

Commercial determinants of health and cancer prevention in South Africa

Susan Goldstein^{1,2}, Sameera Mahomed^{1,2}

¹ SAMRC Centre for Health Economics and Decision Science - PRICELESS, University of the Witwatersrand, Johannesburg,

² School of Public Health, University of the Witwatersrand, Johannesburg

<https://doi.org/10.61473/001c.120643>

South African Health Review

Vol. 26, 2023

Aim

Commercial determinants, encompassing marketing strategies, corporate social responsibility, and lobbying, significantly contribute to avoidable cancer deaths globally. In South Africa, 30-50% of cancers are preventable, but SA focuses mainly on tobacco control, ignoring major causes of cancer such as alcohol, obesity, and ultra-processed foods. This paper highlights the role of these commercial determinants in contributing to cancer in SA. It outlines strategies and barriers in addressing these determinants.

Approach

While conventional approaches focus on individual responsibility relating to risk factors like tobacco, alcohol, and unhealthy diets, the role of industries in promoting these risk factors remains inadequately addressed. The paper explores the marketing and non-marketing methods employed by industries, such as tobacco, alcohol, and ultra-processed products, to maximise profits while neglecting public health consequences.

Findings

The article sheds light on industry tactics, including strategic partnerships, sponsorship, and diversionary narratives during crises, aimed at safeguarding profits. It emphasises the less-explored realm of non-marketing strategies, such as political lobbying, industry-funded research, and the 'revolving door' phenomenon where industry insiders become policymakers.

Conclusions

The article advocates for a paradigm shift in cancer prevention policies, urging the government to implement a comprehensive suite of measures that include increased taxation on harmful products, strict restrictions on marketing, enhanced product labelling, and eliminating conflict of interest in health research and policies. Addressing the commercial determinants necessitates not only recognising their impact but also adopting a multi-level governance approach that prioritises public health over corporate profits.

The paper concludes by emphasising the urgency of recognising the links between alcohol, food regulation, and cancer prevention. The overarching goal is to shift power relations, fostering governance for the collective good and ensuring equitable access to preventive measures, especially for vulnerable populations.

Introduction

There has been an increased burden of cancer globally and in low- and middle-income countries (LMICs) in particular.¹ In 2022, there were close to 20 million new cancer cases and 9.7 million deaths caused by cancer globally.² Cancer research has been heavily skewed towards high-income countries (HICs). This is particularly concerning given that LMICs face a double burden of disease with a drastic increase in non-communicable diseases, including cancer, along with the continued morbidity and mor-

talidity as a result of infectious diseases.³ In 2020, there were 848 311 new cancer cases and 559 083 cancer deaths in sub-Saharan Africa (SSA).⁴ It is estimated that, without urgent intervention, there will be a 92.2% increase in cancer deaths in SSA from 520 348 in 2020 to about 1 million deaths per year by 2030.⁵ In South Africa (SA) in 2018, neoplasms caused 9.7% of all deaths, the fourth leading cause of death.⁶ Alarming, despite overall death rates in SA dropping by 24.1%, cancer-related deaths increased by 29.3% over this period.⁶ Among SA men, in 2022, the most common cause of cancer-related

deaths was lung cancer, followed by prostate, and colorectal cancers.⁶ Among women, cancer of the cervix and breast were the leading causes of cancer-related death, followed by lung, colorectal, and oesophageal cancers.⁶ The National Cancer Strategic Framework for South Africa 2017-2022 (NCSF) identifies five cancers as priority cancers (lung, colorectal, cervical, prostate and breast).⁷ Treatment for cancers in public institutions in SA (serving the majority of the population) is poor, illustrated by one oncologist in Limpopo serving patients from 43 regional and district hospitals, with waiting times for initiation of treatment of up to 37 weeks.^{7,8} Given this context and the fact that according to the World Health Organization (WHO), 30-50% of cancers are preventable, primary prevention is critical in South Africa.⁹⁻¹² Although there is a well-established link between cancer and certain risk factors such as tobacco, alcohol, and ultra-processed products (UPPs) which can lead to obesity, action to prevent cancers linked to commercial interests is largely limited to tobacco control. In addition, infectious diseases such as hepatitis B (HBV) and human papillomavirus (HPV), have also been known to contribute to various cancers including cervical cancers and hepatocellular carcinoma. This paper seeks to address this gap by highlighting the importance of dealing with the commercial determinants of health (CDOH) when it comes to cancer prevention.

Cancer risk factors

Globally, among the most important modifiable risk factors associated with cancers are tobacco, alcohol, obesity, pollution, and viral infections.^{9,13-15} Globally and in SA, the first three, i.e., tobacco, alcohol and obesity are often classified as diseases of lifestyle.^{5,7} This type of classification risks the focus and the onus of the interventions being on individuals to change their lifestyle by “reducing tobacco use, increasing physical activity, controlling weight, improving diet, ‘responsible’ alcohol use, utilising safer sexual practices, getting routine cancer screening tests, and avoiding excess sun exposure.”^{16(p36)} The recommendations of the NCSF for prevention are to provide it at a community level, at primary healthcare facilities, and through traditional healers. The actions that the NCSF refers to are to “empower and engage communities”, “improve health literacy”, and it refers to public education and raising awareness, focusing on individuals.¹⁶ The NCSF refers to the Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17¹⁶ for preventive actions which encompass cancers. These actions are somewhat broader and include addressing the socio-economic determinants of health at a population level as well as reducing accessibility of tobacco and alcohol through legislation.¹⁷ Population-level interventions are not only more effective in promoting health, but they are also more cost effective.¹⁸ What both documents fail to recognise is that these risk factors are actually commercial determinants of health, and by focusing on the individual, framing them as ‘lifestyle’ issues means that the industries that profit from producing these harmful goods are not held

adequately to account and continue to profit while cancer rates increase.¹⁸ In addition, the interventions recommended in the NCSF are not cost effective and are minimally effective overall. Nine out of the WHO’s 16 ‘best buys’ for non-communicable disease (NCD) prevention are population-level interventions (see [Table 1](#)). The exception in the NCSF is the approach to tobacco control. The Framework Convention for Tobacco Control, to which South Africa is a signatory, provides numerous ways to control the tobacco industry and decrease the harm caused by tobacco.²⁰

Commercial determinants of health

Social determinants of health are well recognised and often mentioned in relation to health and cancer prevention.²¹ However, less well recognised are the CDOH, defined as the systems, practices, and pathways through which commercial actors drive health and equity.²² They involve private sector activities which affect the health of the population either positively or negatively.²² The focus of this paper is on the negative impacts of CDOH on health and, in particular, on cancer, especially where profits are placed above public health.

Commercial determinants of cancer

The WHO has defined cancer control as involving a continuum from prevention, early detection, diagnosis and treatment (including palliative and end-of-life care) to survival.¹⁰ Although CDOH may affect all aspects of the cancer continuum, the focus of this paper is on the commercial determinants of cancer prevention.

Commercial interests drive up the rate of avoidable cancer deaths. As mentioned, according to the WHO, 30-50% of cancer cases are preventable.¹⁰ In 2022, there were 9.7 million cancer deaths, about one third of which were due to tobacco use, high body mass index, alcohol consumption, low fruit and vegetable intake, and lack of physical activity.¹⁰ All these products are strategically marketed by companies that have a fiducial duty to generate profit, mostly with limited concern for public or global health interests.

Approach

To understand why the commercial determinant of cancer need to be dealt with, one needs to understand how industries promote their products and engage with, and block policies that protect the health of the population but which might decrease their profits. The next section of this paper reviews in detail the marketing and non-marketing methods employed by industries that contribute to the cancer burden in South Africa.

Table 1. WHO's 'best buys' for NCD prevention

Commercial determinants	Cancers caused by and associated with #	WHO's 'best buys' to address NCDs ¹⁹
Tobacco use	lung , cervix, colon, mouth and throat, voice box, oesophagus, stomach, kidney, pancreas, liver, bladder, and rectum	• Increase excise taxes and prices on tobacco products • Implement large graphic health warnings and plain/standardised packaging • Comprehensive bans on tobacco advertising, promotion and sponsorship • Eliminate exposure to second-hand tobacco smoke • Effective mass media campaigns that educate the public • Provision of cost-covered effective population-wide support for tobacco cessation to all tobacco users
Ultra-processed foods (obesity) https://www.cdc.gov/cancer/obesity/	breast, colorectal, oesophageal, kidney, gallbladder, uterine, pancreatic, and liver	• Reformulation policies for healthier food and beverage products (e.g., reduction of trans-fatty acids and/or reduction of saturated fats, free sugars, and/or sodium) • Front-of-pack labelling as part of comprehensive nutrition labelling policies for facilitating consumers' understanding and choice of food for healthy diets • Public food procurement and service policies for healthy diets (e.g., decrease intake of free sugars, sodium, unhealthy fats, and increase intake of legumes, wholegrains, fruits and vegetables) • Behaviour change communication and mass media campaigns • Policies to protect children from the harmful impact of food marketing on diet • Protection, promotion and support of optimal breastfeeding practices
Alcohol consumption	female breast, liver, mouth, throat (pharynx and larynx), oesophagus and colorectal	• Increase excise taxes on alcoholic beverages • Bans / comprehensive restrictions on alcohol advertising • Restriction on the physical availability of retail alcohol (via reduced hours of sale and number of outlets)
# In bold are the top five priority cancers in the NCSF for South Africa 2017–2022		

Adapted from: WHO, 2023.¹⁹

Findings

Marketing methods

Marketing strategy is defined as a business's overall game plan for reaching prospective consumers and turning them into customers of their products or services.²³ It is a legitimate approach to increasing sales and profits for the industry; however, many are not aware of the extent of marketing and how it is often disguised as sponsorship and social responsibility. There are numerous instances of corporate social responsibility efforts being used as marketing techniques. For example, during the COVID-19 pandemic, tobacco companies used various tactics to ensure the continued sale of their harmful products such as entering into partnerships with government to assist with tackling the illicit trade of cigarettes during the lockdown, which often involved arguments against taxation due to industry's narrative that illicit trade would increase with increased taxation.²⁴ Globally, similar strategies were seen with alcohol companies providing free alcohol to those who received COVID-19 vaccinations, and tobacco and alcohol companies increasing their charitable donations to the health-care sector.^{25,26} These so-called 'washing' strategies have

also been used generally to increase goodwill and brand reputation. Furthermore, many companies focused on solidarity and narratives of 'we are all in this together' during the COVID-19 pandemic and supported social distancing through encouraging online drinking parties and online wine tastings.²⁶ These were all attempts to distract the public and to rehabilitate the companies' brand image, positioning them as allies.^{22,26} In addition, tactics employed often divert the attention of policymakers and the public from the products' harm and from effective interventions towards personal responsibility and consumption. Two examples of this are the sponsorship of South African Rugby by South African Breweries over a 23-year period,²⁷ and KFC being a series associate sponsor of South African Cricket.²⁸ Another example is that of the Coca Cola Foundation, which recently refocused their approach to "specifically address sustainable access to water, a circular economy, climate resilience and disaster preparedness and response, economic empowerment...".²⁹ At the same time, Coca Cola has been declared the biggest plastic polluter in the world for the fourth time.^{30,31}

The use of specific phrasing in adverts is also very targeted and employs tactics such as denying health evidence. For example, the alcohol industry focuses on re-

sponsible drinking, shifting liability away from the product onto the individual, which implies that those who are harmed by alcohol are irresponsible, despite alcohol being a carcinogen.³² The large size of these industries means that they have ample resources to launch these deceptive marketing campaigns combined with extensive corporate social responsibility (CSR) efforts.²² Digital marketing often uses artificial intelligence and machine learning that directly targets vulnerable individuals, and further links them to specific products through online buying. These tactics are aimed at increasing brand loyalty and consumption of these unhealthy products which are known risk factors for cancer, thus putting individuals at higher risk of developing cancer.^{33,34}

Advertising and marketing agencies have been identified as crucial to these tactics, especially in relation to public deception and detracting the public's attention from previous or ongoing harms caused by the company (such as environmental harms or human rights violations relating to, for example, health and safety infringements, and abuses related to wages, benefits and living standards, and the production of harmful products).³¹ In addition, there are often various benefits that accrue to companies engaging in social responsibility activities such as tax rebates for donations and legislative compliance, especially in relation to environmental legislation, and empowerment initiatives for broad-based black economic empowerment (BBBEE) compliance.³⁵ Of equal concern is the number of resources, including financial resources, that are directed into these 'washing' strategies. For example, Coca Cola spends roughly USD 4 billion per annum on marketing globally.³⁶ In SA, ZAR 2.3 billion was spent over 76 months (2013-2019).³⁷

Non-marketing methods

Non-marketing strategies are aimed at influencing policies in order to ensure that said policies do not impact on the profit the industry is making. These strategies have been used by a number of industries, including the tobacco, alcohol, and food industries³⁵ and include funding of political parties and spending millions of rands (or dollars) on lobbying. For example, AB InBev (a multinational, Belgian-based, alcoholic beverage company) spent USD 5.1 million in lobbying in the United States in 2022 alone. This was to lobby on behalf of the industry to keep taxes low, and against anti-trust laws, or competition laws, which are aimed at encouraging competition by limiting the market power of any particular firm, among other issues.³⁷

Many of these harmful industries have board members who were previously politicians, or previous industry players who became politicians, referred to in industry as the 'revolving door', ensuring that the interests of industries are sustained, often above the interests of public health.^{24,38} One high-level example of this is that South African President Cyril Ramaphosa was Chair of the South African Breweries Board, prior to returning to his role in politics.³⁹

Industry also regularly funds research and institutions, with the reported results often presenting the funders favourably.^{25,40} The recent partnership between Nestlé and the Alliance for a Green Revolution in Africa (AGRA) on the Africa Food Prize is a concerning example given the influence that these industries have on research and development.⁴⁰ Instances of conflict of interest, for example where public health academics hold board membership or similar positions in companies that are detrimental to public health objectives, need to be addressed and guarded against.

When it comes to policies, there are many examples of SA industries attempting to delay, defeat, weaken, overturn and avoid the passing of policies that might impact them negatively, such as increased taxation or limiting or banning marketing.^{18,41} In fact, under country rankings, SA ranks 57 out of 90 countries on the 2023 Global Tobacco Index, which rates countries on their response to tobacco industry interference.²⁴ The 2023 score was 64 (out of 100), which is extremely concerning, given that higher scores illustrate higher amounts of industry interference. What is more concerning is that South Africa received the same score in 2021, which indicates that government has not acted to reduce industry interference in the years following. Other industry strategies include financial incentives, constituency building, legal challenges, policy substitution (more favourable to industry), and suggestions of self-regulation which have been shown not to be effective.^{18,42} In South Africa, industry action to block policies aimed at reducing tobacco and alcohol consumption is well documented, but less well known is the industry action relating to sodium regulation, the tax on sugar-sweetened beverages (SSBs) which is implanted through the Health Promotion Levy (HPL), and the regulations pertaining to front-of-pack warning labels of UPPs.^{42,43} Industry attempts to stop or delay all of these policy processes was clearly illustrated through the SSB tax process, where numerous instances of industry interference were visible, especially during the public participation processes on the proposed policy.⁴⁴ In particular, arguments were made in relation to the industry's economic importance coupled with the issue of job losses and other economic harms that could stem from implementing the tax.⁴⁵ Economic arguments are generally well received by policymakers both in SA as well as other LMICs.⁴⁶ In addition, attempts were made to misuse or cast doubt on evidence about the possible efficacy of the SSB tax, with claims that it would cost the country thousands of jobs and that there was no evidence that the tax would decrease obesity, which ignored the global evidence that highlights that SSB tax, along with alcohol and tobacco taxes, are cost-effective measures which aid in preventing diseases, injuries, and premature mortality.^{47,48} The initial policy proposal for SA's HPL in 2016 was a tax rate of 20% as this was expected to have a major impact on obesity, in line with the literature. However, what was implemented was only 10%.⁴⁹ In addition, despite calls from academics and advocacy partners for the SSB tax to be increased in line with inflation, this has

not happened. A failure to increase the tax in line with inflation increases affordability over time, which defeats the objective of the imposed tax (i.e., to reduce consumption). Other examples of SA industry interference leading to delays in legislative reform is the 54-month delay relating to the Tobacco Products and Electronic Delivery Systems Bill (2022), and more than five years delay in the Liquor Amendment Bill of 2016 (which still has not been passed at writing in November 2023).

Discussion

Ways that SA should respond to prevent cancer

It is clear that SA has a limited recognition of commercial determinants when looking at cancer prevention. Firstly, there is a failure to recognise the link between alcohol and food regulation (with some recognition of the need for tobacco regulation) on the one hand, and cancer prevention on the other. The regulation of unhealthy food is increasingly important given the association between cancer and obesity and the fact that the growing prevalence of cancer may be partly attributed to the obesity epidemic in SA.⁴³ Secondly, the broad link between commercial determinants of health and cancer prevention is missing. While there was a big push and response to regulate tobacco, the food and alcohol industries seem to have been left behind.

Four policy actions need to be prioritised to reduce preventable cancers which are caused by the tobacco, alcohol and UPPs industries. These policy actions are increased taxation, restrictions on and regulation of marketing, improved labelling of products, and public education around these interventions and the role that companies play in increasing bad health outcomes. National policies and programmes targeting these key areas should be strengthened to reduce the population's exposure to cancer risk factors and to ensure that they have access to the information and support needed for healthy lifestyles. This is especially the case given how effective industry is at increasing brand recognition and protecting their financial interests, while at the same time blocking public health-focused policy interventions. There is also need for a framework similar to the tobacco framework for CDOH more broadly and to increase public awareness of the role that these industries play in contributing to cancer. Vulnerable populations are more likely to experience higher cancer incidence and lower survival rates in comparison to others, which is especially concerning in the context of SA and given the targeting of these groups through marketing practices as discussed above. Thus, urgent action must be taken.

Recommendations

Preventing cancer through controlling the CDOH should follow a multipronged approach to address the complex

methods industries use to increase their profits. There is also growing evidence of the need to focus on specific industries as well as to look at the broader roles of CDOH. This paper proposes recommendations for three of the main prongs of a suggested approach as well as focusing on specific industries, as discussed below.

Health taxes

Using health taxes is an efficient and effective way of reducing demand for unhealthy products while adding to the fiscus. Indeed, as taxes increase, the trend in consumption of unhealthy products decreases, illustrated very clearly by the use of tobacco dropping by one-third in the Philippines with the introduction of a strong tobacco tax.⁴³ Among the recommendations for tobacco taxes by the World Bank is the need to 'attack affordability'.⁴⁵ This is important because, as in the case in SA with the SSB tax, if an introduced health tax does not keep up with inflation, its effect on affordability declines over time, defeating the objective of the imposed tax. This is also illustrated by the SAHPL which has not kept up with inflation and thus potentially is not having its full intended impact. The impact of the HPL in the first few years after its introduction was significant and the benefit was experienced mostly by people in the lower living standards measures, thus it improved equity regarding the potential impact on health outcomes.⁴⁶ In addition to health taxes making unhealthy products less affordable, the taxation sends a message to the public that the government believes those products are harmful to their health, which can mitigate the negative impact of commercial actors on public and global health.⁴⁷ Other benefits gained from the revenue generated from health taxes include funding for other social and economic determinants of health such as education, poverty reduction, and the subsidising of healthy foods as recommended by the WHO. While SA Treasury does not earmark or ringfence money generated from taxation, additional funding for health promotion and chronic disease prevention was allocated in the National Department of Health budget.⁵⁰

Banning marketing of potentially carcinogenic products

Banning marketing of unhealthy products is an intervention that will receive mass resistance from industries producing unhealthy foods. As mentioned above, marketing is not only advertising, but includes sponsorship, and corporate social responsibility is an often-used marketing tool. As early as 2013, the South African Government proposed the Control of Marketing of Alcohol Beverages Bill.⁵¹ This was based on substantial evidence that banning the marketing of alcohol could reduce the substantial harm that alcohol causes in South Africa,⁴³ but that Bill has not yet been tabled in Parliament. Although there are moves to limit the marketing of alcohol and sugary beverages to children, with a resolution at the World Health Assembly passed as early as 2008 to limit the mar-

keting of unhealthy food to children, the evidence shows that voluntary pledges by industries do not work, and children are bombarded by advertising in many 'adult' spaces.⁵²⁻⁵⁴ Despite many arguing that a complete ban on advertising of a legal substance cannot be implemented, this has occurred in Lithuania where they have successfully implemented a total ban on alcohol advertising.^{55,56} The R3337 Regulations which house the front-of-pack warning labels, along with the White Paper on Audio and Audiovisual Content Media Services and Online Safety: A New Vision for South Africa (which regulates audio and audio-visual content services), would be good legal mechanisms to introduce a potential ban on the marketing of unhealthy products and would strengthen existing mechanisms included in these draft regulations.

Closing the 'revolving door' and eliminating conflict of interest in health policies

Preventing industries and individuals whose fiduciary duty is to generate profits being involved in decisions involving policies to protect the health of the population is not as straightforward as it may seem. The influence of industry is not only at official tables such as the National Economic Development and Labour Council (NED-LAC), but also in the social and corporate networks where politicians and industry leaders socialise and often exchange positions. Conflicts of interest need to be resolved at a global level (for instance where a global health funding body is known to have investments in a global alcohol company)⁵⁷; at national level where industry involvement in policy and legislation have pushed for delays in implementing important legislation⁴⁴; and at university and research level where industry often funds research, medical education, advisory boards, and conferences. Transparency is only the first step in dealing with conflict of interest, and although there are many frameworks for dealing with conflict of interest in many sectors, public health seems to be trailing far behind.⁵⁸

Fundamentally, there needs to be a global shift in power relations away from the pursuit of profit towards governance for the good of the population. This, through multi-level governance systems that put health above profit, will assist in the prevention of cancers and increase global and local equity.⁵⁹ There is a move to begin working towards a comprehensive suite of policy responses to control the CDOH through a 'framework convention' similar to the Framework Convention on Tobacco Control, but focusing on policies, practices and political processes of all commercial actors that harm health.⁵⁹

At a national level, more funding towards public health and the promotion of health could come from 'soft earmarking' of tax or the creation of a multisectoral health promotion foundation funded by excise taxes to fill gaps in advertising, sponsorship, health-related research, and the funding of health advisory boards.

Conclusion

There has been a clear rise in CDOH with an increasing negative effect of both the private and public sector on public and global health. The impact of commercial practices on health and human cost are not new but evidence showing the role of CDOH in impacting health and affecting health outcomes is increasing. There are also issues of power, equity, and governance when it comes to the CDOH, which is why government urgently needs to intervene, especially when considering the asymmetry of power in SA where the most vulnerable are affected most by these practices. There is a need for a more concerted and holistic understanding and effort to increase attempts at cancer prevention. Importantly, this involves the need to recognise and understand the role that CDOH play in cancer causation and their impact on public health. As such, there is a need to broaden the discussion on cancer policy to ensure that government can provide the most effective (including cost-effective) interventions that speak to the underlying issues relating to cancer prevention. There is a plethora of research conducted on efficient and cost-effective policies to aid in better prevention and control of cancer. However, a gap exists in terms of implementation. Here, commercial determinants have been identified as a key barrier. As highlighted above, this includes industries such as tobacco, alcohol and big food undermining public health objectives and interventions aimed at preventing NCDs, including cancer, and industry interference which results in the scrapping of, or delay in implementing public health policies aimed at reducing NCD prevalence. Apart from the four policy interventions mentioned above (increased taxation, restrictions on marketing, improved labelling of products, and public education), strong measures need to be taken to ensure that industry interference in policymaking processes is controlled and conflict of interest policies are firmly in place and adhered to in both the public and private sector.

.....

Published: October 01, 2024 CAT.

Abbreviations

Abbreviation	Description
AGRA	Alliance for a Green Revolution in Africa
ARUA-SFS	African Research Universities Alliance Centre of Excellence in Sustainable Food Systems
BBBEE	broad-based black economic empowerment
CDOH	commercial determinants of health
CSR	corporate social responsibility
HBV	hepatitis B virus
HIC	high-income country
HIV	human immunodeficiency virus
HPL	Health Promotion Levy
HPV	human papillomavirus
LMIC	low- and middle-income country
NCD	non-communicable disease
NCSF	National Cancer Strategic Framework
NEDLAC	National Economic Development and Labour Council
SA	South Africa
SSA	sub-Saharan Africa
SSBs	sugar-sweetened beverages
UPPs	ultra-processed products
WHO	World Health Organization



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-NC-4.0). View this license's legal deed at <https://creativecommons.org/licenses/by-nc/4.0> and legal code at <https://creativecommons.org/licenses/by-nc/4.0/legalcode> for more information.

References

1. World Health Organization. *Commercial determinants of health*. World Health Organisation; 2021. Accessed November 20, 2023. <https://www.who.int/news-room/fact-sheets/detail/commercial-determinants-of-health>
2. Bray F, Laversanne M, Sung H, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024;74(3):229-263. doi:[10.3322/caac.21834](https://doi.org/10.3322/caac.21834)
3. Pramesh CS, Badwe RA, Bhoo-Pathy N, et al. Priorities for cancer research in low-and middle-income countries: a global perspective. *Nat Med*. 2022;28(4):649-657. doi:[10.1038/s41591-022-01738-x](https://doi.org/10.1038/s41591-022-01738-x)
4. Ferlay J, Ervik M, Lam F, et al. *Global Cancer Observatory: cancer today*. International Agency for Research on Cancer; Date unknown. Accessed June 14, 2024. <https://gco.iarc.who.int/today>
5. Collingridge D. Cancer in sub-Saharan Africa: the time to act is now. *Lancet Oncol*. 2022;23(6):701-702. doi:[10.1016/S1470-2045\(22\)00208-X](https://doi.org/10.1016/S1470-2045(22)00208-X)
6. Statistics SA. *Cancer in South Africa (2008-2019)*. Statistics South Africa; 2023. Accessed June 18, 2024. https://www.statssa.gov.za/?page_id=1854&PPN=03-08-00&SCH=73599
7. Department of Health. *National Cancer Strategic Framework for South Africa 2017-2022*. NDoH; 2017. Accessed June 18, 2024. <https://www.health.gov.za/wp-content/uploads/2020/11/national-cancer-strategic-framework-2017-2022-min.pdf>
8. Ramutumbu NJ, Ramathuba DU, Maputle MS. Barriers to accessing oncology services for effective cancer care in the public health institutions in Limpopo Province, South Africa: a qualitative study. *Nurs Rep*. 2023;13(3):956-968. doi:[10.3390/nursrep13030084](https://doi.org/10.3390/nursrep13030084)
9. Tran KB, Lang JJ, Compton K, et al. The global burden of cancer attributable to risk factors: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2022;400(10352):563-591. doi:[10.1016/S0140-6736\(22\)01438-6](https://doi.org/10.1016/S0140-6736(22)01438-6)
10. World Health Organization. *Preventing Cancer*. World Health Organization; 2023. Accessed November 20, 2023. <https://www.who.int/activities/preventing-cancer>
11. Saxena A, Stacey N, Puech PDR, Mudara C, Hofman K, Verguet S. The distributional impact of taxing sugar-sweetened beverages: findings from an extended cost-effectiveness analysis in South Africa. *BMJ Glob Health*. 2019;4(4):e001317. doi:[10.1136/bmjgh-2018-001317](https://doi.org/10.1136/bmjgh-2018-001317)
12. Winn AN, Ekwueme DU, Guy GP, Neumann PJ. Cost-utility analysis of cancer prevention, treatment, and control. *Am J Prev Med*. 2016;50(2):241-248. doi:[10.1016/j.amepre.2015.08.009](https://doi.org/10.1016/j.amepre.2015.08.009)
13. Ansari KK, Jha A. Causes of cancer in the world: comparative risk assessment of nine behavioral and environmental risk factors. *Cureus*. 2022;14(9):e28875. doi:[10.7759/cureus.28875](https://doi.org/10.7759/cureus.28875)
14. Murray CJL, Aravkin AY, Zheng P, et al. Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396(10258):1223-1249. doi:[10.1016/S0140-6736\(20\)30752-2](https://doi.org/10.1016/S0140-6736(20)30752-2)
15. Stein CJ, Colditz GA. Modifiable risk factors for cancer. *Br J Cancer*. 2004;90(2):299-303. doi:[10.1038/sj.bjc.6601509](https://doi.org/10.1038/sj.bjc.6601509)
16. National Department of Health. *Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17*. NDoH; 2013.
17. Bertram MY, Chisholm D, Watts R, Waqanivalu T, Prasad V, Varghese C. Cost-effectiveness of population level and individual level interventions to combat non-communicable disease in Eastern Sub-Saharan Africa and South East Asia: a WHO-CHOICE analysis. *Int J Health Policy Manag*. 2021;10(11):724-733. doi:[10.34172/ijhpm.2021.37](https://doi.org/10.34172/ijhpm.2021.37)
18. Mialon M. An overview of the commercial determinants of health. *Glob Health*. 2020;16(1):74. doi:[10.1186/s12992-020-00607-x](https://doi.org/10.1186/s12992-020-00607-x)
19. World Health Organization. *More ways, to save more lives, for less money: World Health Assembly adopts more best buys to tackle noncommunicable diseases*. 2023. Accessed November 20, 2023. <https://www.who.int/news/item/26-05-2023-more-ways-to-save-more-lives-for-less-money>
20. World Health Organization. *WHO Framework Convention on Tobacco Control*. World Health Organization; 2003–2005. Accessed November 20, 2023. <https://iris.who.int/bitstream/handle/10665/42811/9241591013.pdf?sequence=1>

21. Hiatt RA, Breen N. The social determinants of cancer: a challenge for transdisciplinary science. *Am J Prev Med.* 2008;35(2 Suppl):S141-S150. doi:[10.1016/j.amepre.2008.05.006](https://doi.org/10.1016/j.amepre.2008.05.006)
22. Gilmore AB, Fabbri A, Baum F, et al. Defining and conceptualising the commercial determinants of health. *Lancet.* 2023;401(10383):1194-1213. doi:[10.1016/S0140-6736\(23\)00013-2](https://doi.org/10.1016/S0140-6736(23)00013-2)
23. Barone A. *Marketing strategy: what it is, how it works, and how to create one.* Investopedia; 2024. Accessed November 20, 2023. <https://www.investopedia.com/terms/m/marketing-strategy.asp>
24. Assunta M. *Global Tobacco Industry Interference Index 2023.* Global Center for Good Governance in Tobacco Control (GGTC); 2023. Accessed June 18, 2024. <https://exposetobacco.org/wp-content/uploads/GlobalTIIndex2023.pdf>
25. Lesser LI, Ebbeling CB, Gozner M, Wypij D, Ludwig DS. Relationship between funding source and conclusion among nutrition-related scientific articles. *PLoS Med.* 2007;4(1):e5. doi:[10.1371/journal.pmed.0040005](https://doi.org/10.1371/journal.pmed.0040005)
26. Vredenburg J, Kapitan S, Spry A, Kemper JA. Brands taking a stand: authentic brand activism or woke washing? *J Public Policy Mark.* 2020;39(4):444-460. doi:[10.1177/0743915620947359](https://doi.org/10.1177/0743915620947359)
27. SA Rugby. *SAB renews SA Rugby sponsorships until 2020.* 2013. Accessed November 20, 2023. <https://www.rugby15.co.za/sab-renews-sa-rugby-sponsorships-until-2020/>
28. Cricket South Africa. *CSA Commercial partners.* Accessed November 20, 2023. <https://cricket.co.za/commercial-partners/>
29. Coca Cola Foundation. *Addressing complex global challenges to leave a lasting impact in our communities.* 2024. Accessed November 20, 2023. <https://www.coca-colacompany.com/social/coca-cola-foundation>
30. The Sierra Club. *Coca-Cola's plastic pollution problem.* 2022. Accessed November 20, 2023. <https://www.sierraclub.org/michigan/blog/2022/12/coca-cola-s-plastic-pollution-problem>
31. Plastic Soup Foundation. *Is Coca-Cola's latest promise really a step forward?* 2022. Accessed November 20, 2023. <https://www.plasticsoupfoundation.org/en/2022/02/is-coca-colas-latest-promise-really-a-step-forward/>
32. Wild CP, Weiderpass E, Stewart BW. *World Cancer Report: Cancer Research for Cancer Prevention.* International Agency for Research on Cancer; 2020. Accessed June 18, 2024. <https://shop.iarc.fr/products/world-cancer-report-cancer-research-for-cancer-prevention-pdf>
33. World Health Organization. *Digital marketing of alcoholic beverages: what has changed?* World Health Organization; 2022. Accessed November 20, 2023. <https://www.who.int/publications/i/item/9789240045002>
34. Grier SA, Kumanyika S. Targeted marketing and public health. *Annu Rev Public Health.* 2010;31(1):349-369. doi:[10.1146/annurev.publhealth.012809.103607](https://doi.org/10.1146/annurev.publhealth.012809.103607)
35. Sprinkle GB, Maines LA. The benefits and costs of corporate social responsibility. *Bus Horiz.* 2010;53(5):445. doi:[10.1016/j.bushor.2010.05.006](https://doi.org/10.1016/j.bushor.2010.05.006)
36. Investopedia. *A look at Coca-Cola's advertising expenses.* Accessed November 20, 2023. <https://www.investopedia.com/articles/markets/081315/look-cocacolas-advertising-expenses.asp>
37. Boachie MK, Goldstein S, Kruger P, Ng SW, Hofman KJ, Thsehla E. Beverage industry's advertising expenditures and airtimes in South Africa from 2013 to 2019 target children and families. *Public Health Res.* 2023;12(2):1-13. doi:[10.1177/22799036231168207](https://doi.org/10.1177/22799036231168207)
38. Schulz-Herzenberg C. *Trading public knowledge for private gain: is the revolving door spinning out of control?* Institute for Security Studies; 2010. Accessed November 20, 2023. <https://issafrica.org/iss-today/trading-public-knowledge-for-private-gain-is-the-revolving-door-spinning-out-of-control>
39. My Broadband. *All the companies Cyril Ramaphosa owned.* 2021. Accessed November 20, 2023. <https://mybroadband.co.za/news/business/408046-all-the-companies-cyril-ramaphosa-owned.html>
40. Nestle M. Food company sponsorship of nutrition research and professional activities: a conflict of interest? *Public Health Nutr.* 2001;4(5):1015-1022. doi:[10.1079/PHN2001253](https://doi.org/10.1079/PHN2001253)
41. Kruger P, Wynberg R, Mafuyeka M, et al. The ultra-processed food industry in Africa. *Nat Food.* 2023;4(7):534-536. doi:[10.1038/s43016-023-00802-0](https://doi.org/10.1038/s43016-023-00802-0)

42. Erzse A, Karim SA, Foley L, Hofman KJ. A realist review of voluntary actions by the food and beverage industry and implications for public health and policy in low- and middle-income countries. *Nat Food*. 2022;3(8):650-663. doi:[10.1038/s43016-022-00552-5](https://doi.org/10.1038/s43016-022-00552-5)
43. Bertscher A, London L, Orgill M. Unpacking policy formulation and industry influence: the case of the draft control of Marketing of Alcoholic Beverages Bill in South Africa. *Health Policy Plan*. 2018;33(7):786-800. doi:[10.1093/heapol/czy049](https://doi.org/10.1093/heapol/czy049)
44. Kruger P, Abdool Karim S, Tugendhaft A, Goldstein S. An analysis of the adoption and implementation of a sugar-sweetened beverage tax in South Africa: a multiple streams approach. *Health Syst Reform*. 2021;7(1). doi:[10.1080/23288604.2021.1969721](https://doi.org/10.1080/23288604.2021.1969721)
45. Hattersley L, Fuch A, Gonima A, Silver L, Mandeville K. *Business, employment, and productivity impacts of SSB taxes*. World Bank; 2020. doi:[10.1596/34082](https://doi.org/10.1596/34082)
46. Sukanya P, Irfan W, Jameel A, Ahmed S, Shahid RK. Obesity and cancer: a current overview of epidemiology, pathogenesis, outcomes, and management. *Cancers (Basel)*. 2023;15(2):485. doi:[10.3390/cancers15020485](https://doi.org/10.3390/cancers15020485)
47. Ghebreyesus TA, Clark H. Health taxes for healthier lives: an opportunity for all governments. *BMJ Glob Health*. 2023:e013761. doi:[10.1136/bmjgh-2023-013761](https://doi.org/10.1136/bmjgh-2023-013761)
48. Marquez PV, Moreno-Dodson M. *Tobacco tax reform at the crossroads of health and development a multisectoral perspective*. World Bank; 2017. doi:[10.1596/28494](https://doi.org/10.1596/28494)
49. Stacey N, Edoka I, Hofman K, Swart EC, Popkin B, Ng SW. Changes in beverage purchases following the announcement and implementation of South Africa's Health Promotion Levy: an observational study. *Lancet Planet Health*. 2021;5(4):e200-e208. doi:[10.1016/S2542-5196\(20\)30304-1](https://doi.org/10.1016/S2542-5196(20)30304-1)
50. Lauer JA, Soucat A, Vigo A. *Health taxes policy and practice*. World Health Organization; 2022. doi:[10.1142/Q0365](https://doi.org/10.1142/Q0365)
51. Parry C, Burnhams NH, London L. A total ban on alcohol advertising: presenting the public health case. *S Afr Med J*. 2012;102:602-604. doi:[10.7196/samj.5945](https://doi.org/10.7196/samj.5945)
52. Harris JL. Protecting children from harmful food marketing: options for local government to make a difference. *Prev Chronic Dis*. 2011;8(5). Accessed November 20, 2023. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181192/>
53. World Health Organization. *Set of recommendations on the marketing of foods and non-alcoholic beverages to children*. 2010. Accessed November 20, 2023. https://iris.who.int/bitstream/handle/10665/44416/9789241500210_eng.pdf
54. Anderson P. Is it time to ban alcohol advertising? *Clin Med*. 2009;9(2):121-124. doi:[10.7861/clinmedicine.9-2-121](https://doi.org/10.7861/clinmedicine.9-2-121)
55. Galkus L, Lange S, Liutkutė-Gumarov V, et al. The comprehensive alcohol advertising ban in Lithuania: a case study of social media. *Int J Environ Res Public Health*. 2022;19(19):12717-12722. doi:[10.3390/ijerph191912398](https://doi.org/10.3390/ijerph191912398)
56. World Health Organization. *Reducing harm due to alcohol: success stories from 3 countries*. 2021. Accessed November 20, 2023. <https://www.who.int/europe/news/item/15-04-2021-reducing-harm-due-to-alcohol-success-stories-from-3-countries>
57. Dünnebier M. *Bill and Melinda Gates Foundation undermines its global health credibility with massive investment in the world's second largest beer producer*. 2024. Accessed November 20, 2023. <https://movendi.ngo/media-release/bill-and-melinda-gates-foundation-undermines-its-global-health-credibility-with-massive-investment-in-the-worlds-second-largest-beer-producer/>
58. Madureira Lima J, Galea S. Corporate practices and health: a framework and mechanisms. *Glob Health*. 2018;14(1):21. doi:[10.1186/s12992-018-0336-y](https://doi.org/10.1186/s12992-018-0336-y)
59. Friel S, Collin J, Daube M, et al. Commercial determinants of health: future directions. *Lancet*. 2023;401(10383):1229-1240. doi:[10.1016/S0140-6736\(23\)00011-9](https://doi.org/10.1016/S0140-6736(23)00011-9)