADE system upon which most of them depend, does not do much to help the cause, given that it allows recommendations to be classified as strong despite weak supporting evidence.

Supposed evidence-based opinions remind me of insurance policies that include a fine-print clause on when coverage ceases to apply; with scientific evidence, there are always justifications as to why interpretations vary or recommendations contradict each other.

So, let us stop constantly invoking evidence-based data as though it guarantees certainty.

What a dangerous idea!



References

1. Hale I. Fantastic idea: stop telling people to lose weight. In: Dangerous ideas. Top 3 proposals presented at Family Medicine Forum. *Can Fam Physician* 2018;64:97-8 (Eng), e56-8 (Fr).
2. Allan GM. First place: making family physicians primary in primary care guidelines. In: Dangerous ideas. Top 4 proposals presented at Family Medicine Forum. *Can Fam Physician* 2016;62:120-1 (Eng), e61-3 (Fr).
3. Raza D, Pinto AD, Bloch G, Tomlinson KC. First place: prescribing income—reimagining our ability to act on the most powerful determinant of our patients’ health. In: Dangerous ideas. Top 4 proposals presented at Family Medicine Forum. *Can Fam Physician* 2015;61:117-9 (Eng), e73-5 (Fr).
4. Perry D, Kolber MR, Korownyk C, Lindblad AJ, Ramji J, Ton J, et al. Top studies relevant to primary care practice. *Can Fam Physician* 2018;64:280-5.
5. McAlindon TE, LaValley MP, Harvey WF, Price LL, Driban JB, Zhang M, et al. Effect of intra-articular triamcinolone vs saline on knee cartilage volume and pain in patients with knee osteoarthritis. A randomized clinical trial. *JAMA* 2017;317(19):1967-75.
6. American Academy of Orthopaedic Surgeons. *Treatment of osteoarthritis of the knee. Evidence-based guideline*. 2nd ed. Rosemont, IL: American Academy of Orthopaedic Surgeons; 2013.
7. Hochberg MC, Altman RD, Toupin April K, Benkhalti M, Guyatt G, McGowan J, et al. American College of Rheumatology 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip, and knee. *Arthritis Care Res (Hoboken)* 2012;64(4):465-74.
8. Jamieson J, Allan GM. *Corticosteroid shots and knees: a match made in osteoarthritis heaven?* Edmonton, AB: Tools for Practice; 2015.

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