

## Editorial

# Disclosures of Coca-Cola funding: transparent or opaque?

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In August 2015, in response to a *New York Times* article reporting on the Coca-Cola Company's funding of the Global Energy Balance Network<sup>(1)</sup>, the company's CEO Muhtar Kent declared a commitment to 'act with even more transparency'<sup>(2)</sup>. They would achieve this in part by publishing on their website a list of partnerships, research activities<sup>(3)</sup> and Coca-Cola-funded scientific investigators<sup>(4)</sup>, to be updated every six months.

In their article in this issue of *Public Health Nutrition (PHN)*, Serôdio *et al.*<sup>(5)</sup> evaluate efforts towards transparency on the part of both Coca-Cola and Coca-Cola-funded investigators. They use the Web of Science Core Collection database, which includes information from funding acknowledgements and competing interest statements. Their findings, in brief, show:

1. *Reporting of conflicts of interest by Coca-Cola-funded investigators is incomplete.* Serôdio *et al.* were unable to find any declared conflicts of interest from at least thirty-eight (17%) of the 218 recipients of Coca-Cola funding included on Coca-Cola's transparency lists. Disclosure of funding from pharmaceutical companies for clinical trials is under-reported<sup>(6–8)</sup>; Serôdio *et al.*'s analysis demonstrates that the same occurs in public health nutrition research.
2. *Coca-Cola's transparency lists of scientific investigators are incomplete.* Of 331 articles identified from the Web of Science as having acknowledged funding from Coca-Cola, 128 (39%) had *no* authors who were among the 218 listed on Coca-Cola's transparency lists. This incompleteness suggests that Coca-Cola has a more extensive influence on research activities than its transparency lists imply.
3. *A leading topic of research in Coca-Cola-funded work was physical activity.* Serôdio *et al.*'s structural topic modelling analysis of all articles with acknowledged Coca-Cola funding provides an empirical confirmation of suggestions that the company funds research that 'shifts attention' from sugary beverages to physical activity and energy balance as determinants of obesity<sup>(9)</sup>.

### The problem with incomplete disclosure

The problem with incomplete disclosure, of course, is that readers are not given the complete information needed to critically assess an article fully. In a previous editorial, we discussed the problem of *disclosed* conflicts of interest

(CoI)<sup>(10)</sup>. Our editorial focused on how CoI disclosures might affect readers' reactions to an article, and on the importance of considering non-financial CoI. A primary theme was that although disclosure is not a perfect system, it is all we have, and transparency remains and should remain the goal.

Serôdio *et al.* further the discussion by bringing attention to the problem of incomplete disclosure. Most medical and health journals have policies requiring some form of disclosure<sup>(11–13)</sup>. Thus, reasons for failing to disclose CoI, particularly financial ones, are unclear, although different CoI time windows across journals (requiring disclosure of financial relationships for 2 *v.* 3 years prior to the manuscript's submission, for example) is one potential source of ambiguity<sup>(11,12,14)</sup>.

Also unclear is what to do with an article when an undisclosed CoI is discovered. Rejection or retraction are possible outcomes in some journal policies<sup>(11,12)</sup>. Alternatively, guidelines from the Committee on Publication Ethics (COPE; of which *PHN* is a member) suggest that, assuming the author 'supplies relevant details' when asked about an undisclosed CoI, the journal 'thank author but point out seriousness of omission', then 'publish correction to competing interest statement as required'<sup>(15)</sup>. The tools we have to enforce or monitor enforcement of disclosure policies are clearly limited. We rely on our Editorial Board, reviewers and readers to call out undisclosed CoI when they encounter them<sup>(16)</sup>.

### The problem with incomplete transparency lists

Coca-Cola's effort towards transparency is a step in the right direction. But the incompleteness of its transparency lists ends up giving us a limited view of the extent to which it influences the published, peer-reviewed literature. Authors of industry-funded studies, including systematic reviews and meta-analyses, are more likely to draw conclusions favourable to the industry funding them<sup>(17–21)</sup> and there are ways to breach research integrity that the peer review process cannot easily identify<sup>(22)</sup>. But Serôdio *et al.*'s analysis demonstrates Coca-Cola's influence not on how research is conducted, but on what questions are being asked.

Ideally, the questions we ask in public health research are motivated by the desire to improve public health. The problem with research questions funded by Coca-Cola is

that Coca-Cola is *not* primarily motivated to improve public health. By choosing to fund certain studies, Coca-Cola is tipping the scale towards the research questions it would like asked<sup>(23)</sup>, not necessarily the questions that need to be asked, and potentially overshadowing other equally if not more important work. In this way, Coca-Cola can become the driver of (or obstacle to) public health action simply by pouring resources on to a given question.

Partnering with industry is advantageous in an era when funding for research and community health programmes is limited. Coca-Cola has funded community programmes, programmes in low- and middle-income countries, and research<sup>(3,24)</sup>. But with an industry partnership comes the responsibility to weigh what will be gained against the potential cost. At a broader level, industry funding may come at a cost to the integrity of the research and public health decision-making processes<sup>(25)</sup>.

### Balancing transparency and libel chill

An additional, noteworthy aspect of Serôdio *et al.*'s findings is the inclusion of the names of researchers as part of the research findings and discussion. Serôdio *et al.* name the fifteen investigators who published the most articles with acknowledged funding from Coca-Cola; use names to label the results of their network analysis of co-authorships of Coca-Cola-funded research; and refer by name to two publicized cases of investigators revealed to have undisclosed funding from Coca-Cola. The inclusion of names serves the purpose of firmly grounding the results and their implications in reality.

The decision to publish the names was well-considered. After consulting with the authors and The Nutrition Society, it was decided that moving forward was appropriate given the stringent peer review process, the additional, careful review by members of our Editorial Board and the resolution not to fall prey to 'libel chill'<sup>(26)</sup>. Also worth noting is that the investigators named were in fact among those who disclosed their funding and/or were included on Coca-Cola's transparency lists.

### But is that the best we can do?

In a *New York Times* article<sup>(1)</sup>, Gregory Hand, the former dean of the West Virginia School of Public Health, is quoted as saying, 'As long as everybody is disclosing their potential conflicts and they're being managed appropriately, that's the best that you can do.' But first, as Serôdio *et al.* show, everybody is *not* disclosing their potential conflicts. Second, is that really the best we can do?

Gilmore and Capewell suggest 'radical funding models that allow corporations to fund research while protecting that research from their influence'<sup>(27)</sup>. In the absence of any radical change in funding models, there are other things we can do. First, management of disclosures

requires, at a minimum, the tools to track them easily. Dunn *et al.*<sup>(28)</sup> describe the characteristics of an effective registry for recording CoI. Such a registry is similar in concept to the Open Payments database developed as a result of the Physician Payments Sunshine Act in the USA<sup>(29)</sup>. Given the potential influence of food and beverage companies, the same tool might be useful to monitor funding and CoI in public health and nutrition research.

With respect to what can be done in research, *PHN* welcomes contributions that monitor the quality and transparency of scientific publications and the impact of CoI, with the objective of advancing science, providing an appropriate evidence base for action and encouraging debate. These might include, for example: (i) monitoring the disclosure policies of nutrition journals; (ii) determining the extent of undisclosed CoI in public health nutrition-related research; (iii) examining whether research findings differ according to amount of funding, or according to whether authors were directly or indirectly funded; and (iv) evaluating the influence of industry funding on the research topics being studied.

*PHN* can also serve as a forum for academic debate. Recent publications in *JAMA* and *BMJ* are examples of sharing the range of different viewpoints on CoI<sup>(30)</sup> and on whether food industry should fund public health research<sup>(27)</sup>. In the case of Coca-Cola (or other food industry) funded research, it would be useful to see the benefits and costs addressed point-by-point, as a way for us as a scientific community to identify common ground – we all want to see improvements in public health, for example – and to identify where our priorities diverge.

As we have stated previously<sup>(10)</sup>, disclosure and transparency are necessary. But they are not by themselves sufficient to ensure the highest standards of research, both in terms of how it is conducted and what is being studied.

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