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Countering the arms industry as a commercial determinant of health

Research, policy, and practice priorities

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Commercial determinants of health are the products, practices, and structures of the private sector that affect health.¹ There is a growing understanding that some of the main health challenges facing us, from non-communicable diseases to climate change to obesity, are linked to powerful elements of the private sector. The effects of gun violence, war, and displacement—despite their enormous burdens on health and healthcare—are rarely seen as being fuelled by commercial forces both on and far beyond conflict areas. But a series of BMJ articles on the arms industry as a commercial determinant of health (www.bmj.com/collections/arms-industry-health) shows how weapons manufacturers deploy corporate tactics-lobbying, marketing, and regulatory capture-to shape policy environments that prioritise their own profit over population and planetary health.2 -4

This approach displays striking parallels. Just as tobacco companies spent decades manufacturing doubt about cancer links,5 alcohol companies emphasise personal responsibility and self-regulation to evade curbs on their marketing, 6 the sugary drink industry funds physical activity research to deflect from its own complicity in obesity, 7 and fossil fuel corporations strategically spread misinformation to evade climate treaties, 8 the arms industry uses similar strategies to subvert public health agendas and shape discourse around security and violence. With global military spending reaching \$2.7tn in 2024 and conflicts escalating worldwide, understanding these industry dynamics through a commercial determinants of health framework can help uncover both direct and systemic health harms.9

Opportunities for research

An important message from the *BMJ* articles is the opportunity cost of arms spending. Rigorous economic analysis is needed of the trade-offs associated with health investments forgone because of military spending, particularly in low and middle income countries where opportunity costs are high and state health budgets already limited. ¹⁰ Much more research is needed to examine arms industry lobbying expenditures, trade agreements, political influence networks, and regulatory capture mechanisms across different political systems—from democratic contexts to authoritarian regimes—as has been attempted with other commercial determinants of health. ¹¹

A clear gap is that current research on commercial determinants of health has severe geographical bias, focusing predominantly on western democracies while neglecting the global south, where arms transfers fuel the deadliest conflicts and the health burden is disproportionately concentrated.

Methodological innovations will be essential for the research, including use of non-conventional data sources such as freedom of information requests or legal disclosures, though these may be particularly constrained by defence policy processes. Comparative studies of arms industry practices across political contexts could also reduce current bias towards comparatively more transparent systems. 12 Such research is needed to surface the challenges in studying commercial determinants of the arms trade—security classification, state interests, political donations, and commercial secrecy. Emerging technologies, including artificial intelligence, autonomous weapons, and cyber capabilities, will undoubtedly create new categories of health risk and health inequality, demanding more research. 13 14

Role of health practitioners

As a starting point, medical education should incorporate commercial determinants of health analysis. This would help the next generation of health professionals to recognise these connections and link the realities they face in daily clinical practice, including violence and conflict related trauma, to the upstream practices and structures that generate them. ¹⁵ Health professionals can document and publish case studies linking patient harms to broader arms industry practices, from domestic violence to conflict trauma and occupational exposures, using a similar model to physicians who exposed tobacco industry deception by tracking lung cancer patterns. ¹⁶

To ensure this evidence of health harms informs both policy and practice, health professionals can also contribute relevant expertise to arms export licensing decisions, treaty negotiations, and injury surveillance systems, much as physicians helped expose tobacco harms, ¹⁶ contributed to the international campaign to ban landmines, ¹⁷ and advanced firearm injury surveillance as a public health priority. ¹⁸ Finally, professional societies should call for policy positions addressing arms industry health impacts and divesting where possible from arms, as we do from tobacco. ¹⁹

Need for action

Ongoing wars in Gaza, Sudan, Ukraine, and elsewhere underscore the immediate relevance of arms industry behaviour. Worldwide increases in defence budgets since covid-19 create historic opportunity costs for health investment. The rapid development of AI weapons and autonomous systems requires proactive health assessment rather than reactive regulation.

The health community has unique advantages. Health professionals' moral authority and evidence based

approach can help serve as a counterpoint to industry narratives and framing of problems and their causes. The public health community has successfully challenged powerful industries before, through building coalitions that together expose the manipulation of policy environments. ²⁰ ²¹ Just as it is not "anti-alcohol" to interrogate the practices of alcohol marketers in deprived communities, it is not "anti-security" to examine the commercial incentives, political practices, and direct and indirect harms associated with the arms industry.

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- Gilmore AB, Fabbri A, Baum F, etal. Defining and conceptualising the commercial determinants of health. Lancet 2023;401:-213. doi: 10.1016/S0140-6736(23)00013-2. pmid: 36966782
- Bellis M, Jones L, Tucker J, etal. Weapons, wealth and health: the arms industry as a commercial determinant of health. BM/2025;390:e086166. doi: 10.1136/bmj-2025-086166
- Bellis M, Jones L, Tucker J, etal. Weapons of influence: tactics of a growing global arms industry and needed health actions. BMJ 2025;390:e086167. doi: 10.1136/bmj-2025-086167
- 4 Clark J, Abbasi K. Medical action against the arms industry. BM/2025;390:. doi: 10.1136/bmj.r1794.
- 5 Proctor R. Golden holocaust: origins of the cigarette catastrophe and the case for abolition. University of California Press, 2011.
- Maani Hessari N, Petticrew M. What does the alcohol industry mean by 'responsible drinking'? A comparative analysis. J Public Health (Oxf) 2018;40:-7. doi: 10.1093/pubmed/fdx040. pmid: 28398571
- Fabbri A, Holland TJ, Bero LA. Food industry sponsorship of academic research: investigating commercial bias in the research agenda. *Public Health Nutr* 2018;21:-30. doi: 10.1017/S1368980018002100. pmid: 30157979
- 8 van Schalkwyk MC, Maani N, Petticrew M. The fossil fuel industry: fueling doubt and navigating contradiction. In: Maani N, Petticrew M, Galea S, eds. *The commercial determinants of health*. Oxford University Press, 2023.: doi: 10.1093/oso/9780197578742.003.0012.
- 9 Stockholm International Peace Research Institute. SIPRI yearbook 2025: armaments, disarmament, and international security. 2025. https://www.sipri.org/sites/default/files/2025-06/yb25_summary_en.pdf
- Perlo-Freeman S. The opportunity cost of world military spending. SIPRI. 2016. https://www.sipri.org/commentary/blog/2016/opportunity-cost-world-military-spending
- Fabbri A, Lai A, Grundy Q, Bero LA. The influence of industry sponsorship on the research agenda: a scoping review. Am J Public Health 2018;108:-16. doi: 10.2105/AJPH.2018.304677. pmid: 30252531
- Perlo-Freeman S. Arms and the state: How the arms industry influences government in western arms producing nations. World Peace Foundation, 2024.
- 13 Reiff B. 'A mass assassination factory': inside Israel's calculated bombing of Gaza. +972 Magazine. 30 Nov 2023. https://www.972mag.com/mass-assassination-factory-israel-calculated-bombing-gaza/
- Schmitt MN. Israel Hamas 2024 symposium the gospel, lavender, and the law of armed conflict. Lieber Institute West Point. 2024. https://lieber.westpoint.edu/gospel-lavender-lawarmed-conflict/
- McKee M, Stuckler D. Revisiting the corporate and commercial determinants of health. Am J Public Health 2018;108:-70. doi: 10.2105/AJPH.2018.304510. pmid: 30024808
- Brandt AM. Inventing conflicts of interest: a history of tobacco industry tactics. Am J Public Health 2012;102:-71. doi: 10.2105/AJPH.2011.300292. pmid: 22095331
- 17 Giannou C. Antipersonnel landmines: facts, fictions, and priorities. *BMJ* 1997;315:-4. doi: 10.1136/bmj.315.7120.1453. pmid: 9418100
- 18 Christoffel KK. Firearm injuries: epidemic then, endemic now. Am J Public Health 2007;97:-9. doi: 10.2105/AJPH.2005.085340. pmid: 17329653
- UNE-FI. The tobacco-free finance pledge. 2018.
- Gilmore AB, Fooks G, Drope J, Bialous SA, Jackson RR. Exposing and addressing tobacco industry conduct in low-income and middle-income countries. *Lancet* 2015;385:-43. doi: 10.1016/S0140-6736(15)60312-9 pmid: 25784350
- 21 Moodie R, Stuckler D, Monteiro C, etalLancet NCD Action Group. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet* 2013;381:-9. doi: 10.1016/S0140-6736(12)62089-3. pmid: 23410611