Research Methods and Professional Practice June 2022

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« Collaborative Learning Discussion 2



Initial Post

45 days ago

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The food industry plays an importing role in supporting nutrition research within companies' R&D environments as well as in academia (Mozaffarian, 2017). While the benefits of such public-private partnerships are many, there are reports indicating substantial bias in industry-sponsored reviews of health effects of certain food additives (Mandrioli et al., 2016), with an approximate 30% higher likelihood of favorable conclusions in other nutritional topics (Chartres et al., 2016). In these reports, financial conflicts of interest introduced bias that affected the review outcomes in ways that could not be attributed to other factors. Fabbri et al. (2018), in their investigation of commercial bias in research agenda, found that industry-funded publications often frame public health problems in a narrow way and avoid addressing nutrition as a health issue. In most extreme cases, major corporations were shown to have ultimate control over the study data, including a choice regarding publication of research findings (Sacks et al., 2020).

In the case study provided in this Unit, the first essential step for Abi would be to identify and explicitly declare the conflict of interest in his research, which usually involves disclosing the financial supporter of the research in his manuscript (Romain, 2015). This will ensure that the readers of Abi's research findings have information upon which they can make their own judgement. Many countries have frameworks for responsible research conduct, e.g., Australian Code for the Responsible Conduct of Research (2018); additionally, Abi's institute might have specific procedures for managing research conduct issues. Abi also needs to carefully review publication guidelines of his target journal; while disclosure of conflicts of interest has become common practice in scientific congresses and publications, it is still lacking in many published articles (Garattini & Padula, 2019).

References

Chartres, N., Fabbri, A. & Bero, L. (2016) Association of Industry Sponsorship with Outcomes of Nutrition Studies: A Systematic Review and Meta-analysis. *JAMA Internal Medicine* 176(12): 1769-1777.

Fabbri, A., Holland, T. & Bero, L. (2018) Food industry sponsorship of academic research: investigating commercial bias in the research agenda. *Public Health Nutrition* 21(18): 3422-3430.

Garattini, L. & Padula, A. (2019) Conflict of interest disclosure: striking a balance? *The European Journal of Health Economics* 20(1): 633-636.

Mandrioli, D, Kearns, C. & Bero, L. (2016) Relationship between research outcomes and risk of bias, study sponsorship, and author financial conflicts of interest in reviews of the effects of artificially sweetened beverages on weight outcomes. *PLOS One* 11(9): 1-20.

Mozaffarian, D. (2017) Conflict of Interest and the Role of the Food Industry in Nutrition Research. *The Journal of the American Medical Association* 317(17): 1755-1756.

National Health and Medical Research Council (2018) Australian Code for the Responsible Conduct of Research. Available from: https://nhmrc.gov.au/about-us/publications/australian-code-responsible-conduct-research-2018 [Accessed 20 July 2022].

Romain, P. (2015) Conflicts of interest in research: looking out for number one means keeping the primary interest front and center. *Current Reviews in Musculoskeletal Medicine* 8(2): 122-127.

Sacks, G., Riesenberg, D., Mialon, M., Dean, S. & Cameron, A. (2020) The characteristics and extent of food industry involvement in peer-reviewed research articles from 10 leading nutritionrelated journals in 2018. *PLOS One* 15(12): 1-15.

Reply

2 replies

Post by <u>Doug Leece</u> Peer Review

33 days ago

Great post as usual Andrey, although I may be biased since I arrived at a similar point of view.

The Sacks et al (2020) study confirmed a trend in companies paying for research associated with favourable research outcomes, something seen in other areas such as medical research (Khan et al). Although conflict of interest disclosure appears a reasonable remedy to monitor undue influence in research, those outside scientific circles are likely only exposed to the marketed message highly influenced by the financial contributors (Mindell et al, 2019).

Although we are regularly reminded to ensure we cite high quality sources in our own research and discussions as an assurance of quality I was saddened to see only 2.5 papers in 10,000 are retracted from journals (Campos-Varela & Ruano-Raviña, 2019). Sacks et al(2020) found processed food manufacturers had funding ties to almost 40% of 2018 food nutrition journal articles raising questions for me personally about the validity of journal publications as an indicator of content integrity.

References:

Khan, S., Mermer, M., Myers, E., & Sandhu, H. (2008). The Roles of Funding Source, Clinical Trial Outcome, and Quality of Reporting in Orthopedic Surgery Literature. American Journal Orthopedic, 37(12): 205–212.

Mindell, J., Buliung, R., & Watkins, S. J. (2019). Protecting science from the Dark Side: Commercial funding of research. Journal of Transport and Health, 15. Available from: https://doi.org/10.1016/j.jth.2019.100796 [Accessed 31 July 2022]

Sacks Id, G., Riesenberg Id, D., Mialon, M., Dean, S., & Cameron, A. J. (2020). The characteristics and extent of food industry involvement in peer-reviewed research articles from 10 leading nutrition-related journals in 2018. PLOS One 15(12): 1-15 https://doi.org/10.1371/journal.pone.0243144

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Minimum rating: -

Post by **Shan Swanlow** Peer Response

19 days ago

Hi Andrey,

Your focus on academic practice and financing is insightful. I've had similar findings when looking at academic perspectives on the topic of conflicts of interest. Newton et al. (2016) found that some food organisations in the UK employed individuals who did not have their conflicts of interest clearly declared, highlighting how this problem appears at an organisational level- notably, this problem wasn't as widespread in other organisations, where conflicts were more clearly communicated. The authors conclude their research by stating that conflicts of interest are unavoidable, thus they argue that it is more important to encourage disclosure and develop strategies for managing conflicts of interest.

Larrick et al. (2022) expand on this point and propose some guidelines to improve the trustworthiness and transparency of nutrition research. A key point which they encourage is open access to dataall peer reviewers and auditors should have access to the research findings, and additionally, research data and methodologies should be publicly accessible. Additionally, they suggest that researchers should clearly explain where funders gave advice (e.g., on research design, research conduct, or the development of research). Lastly, they also encourage the disclosure of relevant nonfinancial relationships. Do you think that these guidelines would better equip researchers to critically evaluate studies and thereby prove the existence of bias?

References

Larrick, B., Dwyer, J., Erdman, J., D'Aloisio, R. & Jones, W. (2022) An Updated Framework for Industry Funding of Food and Nutrition Research: Managing Financial Conflicts and Scientific Integrity. *The Journal of Nutrition* 152(8): 1812-1818. DOI: https://doi.org/10.1093/jn/nxac106

Newton, A., Lloyd-Williams, F., Bromley, H. & Capewell, S. (2016) Food for thought? Potential conflicts of interest in academic experts advising government and charities on dietary policies. *BMC Public Health* 16: 1-8. DOI: https://doi.org/10.1186/s12889-016-3393-2

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