THE INTERNATIONAL CODE OF MARKETING OF BREAST-MILK SUBSTITUTES: CONFLICTS OF INTEREST AND COGNITIVE DISSONANCE

11 June 2026.
Italian National Institute of Health
Annual Meeting: Joint Action to Prevent NCDs
Baby-Friendly Community & Health Services

Nigel Rollins
Professor, Maternal and Child Health
Queen's University Belfast
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… AND HOW THEY UNDERMINE PUBLIC HEALTH AND POLICY

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Past history and disclosures

1990 – 1991	Doctoral research: Nutrition and iodine deficiencies in Tanzanian pre-school children
1994 – 2008	Professor of Maternal and Child Health, University of KwaZulu-Natal, Durban, South Africa
2008 – 2024	Scientist at the World Health Organization: Maternal, Newborn and Child health and Ageing
Jan 2025 –	Professor, Maternal and Child Health, Queen's University Belfast

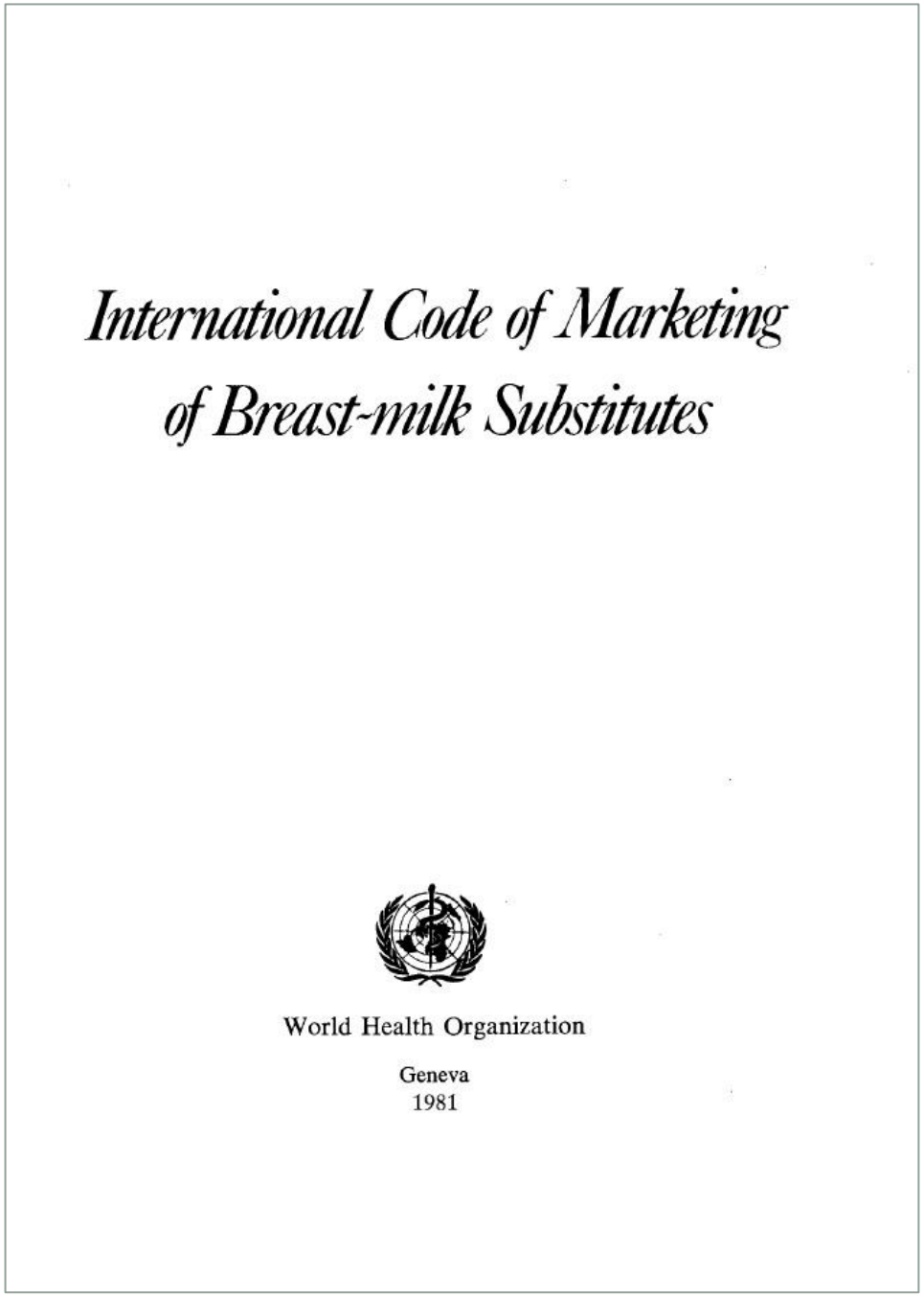
Disclosures

- I receive/received funding for technical support …
  - King Faisal Hospital Foundation, Rwanda. An implementation research project to reduce stunting in children.
  - Northern Ireland Public Health Agency. To assist drafting of an Action Plan to promote breastfeeding.
  - Norwegian Directorate of Health. To developing a teaching module on the Determinants of breastfeeding.

Views expressed are personal and do not necessarily represent the policies or position of Queen's University Belfast or the World Health Organization

The ‘Code’

- 20 May 1981



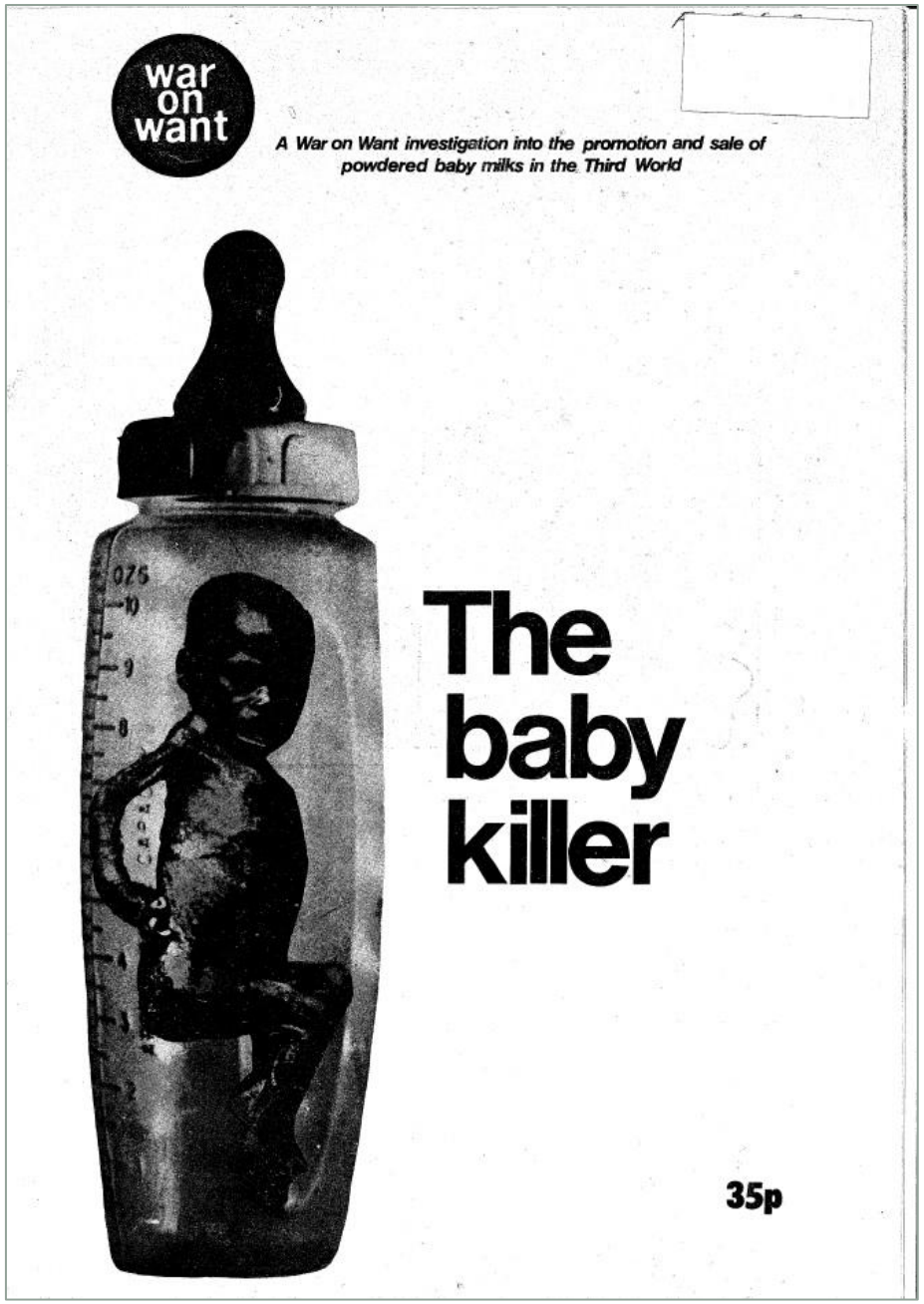
Marketing of formula milk in Africa - 1974

Formula marketing => malnutrition, especially in young infants, and mortality

- Nurses providing marketing information and free samples to mothers waiting in clinics
- Estimated 66,000 infant deaths in 1981 at the peak of the infant formula controversy

The Nestle boycott

https://www.bbc.com/audio/play/p040g528



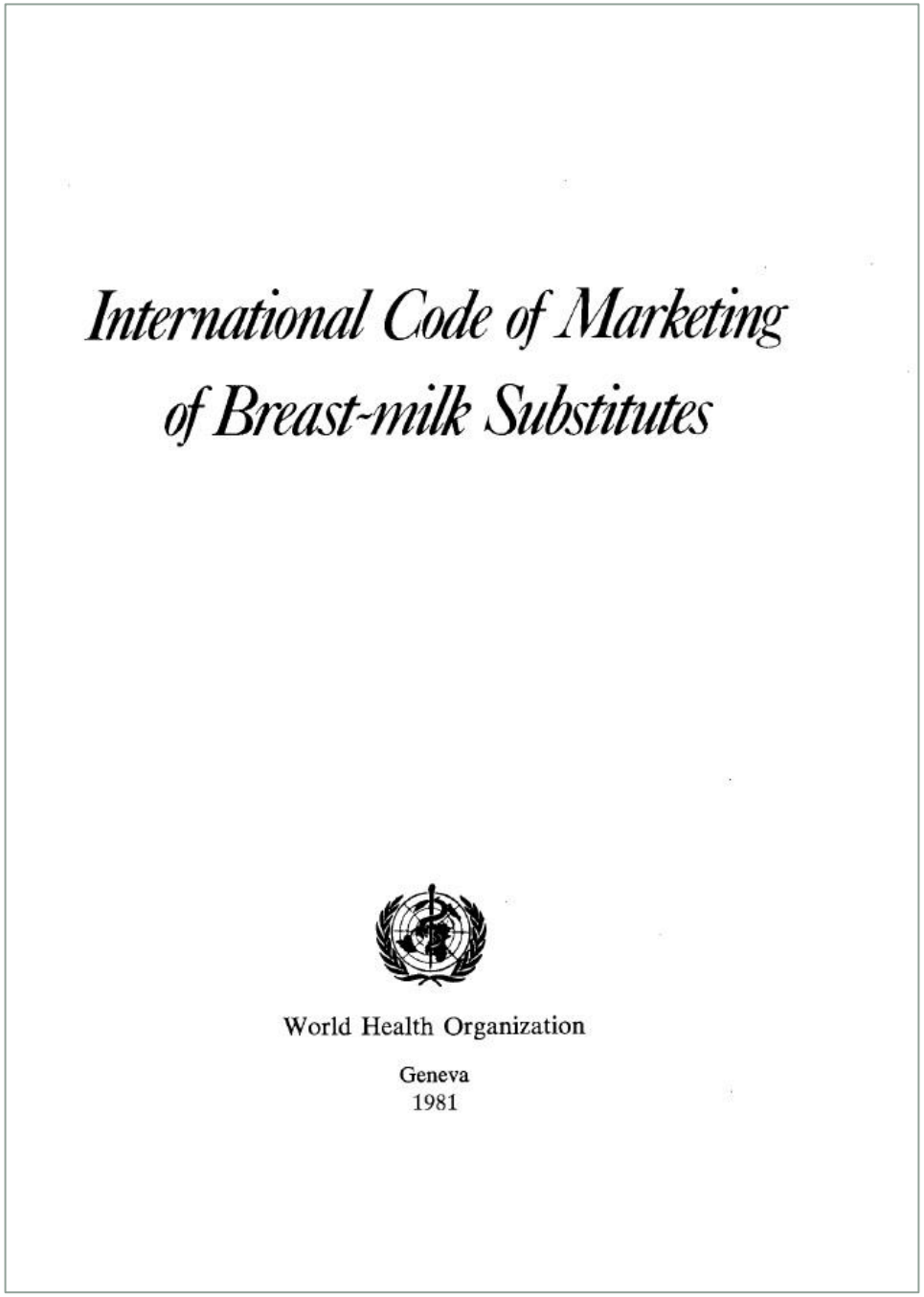
The Code

- 20 May 1981

Aims

- Protection and promotion of breastfeeding
- Proper use of breast-milk substitutes when needed, based on adequate information and appropriate marketing and distribution

- **Primary focus on marketing …. not against breast-milk substitutes**

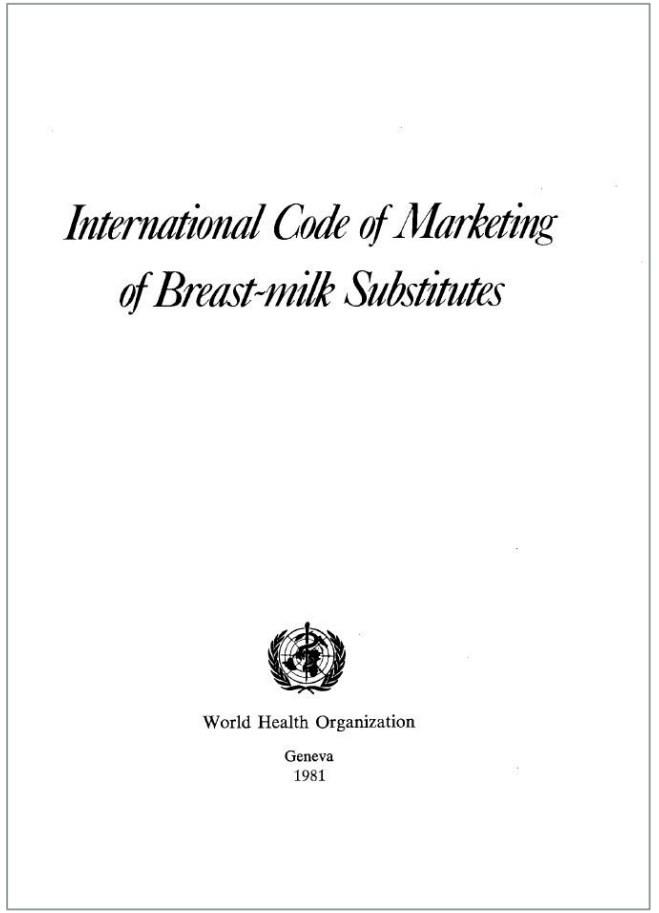


The Code

11 'Articles'

Plus several 'Resolutions'

1. The aim of the Code
2. Scope of the Code
3. Definitions
4. Information and education (3 points)
5. The general public and mothers (5 points)
6. Health systems (8 points)
7. Health workers (5 points)
8. Persons employed by manufacturers and distributors (2 points)
9. Labelling (4 points)
10. Quality [of the product] (2 points)
11. Implementation and monitoring (7 points)



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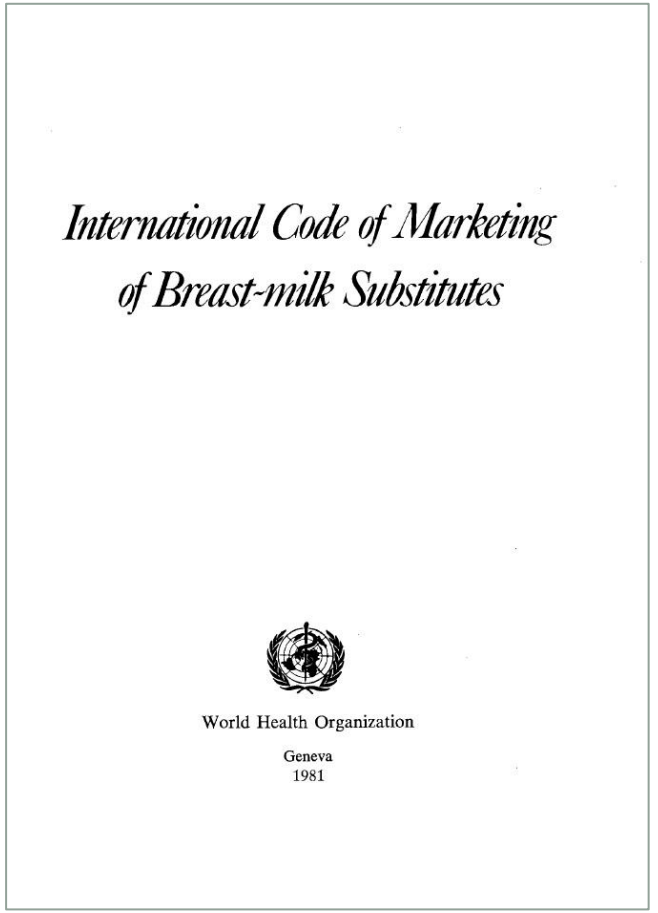

The Code and health systems/workers, in brief ….

6.1 Health authorities … should encourage and protect breastfeeding

6.2. No health facility should be used to promote infant formula

6.3. Health facilities should not be used to display formula products, placards, posters, brands

6.4 Health systems should not use “professional service representatives” [of formula companies]

6.5 Feeding with infant formula … should be demonstrated only by health workers if necessary, and only to families who need to use it

6.6 Donations or low-price sales to institutions …. may be made … but only for infants who must be fed BMS

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7.1 Health workers should encourage and protect breastfeeding

7.2 Information provided by manufacturers … should be restricted to scientific and factual matters …. and should not imply or create a belief that BMS is equivalent or superior to breastfeeding

7.3 No financial or material inducements …. should be offered to health workers or their families and should not be accepted

7.4 Samples should not be given … except for professional evaluation or research. Health workers should not give samples of products

7.5 Manufacturers should disclose to institutions any contributions to health workers e.g. fellowships, research grants etc. Similar disclosures should be made by the recipient.

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These practices create the conditions for conflicts of interest and cognitive dissonance
and
Formula milk marketing uses conflicts of interest and cognitive dissonance to promote normalisation and use of formula milk and to undermine breastfeeding

Why does the Code include these specific provisions?

Health workers and health systems influence infant feeding decisions and practices?

- Health workers and systems are the bridge between everyday life and scientific knowledge and evidence based interventions that improve survival, health and development
- Health professionals are widely trusted
  - **Great opportunity to communicate and support**

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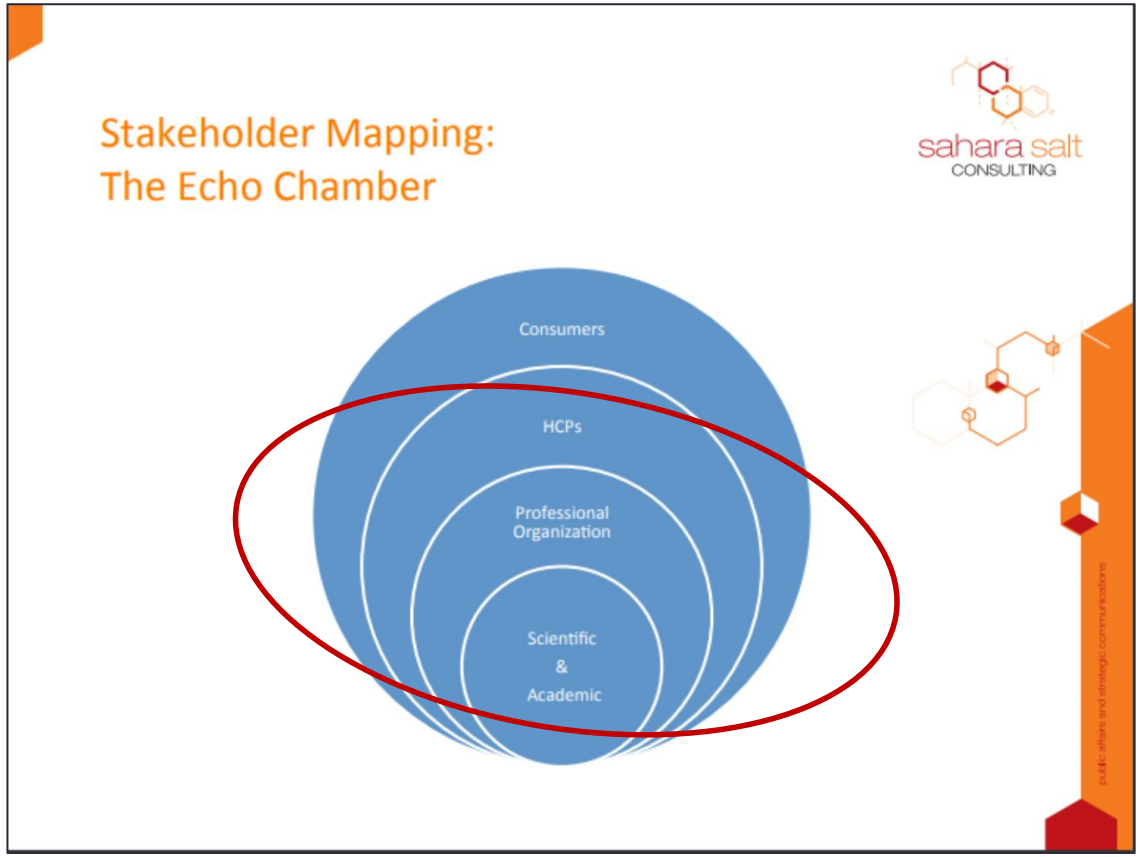
- Health professionals are widely trusted
  - Great opportunity to communicate and support
  - **And great opportunity to miscommunicate and create confusion**

Health professionals: Trusted role

Multi-country study: Bangladesh, China, Mexico, Morocco, Nigeria, South Africa, United Kingdom and Viet Nam

In **all countries**, health professionals were reported as the main source of education on infant feeding practices

Importance of health professionals for industry



Sahara Salt Consulting, a Media & Advertising Healthcare company

Importance of health professionals for industry

Highly trusted =

High value targets

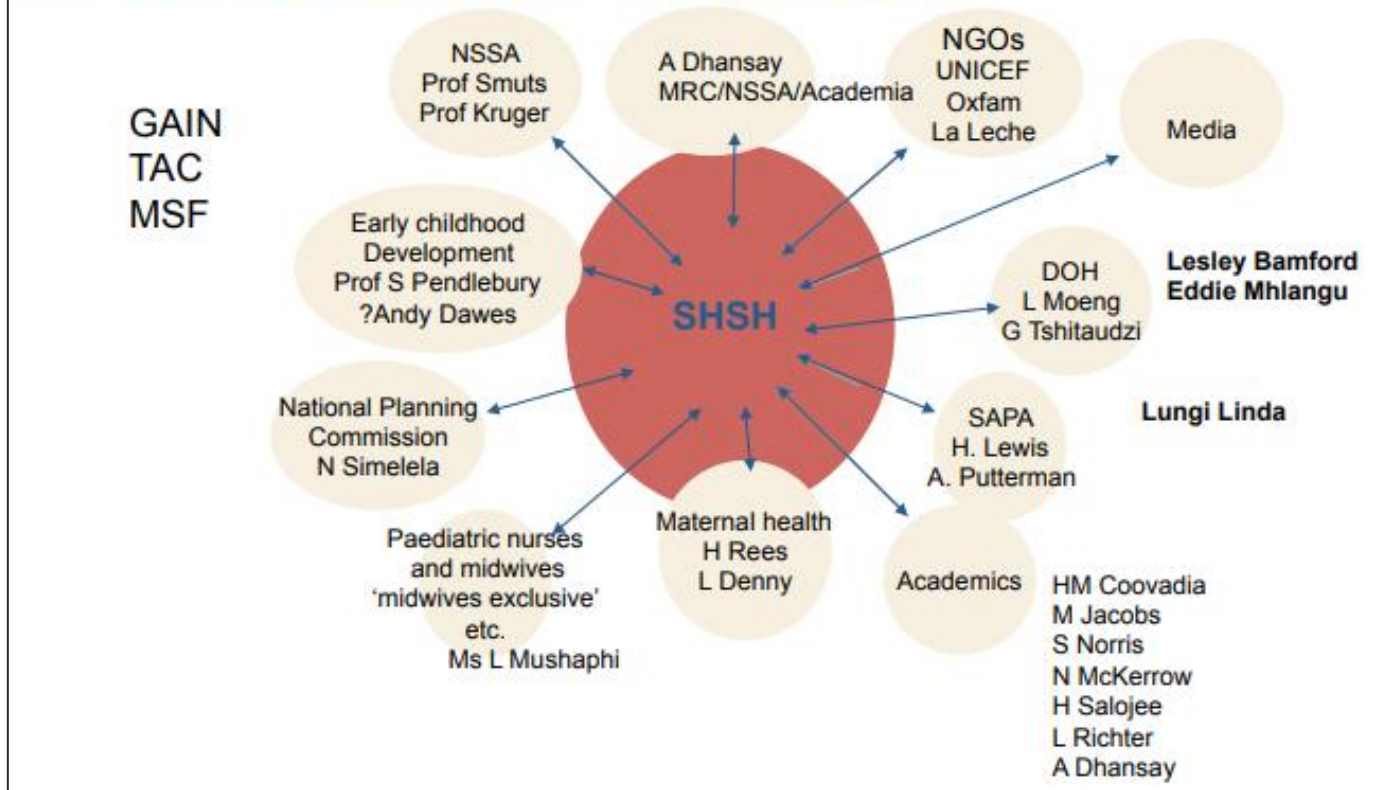
“Category entry points”

network of each stakeholder

key drivers & needs analysis of each stakeholder

Key Opinion leaders

The Sahara Salt Perspective



Health professionals: Trusted role, targeted profession

Multi-country study: Bangladesh, China, Mexico, Morocco, Nigeria, South Africa, United Kingdom and Viet Nam

- In **all countries**, health professionals were reported as the main source of education on infant feeding practices
- Health professionals in Morocco, Nigeria and Viet Nam (public and private) reported contact with formula milk companies was **extremely common**
- Incentives: **commissions** from sales, ambassadorial roles, funding for research, merchandise, gifts and paid promotional trips

Paediatric Associations websites – ‘declared’ interests

In 2019

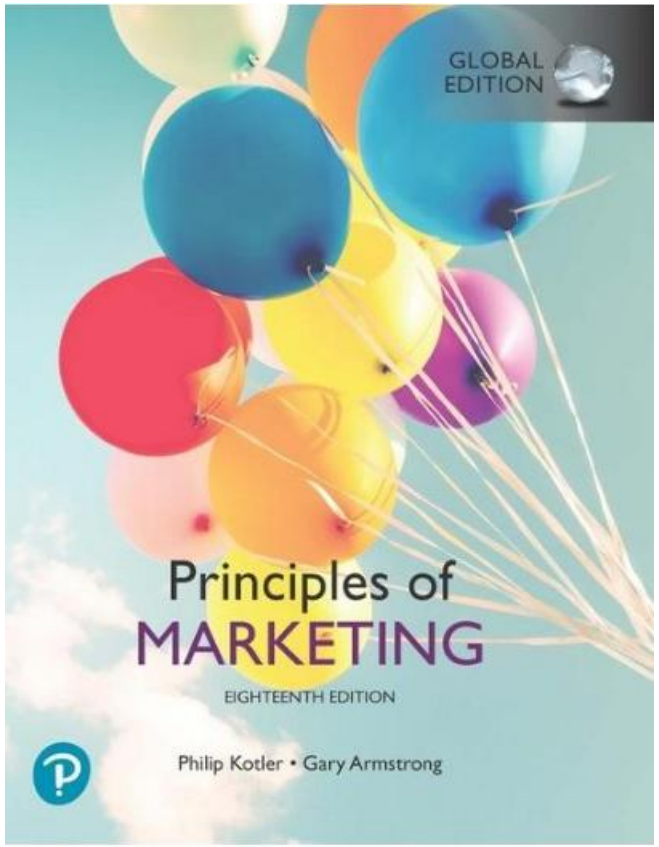
- 60% of paediatric associations with a website documented receipt of some kind of financial support from breast-milk substitute companies

How the formula industry uses health systems and health workers to promote formula products

- Seeks to influence the counselling and messaging – by individual health workers or systems – e.g. there is no major difference between breastfeeding and formula products
- Exploits the halo effect …. visibility with health workers and a wide range of activities … 'educational', physical infrastructure, product placement … to enhance legitimacy of companies and brands
- Direct promotion by health systems, health workers and health professional associations
  - 'Loss-leaders'. Use of preterm formula – provided at reduced cost – in neonatal units

Marketing companies and experts knows us very well: possibly better than we know ourselves

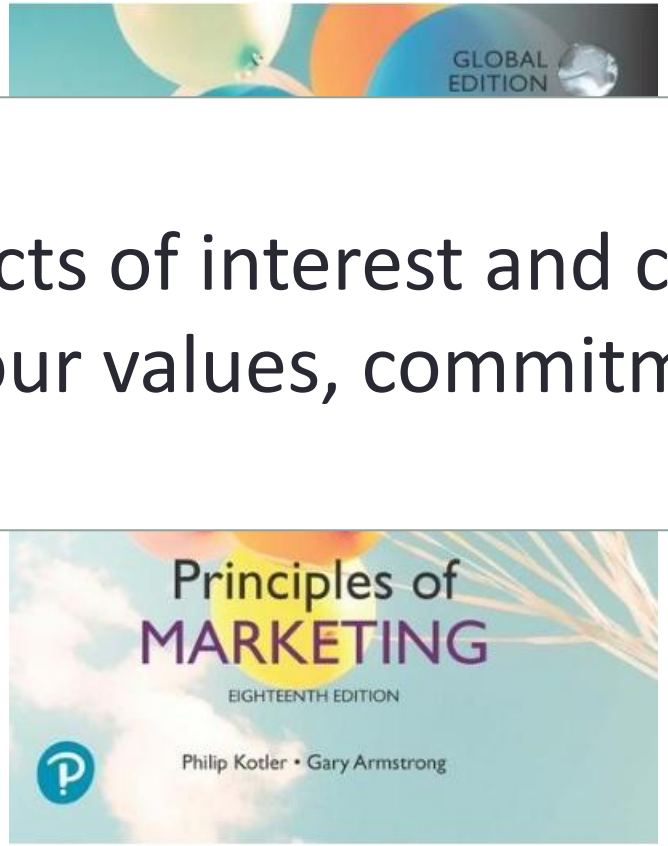
The Rational Mind



The Emotional Mind

What makes us tick, tick, tick …

Marketing companies and experts knows us very well: possibly better than we know ourselves



And uses conflicts of interest and cognitive dissonance to influence our values, commitment and practices

What is a conflict of interest?

- A conflict of interest exists when an individual has an obligation to serve a party or perform a role and the individual has either

  a. incentives

  or

  b. conflicting loyalties ….

  which encourage the individual to act in ways that breach his/her obligations

Marc A. Rodwin,

Conflicts of Interest and the Future of Medicine: The United States, France and Japan, Oxford: Oxford University Press, 2011. Pp. ix-375. ISBN 978 0 19 975548 6.

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Individual }
Institutional } level
Government }

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Conflicts of interest (actual and perceived potential for bias)

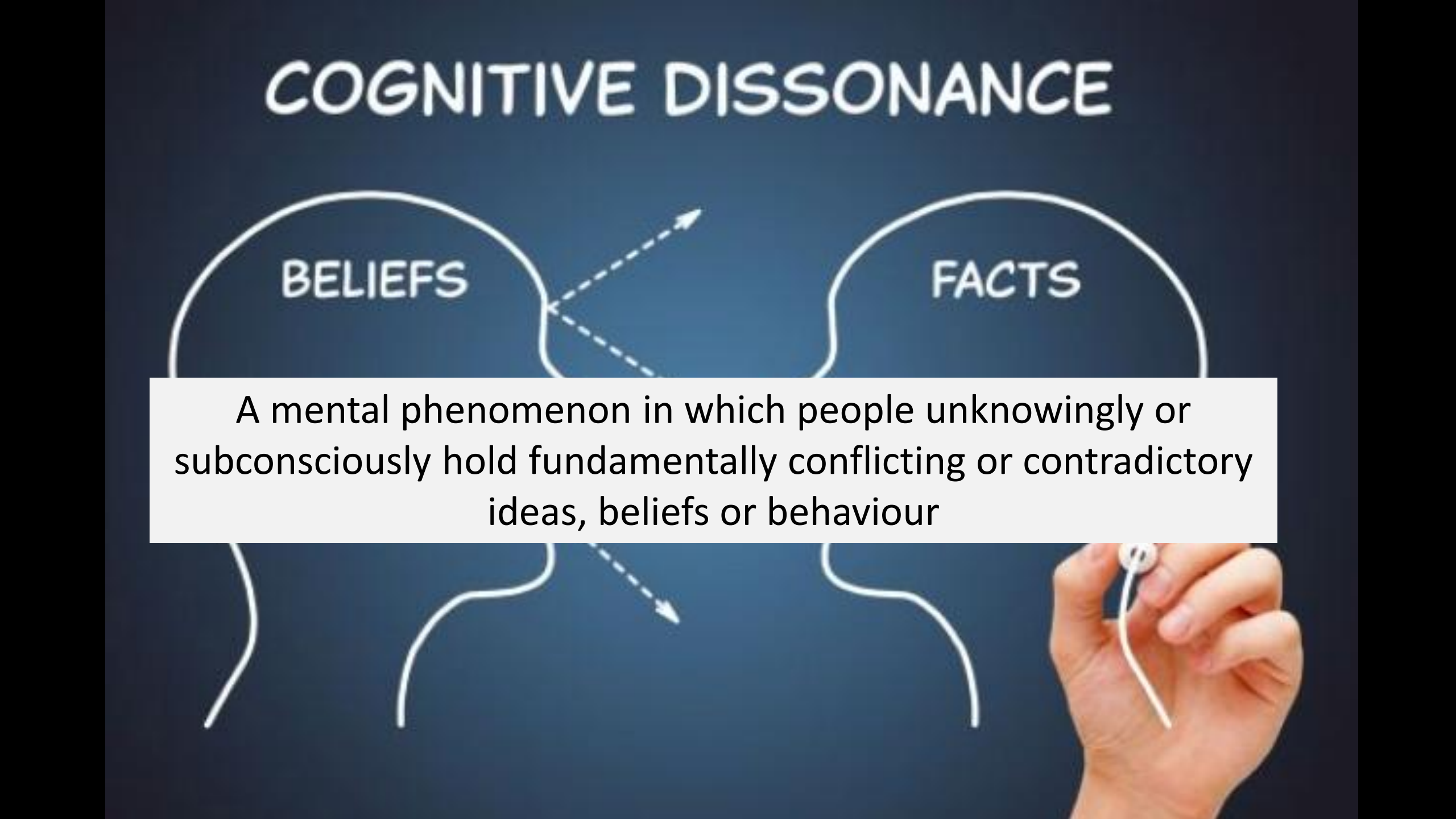
- Create an incentive and increases the risk that an individual's or institution's judgement or action may be compromised
- Conscious or unconsciously …
  - Treat the funder more favourably
  - A sense of indebtedness
  - Increased tolerance of activities
  - Make marginal decisions in favour of a sponsor

E.g. Funding individuals or professional associations

- Conferences
- Training
- Travel
- Research

and more that we never see


COGNITIVE DISSONANCE
BELIEFS
FACTS



A mental phenomenon in which people unknowingly or subconsciously hold fundamentally conflicting or contradictory ideas, beliefs or behaviour

Cognitive dissonance

For example ….

- Knowing that physical activity, eating more fruit and vegetables, >8 hours sleep are good for health but not changing lifestyle
- Knowing that consuming too much sugar or fast foods or smoking damages health but still continue
- Knowing that higher speed on the road puts you and others at increased risk but still driving fast
- Acknowledging the consequences of climate change but adopting a lifestyle as if there is no crisis

Cognitive dissonance

For example ….

- As a health worker, you acknowledge breastfeeding as important for maternal and child health but communicate mixed messages to women and families

Conflicts of interest and cognitive dissonance

Commonly….
… we don’t think we are susceptible
or affected

Conflicts of interest and public health

- Conflicts of interest undermine good governance, good policymaking, individual decision-making, public/individual health, and human rights

And

- this undermines the quality of care and patient safety => patient harm and increases the costs for health systems and individuals

Commercial determinants of health

Definition

"The systems, practices, and pathways through which commercial actors drive health and equity"

Series

Commercial Determinants of Health 1

Defining and conceptualising the commercial determinants of health

Anna B Gilmore, Alice Fabbri, Fran Baum, Adam Bertscher, Krista Bondy, Ha-Joon Chang, Sandro Demaio, Agnes Erzse, Nicholas Freudenberg, Sharon Friel, Karen J Hofman, Paula Johns, Safura Abdool Karim, Jennifer Lacy-Nichols, Camila Maranha Paes de Carvalho, Robert Marten, Martin McKee, Mark Petticrew, Lindsay Robertson, Viroj Tangcharoensathien, Anne Marie Thow

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Published Online
March 23, 2023
https://doi.org/10.1016/
S0140-6736(23)00013-2

See Editorial page 1131

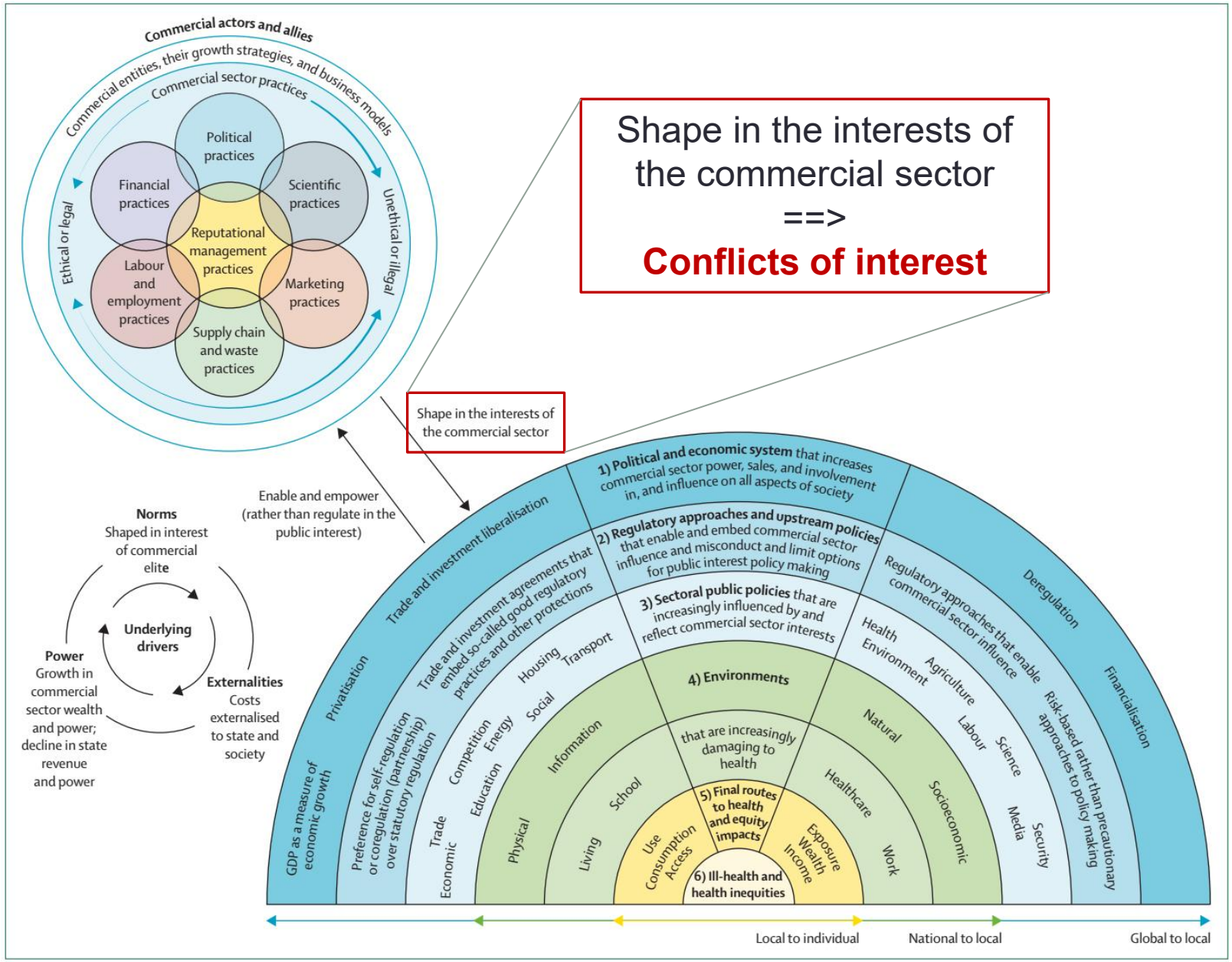
Although commercial entities can contribute positively to health and society there is growing evidence that the products and practices of some commercial actors—notably the largest transnational corporations—are responsible for escalating rates of avoidable ill health, planetary damage, and social and health inequity; these problems are increasingly referred to as the commercial determinants of health. The climate emergency, the non-communicable disease epidemic, and that just four industry sectors (ie, tobacco, ultra-processed food, fossil fuel, and alcohol) already account for at least a third of global deaths illustrate the scale and huge economic cost of the problem. This paper, the

Gilmore et al. Lancet 2023

A conceptual model of the Commercial determinants of health

A framework for understanding, research and intervention

Gilmore et al. Lancet 2023



2023. Lancet series on the Commercial determinants of health https://www.thelancet.com/series-do/commercial-determinants-health

In the context of science, public health, health policy, and patient care conflicts of interest cause harm through

- **Creating bias**
  - The messages and commitment of health workers and health systems
- **Interfering and distorting decision-making**
  - Vs. impartial, evidence-based processes
- **Silencing critique … protecting reputations**
  - Robust critique undermined because of contractual obligations or practical/reputational reasons
  - Protects the reputations of corporations that market products known to cause harm
- **Eroding trust**
  - In science, medicine, the public health system, and the government which then weakens political will across government

Conflicts of interest in science

Meeting Abstracts

Who says what about sugar-sweetened beverage tax? Stakeholders' framing of evidence: a newspaper analysis

Shona Hilton, Christina H Buckton, S Vittal Katikireddi, Ffion Lloyd-Williams, Chris Patterson, Lirije Hyseni, Alex Elliot-Green, Simon Capewell

Published Online
November 23, 2017

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, UK (S Hilton PhD, C H Buckton MSc, S V Katikireddi FFPH, C Patterson MSc); **and Department of Public Health and Policy, University of Liverpool, Liverpool, UK** (F Lloyd-Williams PhD, L Hyseni MSc, A Elliot-Green MD, Prof S Capewell DSc)

Abstract

Background In politically contested health debates, such as sugar-sweetened beverage (SSB) taxation, stakeholders seek to present evidence and arguments for or against specific policy initiatives, based on their interests. The news media have a crucial role in shaping public opinion and the political climate by selectively choosing which issues to focus on. This study examined how stakeholders' positions and evidence on SSB taxation were represented in the media with a view to informing future public health advocacy strategies.

Methods We conducted a structured search of the Nexis database to identify all newspaper articles relating to SSB taxation published in 11 national UK newspapers between April 1, 2015, and Nov 30, 2016. Newspaper articles were excluded if they did not specifically cite stakeholder arguments for or against SSB taxation. The final sample contained 491 articles. Two reviewers double coded a 25% random sample of articles to develop and test a coding frame, before systematically coding the content of the remaining articles. Qualitative content data were entered into NVivo (version 11) and the constant comparative approach was used to identify emergent patterns and themes with particular emphasis on differences across the data.

Conflicts of interest in science

RESEARCH

OPEN ACCESS

Check for updates

Conduct and reporting of formula milk trials: systematic review

Bartosz Helfer,[1,2] Jo Leonardi-Bee,[3] Alexandra Mundell,[4] Callum Parr,[1] Despo Ierodiakonou,[5] Vanessa Garcia-Larsen,[1,6] Cynthia M Kroeger,[7] Zhaoli Dai,[7,8] Amy Man,[1] Jessica Jobson,[1] Fatemah Dewji,[1] Michelle Kunc,[1] Lisa Bero,[9] Robert J Boyle[1,10]

[1]National Heart and Lung Institute, Imperial College London, London, UK

[2]Institute of Psychology, University of Wroclaw, Wroclaw, Poland

[3]Centre for Evidence Based Healthcare, Faculty of Medicine and Health Sciences, University of Nottingham, Nottingham, UK

[4]Imperial College Healthcare NHS Trust, London, UK

[5]Department of Primary Care and

ABSTRACT

OBJECTIVE

To systematically review the conduct and reporting of formula trials.

DESIGN

Systematic review.

DATA SOURCES

Medline, Embase, and Cochrane Central Register of Controlled Trials (CENTRAL) were searched from 1 January 2006 to 31 December 2020.

was low in five (4%) and high in 100 (80%) recently published trials, mainly because of inappropriate exclusions from analysis and selective reporting. For 68 recently published superiority trials, a pooled standardised mean difference of 0.51 (range −0.43 to 3.29) was calculated with an asymmetrical funnel plot (Egger's test P<0.001), which reduced to 0.19 after correction for asymmetry. Primary outcomes were reported by authors as favourable in 86 (69%) trials, and 115 (92%) abstract conclusions were favourable. One of 38 (3%) trials in partially breastfed infants

BMJ: first published as 10.1136/bmj.n2202 on 1

BMJ 2022

Conflicts of interest in science

United Kingdom

Between 2010-2016

- 500% increase in prescribing specialist formulas for CMPA (105,029 → 600,000+)
- NHS spending increased by ~700% (£8.1 → £60m+ pa)
- **2012 ESPGHAN guidelines: 10/12 authors funded by industry**

thebmj

BMJ 2018;363:k5056 doi: 10.1136/bmj.k5056

FEATURE

FORMULA MILK

Overdiagnosis and industry influence: how cows' milk protein allergy is extending the reach of infant formula manufacturers

The condition may be helping the baby milk industry to form relationships with the paediatric profession, finds **Chris van Tulleken**— with potential for harm to mothers and children

Chris van Tulleken *honorary senior lecturer, University College London, UK*

- No increase reported in Australia or US (NHANES)

Our response as health professionals and our associations …

Individually, we must recognise:

- We are high value targets for the formula industry and its marketing and … we are susceptible to conflicts of interest and inconsistencies in our thinking (cognitive dissonance)
- Individually, and as professional associations, we need to adopt measures to limit the influence of industry

We need to de-normalize Conflicts of Interest

Our response as health professionals and our associations …

- **Appropriate action/responses**
  - Leadership from individuals / associations / research institutions / scientific journals
    - Associations have a duty to protect their membership
    - Support systems for membership to discuss sponsorship and funding
  - Sponsorship and Conflict of Industry policies …… and, where indicated, stop/decline funding
  - Registers of sponsorship / research funding from industry
  - Monitor and report industry practices
- **Training on COI and their consequences**

We need to de-normalize Conflicts of Interest

Government responses ….

- **Prioritise public health and rights even if negative consequences for some aspects of trade**
- Safeguards against conflicts of interest and undue influence
- Zero conflicts of interest in guideline groups (individuals) and processes

We need to de-normalize Conflicts of Interest

What would success look like

- Health policy and implementation that is based on *democratic*, *transparent and informed decision-making and protected from corporate influence*. E.g.
  - Protect education, public information, and research from commercial influence and prevent misinformation and disinformation
  - COI standards - governance and policymaking processes that prioritise the public interest, including through: fairness, transparency, public involvement, and strong safeguards against conflicts of interest
  - Policymaking that relies entirely on independent expert advice and evidence, rejecting voluntary or partnership approaches where there is a conflict of interest
  - Use of high-quality evidence for decision-making that improves patient safety and more sustainable, cheaper, more effective healthcare systems

Thank you