On "the average causal effect"

Have you encountered this phrase lately? I found 20 papers containing "average causal effect" in the title, and about 80 containing the words in the abstract (PubMed search, early 2018)[a].

Have you given some thought not only to the math, but also to the idea? Have you thought about the knowledge that we gain from this new "causal parameter"?

Chances are you haven't. So let me draw some "knowing" analogies:

- It's like knowing that your average skin temperature is pleasant, when one of your feet is in the fire and the other – in the freezer.

- It's like knowing that your average level of content is neutral when someone insulted you one day and praised you the next day.

- It's like knowing that you shouldn't worry, when your investment portfolio is swinging between +25% one day and −25% the next day.

- It like knowing that your papers invoke indifference, when 20 of them were accepted and 20 – rejected.

- It's like knowing that a drug for your illness is useless, when it kills 50 people and saves the lives of 50 others.

Welcome to the "average causal effect" era!
(And here is something worth knowing: it is another methodological product of determinism.)

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[a] *As far as the title is concerned, the phrase was born around 2006, went dormant for several years, and was re-born around 2014.*

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