

Continuing Educational Inertia?

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According to National Health and Nutrition Examination Survey 2007–2010 data, 52.5% of patients with diabetes obtained an A1C < 7%.¹ Less than 7% is not the goal for all patients, but it is for the majority; therefore, numerous patients are not achieving goals.

One proposed reason health care providers (HCPs) struggle to get patients to goal is clinical inertia.

Clinical inertia is defined as recognition of the problem, but failure to act.² Clinical inertia leads to delivery of suboptimal care and is complicated by many factors, including access to care, insurance formularies, and patient adherence.

What if there is another reason that is never discussed? I believe another reason patients are not reaching their goals is something I

am calling “educational inertia.” I define educational inertia as learning information in an attempt to improve clinical skills from data that are clinically inaccurate or outdated. This misinformation is then applied to patient care, resulting in poor outcomes. Every effort is needed to stop educational inertia and thus to arm HCPs with the current knowledge and skills essential to get patients

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to goal in a challenging health care environment.

I identified educational inertia while attending two diabetes association annual meetings in 2013. At such meetings, individuals in various health care professions from all around the globe attend sessions given by experts. Attendees believe the information they are presented is new and clinically accurate and leave with a plan to improve patient care based on the knowledge they have gained. They apply what they learn, but patients still do not get to goal. The dilemma occurs when these presentations contain clinically inaccurate or outdated material. Ensuring speakers' presentations are clinically accurate and up to date is crucial to stopping educational inertia.

The first case of educational inertia I witnessed in 2013 occurred in a 2-hour session with multiple presenters. Speaker after speaker cited trials showing the A1C-lowering difference between two insulin products was not statically significant. This nonsignificance was stated with disbelief. When I heard the first presenter do this, I thought maybe he was unaware of the U.S. Food and Drug Administration (FDA) guidance on insulin trials. But when multiple presenters did it, I knew this inaccurate information was the result of a lack of knowledge. In February 2008, the FDA Center for Drug Evaluation and Research released industry guidance for products treating diabetes.³ On the topic of insulin, the guidance states: "Test and comparator groups should be treated to similar goals. Similar degrees of glycemic control (test noninferior to reference) should be achieved so that comparisons among groups in frequency and severity of hypoglycemia will be interpretable in ultimate risk-benefit assessments."

If presenters understood insulin trials are designed to show similar A1C results, they could have stated this, rather than expressing disbelief in the nonsignificant results. The audience would have been armed with accurate knowledge rather than with misinformation about the trials, which ultimately may have improved patient care.

The second case I witnessed occurred when a speaker discussed treatment options for a patient with type 2 diabetes, relying on a trial in patients with type 1 diabetes, referenced from 2002. The speaker justified treatment of the case patient and those in the speaker's clinic by citing this outdated and clinically inaccurate comparison. When I saw this, I knew three things were wrong. First, the trial was in type 1 diabetes and could not be extrapolated to patients with type 2 diabetes. Second, the study was cited with a 2002 abstract that could not be found in PubMed and should have been replaced with a more accurate citation from the full trial results published in 2005.⁴ Third, there have been newer trials in type 2 diabetes patients that, if cited, would have provided newer and more clinically accurate data.^{5,6}

Does educational inertia exist? Because educational inertia is a subjective concept, it is impossible to measure. Perhaps I was more sensitive to these two presentations because I attended them and knew the errors. Do most continuing education session attendees take new knowledge they learn—whether correct or incorrect—and use it to make therapy decisions? Given the prevalence of clinical inertia and the continuing problem of patients not achieving their personalized A1C goals, it seems HCPs are either not gaining useful knowledge or are not applying the knowledge they gain to their practice. Maybe attendees

are just there to earn the continuing education credits required for their professional certifications and are not really listening to the content of the presentations to determine whether the information is correct. However, if we assume attendees are indeed there to learn and plan to apply what they learn to clinical practice, educational inertia does seem to be real and may, ultimately, worsen patient care.

Something has to be done to stop this problem. First, guidelines for presentation development should stress the importance of using up-to-date and clinically accurate information. Second, a rigorous review process stressing adherence to the presentation guidelines and involving more than one expert reviewer providing critical feedback will help to ensure audiences receive the best possible presentations. All presentations, from those of renowned experts to those of rising stars in the diabetes world, should undergo the same level of scrutiny. Third, post-presentation evaluations should be carried out to assess the audience's perceptions of the content as current and clinically accurate, allowing space for written comments to provide examples of instances when these two guidelines were not followed.

This may be asking too much, but educational inertia is real, and patient outcomes are at stake. Speakers and organizers of annual association meetings must take ownership of what is presented at their events to eliminate educational inertia and to arm HCPs with the real information they need to successfully assist their patients in reaching their treatment goals.

REFERENCES

- Centers for Disease Control and Prevention National Center for Health Statistics: National Health and Nutrition Examination Survey. Hyattsville, Md., U.S.

Department of Health and Human Services,
Centers for Disease Control and Prevention,
1999–2010

²Phillips LS, Branch WT, Cook CB,
Doyle JP, El-Kebbi IM, Gallina DL, Miller
DC, Ziemer DC, Barnes CS: Clinical inertia.
Ann Intern Med 135:825–835, 2001

³U.S. Food and Drug Administration:
Guidance for industry: diabetes mellitus:
developing drugs and therapeutic biolog-
ics for treatment and prevention. February
2008. Available from [http://www.fda.gov/
downloads/Drugs/Guidances/ucm071624.pdf](http://www.fda.gov/downloads/Drugs/Guidances/ucm071624.pdf).
Accessed 18 December 2013

⁴Plank J, Bodenlenz M, Sinner F,
Magnes C, Gorzer E, Regittng W, Endahl
LA, Draeger E, Zdrakovic M, Pieber TR: A
double-blind, randomized, dose-response
study investigating the pharmacodynamic
and pharmacokinetic properties of the long-
acting insulin analog detemir. *Diabetes Care*
28:1107–1112, 2005

⁵Klein O, Lynge J, Endahl L, Damholt B,
Nosek L, Heise T: Albumin-bound insulin
analogues (insulin detemir and NN344):
comparable time-action profiles but less vari-
ability than insulin glargine in type 2 diabetes.
Diabetes Obes Metab 9:290–299, 2007

⁶King AB: Once-daily insulin detemir is
comparable to once-daily insulin glargine

in providing glycaemic control over 24 h in
patients with type 2 diabetes: a double-blind,
randomized, crossover study. *Diabetes Obes
Metab* 11:69–71, 2009

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