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Editorial

Impact evaluations can do harm unintentionally – or intentionally

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We need to be prepared for the widespread efforts the ultra-processed food (UPF) industry is going to be using in the coming decades to protect the windfall profits its shareholders and top executives have gotten used to. Tobacco-industry tactics are already in use by the UPF baby food industry (Granheim et al., 2017).

A program/policy evaluation likely to attract stakeholder attention (and especially that of political and funding-agencies) to the question of whether an approach to reduce UPF consumption is worth continuing or expanding may be unrealistically ambitious or just premature. To ensure such an evaluation gets this kind of attention, all seemingly proper scientific methods by serious researchers should be used. Here are some ideas for how to understand this phenomenon and to prepare ourselves to counteract it.

One especially clever approach we can expect the UPF industry to use is to commission (or, even smarter, somehow encourage, without directly funding it) unrealistic impact evaluations that look, and actually may be objective. This was commonly seen in non-industry funded evaluations of breastfeeding interventions that naively used only one rather weak communication channel (Kaplowitz and Olson, 1983) or promoted one simplistic message (Greiner and Mitra, 1999).

Premature or inappropriate impact evaluations probably contributed to the widespread, industry-friendly belief in the global North by the late 1970s that breastfeeding was doomed. Nothing seemed able to slow its rapid demise (Aykroyd, 1977). (Unbeknownst to researchers until the early 1980s, breastfeeding throughout the North experienced something rare in public health, a turnaround remarkable in scope and speed everywhere it was measured from 1972-6, probably due to cultural change that had begun in the late 1960s.) Fortunately, evidence for the importance of breastfeeding for infant (and maternal) health became so overwhelming in following decades that a widespread agreement emerged that if any intervention, program or approach could be shown to increase the duration of breastfeeding, shorten the delay in its initiation, or make it more exclusive, it was accepted as successful without having to prove that it also improved infant growth or health.

A good example of an impact evaluation with industry-friendly results (whether or not the industry was involved in any way) is a recent one on the impact of the sugar-sweetened beverage tax in Philadelphia, which increased their prices by 30% (Gregory et al., 2024). The evaluation failed to find changes in weight of children 2-18 years old during the two years following implementation. As pointed out indirectly in an editorial by Janson and Elinder (2024), assurance that there will be no impact can be achieved by having an evaluation with a follow-up period that is too short. In addition, despite seeming to do their best, researchers outside of Scandinavia (where everyone has a unique "person number" and where in general better records are kept) may only have access to a partial database and this could introduce unintended biases.

Indeed, we need to ask whether we ought to be demanding such an impact? Surely a reduction in consumption of harmful products ought to be enough to convince policymakers of the value of implementing such measures as taxes on them?

What can be done so that researchers avoid naively falling into the trap of conducting premature impact evaluations? Vigneri (2022) provides examples of several evaluation approaches that can be used to obtain data rapidly during program rollout to help guide improved programming – rather than for make decisions on whether or not to continue a program at all.

If useful programs are continued for long enough, then impact on more socially important distal objectives can be the focus of impact evaluations. But even then, I would argue that these should be conducted only once simpler, less ambitious approaches objectively show promise that there WILL be an impact on the ultimate objectives of interest. Otherwise, there is always going to be a risk that an impact evaluation concludes "no effect," killing off approaches or failing to scale them up only because an impact evaluation was prematurely conducted.

An example regarding scale was a nation-wide evaluation of malaria programs in Angola that failed to find impact. Though it had been a waste of money to do such an evaluation in the first place in a recently war-torn country, at least it was realized that the evaluation was premature and it was repeated in provinces known to have had good implementation (Hershey et al., 2017).

Here is an example of how a qualitative study was used in advance to justify an expensive, large-scale impact evaluation. In the early 1990s, through a local NGO, the Swedish International Development Cooperation Agency funded a three-year communication and home gardening project to increase the consumption of carotene-rich foods

that reached virtually every rural household in the entire district of Gaibandha, Bangladesh, with a population of about 2 million. To decide if it was justified to fund an expensive quasi-experimental impact evaluation (and in turn expand the approach to other districts), a simple rapid appraisal was conducted (Greiner, 1997). Venders of vegetables and of vegetable seeds were interviewed in five towns in Gaibandha and nearby districts. In response to questions about how business was going, only in Gaibandha did all venders respond that sales of the carotene-rich vegetables mentioned to them had been greatly increasing over the past year or so, but this was not the case for the other vegetables mentioned. The impact evaluation did go forward. Conducted on probability samples of the entire district compared to a nearby district (Greiner and Mitra, 1995), it found basically a doubling of intakes of the cheapest carotene sources, green-leafy vegetables, among children under five, a rather rare achievement in the field of nutrition, as any parent can attest to! The project was then expanded to two additional districts thought to have high levels of vitamin A deficiency.

Another approach to ensure that evaluations do not ignore positive, if less than perfect, impacts is to include participants/beneficiaries/community members in the planning, implementation and report-writing for all community-level interventions. To quote Chambers (2009): "They open studies to the voices of those most affected by a project in a way not possible using more conventional methods and can make the realities and experiences of poor people count more."

Impact evaluations of policies are particularly risky -- something the UPF industry can feel rather confident will not be done well. This was obviously the case in the context of the recent COVID pandemic, where policy analysis was poorly done, resulting in dysfunctional responses in many countries. Haber et al. (2021) provide some guidance on how to do better in the future.

Finally, randomized controlled trials, while widely considered to be the "gold standard" in research, can be poorly done and inappropriately generalized from in the context of large-scale implementation of public health approaches. Greenhalgh et al. (2024) provide an excellent illustration of this in the case of facial masking as an intervention during the COVID epidemic.

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