

IEA Discussion Paper No. 99

NANNY STATE ON TOUR

Mark Tovey
November 2019



iea

Institute of
Economic Affairs

With some exceptions, such as with the publication of lectures, IEA Discussion Papers are blind peer-reviewed by at least one academic or researcher who is an expert in the field. As with all IEA publications, the views expressed in IEA Discussion Papers are those of the author and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council or senior staff.

Contents

About the author	4
Summary	6
'Nanny state' foreign aid spending: the data	8
How cost effective are lifestyle interventions in developing countries?	34
Conclusion	45
References	47
Appendix: Full list of 35 'nanny state' foreign aid projects	50

About the author

Mark Tovey is a freelance researcher who focuses on health issues. He graduated in 2016 with a first-class degree in economics from the University of Sussex. He is the co-author of two discussion papers for the Institute of Economic Affairs on the net cost to taxpayers of smoking and obesity. While interning at the Institute for Employment Studies in 2017, he was acknowledged for his contribution to that year's Royal College of Nursing Employment Survey. Most recently, he authored a Freedom of Information-based survey for FOREST on vaping and smoking policies in NHS hospitals. He has written articles for *The Spectator*, *Conservative Home* and *Mises Wire*.

Summary

- This study calculates how much UK foreign aid was spent (in 2018 prices) on lifestyle interventions targeting smoking, drinking, eating and sedentary behaviour. UK taxpayers spent £44.6million on 'nanny state' foreign aid projects between 2005 and 2018, spread over 35 projects in 47 countries. The three biggest recipients were China (£7.9million), India (£2.2 million) and Colombia (£1.8 million).
- 'Nanny state' foreign aid has ballooned in recent years. The majority (84.4 per cent) of the £44.6million was spent from 2016 to 2018. Annual spending on lifestyle intervention projects equalled £17million in 2016, £16.7million in 2017 and £3.9million in 2018.
- Projects in China included a £6.8million 'research unit' to reduce the amount of salt housewives add while cooking; in India, £130,605 was spent researching the 'acceptability and feasibility' of taxing sugary drinks; and in Colombia, £1million was spent tightening tobacco control laws.
- The three biggest categories of spending were anti-smoking projects (65.7 per cent of total 'nanny state' aid), salt-reduction schemes (20.2 per cent) and weight-loss interventions for children and adolescents (1.9 per cent).
- Almost three quarters (72.4 per cent) of the £44.6million spent on lifestyle interventions abroad was funnelled through just five organisations: the World Health Organization (£15.9million), Queen Mary, University of London (£7.81million), the University of Stirling (£3.46million), the University of York (£3.14million) and the University of Cambridge (£2.06million).

- DfID-commissioned projects accounted for just over half (51.3 per cent) of lifestyle intervention spending. The Department of Health, responsible for only 0.7 per cent of Official Development Assistance (ODA) in 2017, funded 27.8 per cent of ‘nanny state’ projects. Similarly, the Department for Business, Energy and Industrial Strategy commissioned 20.8 per cent of the projects while only commanding 5.4 per cent of ODA in 2017. This supports the theory that non-DfID spenders of UK foreign aid are less likely to prioritise poverty reduction.
- Our analysis finds that there are better uses for health-related foreign aid than the ‘nanny state’ projects identified in this study. For example, insecticide-treated bednets to prevent malaria in Sub-Saharan Africa are twenty times more cost effective in terms of life-years saved than implementing smoke-free workplaces, a policy that was pursued in Cape Verde, Chad, Madagascar, Sierra Leone and Zambia as part of a £5.3million tobacco-control programme in the region in 2016. That money could have bought three million insecticide-treated bednets. Misallocating resources means wasting opportunities to save lives.

'Nanny state' foreign aid spending: the data

Background

Since the 1970s, the proportion of children in the developing world dying of infectious diseases has been in decline. More children are making it to adulthood and dying instead of degenerative, non-communicable diseases (NCDs), such as heart disease, cancer and diabetes (Defo 2014). This process is known as the 'epidemiological shift' and is primarily attributable to medical advancements and improvements in hygiene (Omran 1971). How far into this process a country is can be judged by the proportion of deaths attributable to NCDs. For example, in 2016 NCDs accounted for 89 per cent of deaths in the UK, compared with 61 per cent in India and 32 per cent in Malawi.¹ On a global level, 71 per cent of deaths were attributable to NCDs in 2016, compared with 60 per cent at the turn of the millennium (WHO 2000).²

As pandemics and major epidemics recede globally, public health organisations and the western governments that fund them are turning their attention to the degenerative diseases of old age, particularly those attributable to lifestyle factors such as smoking, overeating and sedentary behaviour. While foreign aid has been instrumental in the control and eradication of infectious diseases in the developing world, it is not clear that the same strategy is appropriate when it comes to the emerging diseases of affluence. People in developing countries can decide for themselves whether they judge giving up smoking, overeating or sedentary behaviours worth the possible health gains. This is not the case for

1 Noncommunicable diseases country profiles 2018'. <https://www.who.int/nmh/countries/en/>

2 'NCD mortality and morbidity'. https://www.who.int/gho/ncd/mortality_morbidity/en

infectious diseases, against which individual action is often futile, and which may require instead a coordinated community effort.

The World Health Organization (WHO), as if acutely aware of having strayed outside its area of legitimate focus, routinely describes obesity and tobacco as ‘epidemics’, a term which the Oxford Dictionary defines as ‘a widespread occurrence of an *infectious* [emphasis added] disease in a community at a particular time’.³ Obesity is a medical condition - not even a disease, let alone an infectious one. Tobacco is a plant.

Meanwhile, malnutrition – defined by the Oxford Dictionary as a ‘lack of proper nutrition, caused by not having enough to eat, not eating enough of the right things, or being unable to use the food that one does eat’ – has, in an Orwellian twist, come to encompass its polar opposite: obesity. The WHO’s website states that malnutrition refers to ‘deficiencies, excesses [emphasis added], or imbalances in a person’s intake of energy and/or nutrients’.⁴ In 2017, £602,541 of British foreign aid was used to tackle ‘malnutrition’ among Indian children. This sounds like the kind of response to Band Aid’s call to ‘Feed the World’ that the average taxpayer can feel good about. Only upon closer inspection of the project’s mission statement does one realise that the money was partly spent making Indian children⁵ eat *less* food – as apparently 15 per cent of under five year olds in India are obese.

It must not be forgotten that cradle-robbing pestilences, long ago banished from western societies, still prey on the planet’s poorest people. One in three deaths in the world’s least developed countries occur among children under the age of five. By comparison, just one per cent of deaths in developed countries involve children of such a young age (UN 2017:10).

Government interventions to protect people from their own risky lifestyle choices vary in intrusiveness. A 2007 report by the Nuffield Council on Bioethics produced an ‘intervention ladder’ to categorise lifestyle interventions by this dimension. In Figure 1 lifestyle interventions are ranked in terms of their intrusiveness; the higher the ‘rung’ on the intervention ladder, the more onerous its effect on individual liberty.

3 ‘Definition of epidemic in English’. <https://www.lexico.com/en/definition/epidemic>

4 ‘Malnutrition: key facts’. <https://www.who.int/news-room/fact-sheets/detail/malnutrition>

5 Integrated Health, education and environmental (HEE) intervention to optimise infant feeding practices through schools and Anganwadi networks in India’. UK Research and Innovation. <https://gtr.ukri.org/project/FF417C16-F70C-4F46-BEE2-4455AE40C2F4>

Figure 1: The intervention ladder: from the most to the least intrusive

Eliminate choice. Regulate in such a way as to eliminate choice, for example by banning drugs.

Restrict choice. Regulate in such a way as to restrict the options available, for example by removing unhealthy ingredients from food, or unhealthy foods from shops or restaurants.

Guide choice through disincentives. Fiscal and other disincentives can be put in place to influence people not to pursue certain activities, for example through taxes on cigarettes.

Guide choice through incentives. Regulation can be offered that guides choices through fiscal and other incentives, for example offering tax breaks for the purchase of bicycle as a means of getting to work.

Guide choice through changing the default policy. For example, in a restaurant the default side dish could be changed to a salad, with chips still remaining an option for those who wish to order them.

Enable (or aid) choice. Help make changes possible, for example through offering smoking cessation or weight loss courses.

Provide information. Educate the public about health risks associated with smoking, drinking, overeating, etc. through public service announcements.

Do nothing or simply monitor the situation.

The term ‘nanny state’, used throughout this paper, is popularly applied to government involvement in people’s private lifestyle choices; however, it is debatable how intrusive a policy must be before it qualifies for this description. For example, while prohibition of alcohol would be a clear-cut example of the ‘nanny state’, would an information campaign about alcohol’s health risks similarly qualify? What about offering counselling services to reduce drinking? Or making restaurants remove alcoholic drinks from combo deals on menus? Or offering tax breaks for drinking less? Or raising taxes on alcohol?

According to standard economic theory, interventions that prevent people from acting on their preferences reduce social welfare (in the absence of market failures). From this perspective, softer interventions that merely ‘nudge’ actors towards certain decisions or inform them about risks without removing any options from the table are less objectionable, although they could still incur costs.

This research set out to find the amount of UK Official Development Assistance (ODA) spent on lifestyle interventions targeting smoking, drinking, eating and sedentary behaviour to prevent NCDs. We included all lifestyle interventions in our search, from the most to the least intrusive. Lifestyle interventions targeting NCDs will always be controversial when funded with foreign aid. Popular conceptions of health spending in developing countries involve vaccination drives and cataract surgeries, not weight-loss classes and second-hand smoking workshops.

Lifestyle interventions focused on treating diseases, as opposed to reducing the probability of their future onset, were excluded. For example, structured education programmes, prescribed for Type 2 diabetics and focused on healthy eating and exercise, were *not* included because these are targeted health interventions tailored to handle the symptoms of a disease.

Data over time

The total value of lifestyle intervention projects identified between 2005 and 2018 in the UK’s ODA budget was £44.6million, distributed among 35 projects. The average value of each project was £1.28million. Project spend was converted into 2018 prices using the GDP deflator to allow for comparison between years.

Table 1: Annual spending on lifestyle intervention projects

Year	Cost of projects	Number of projects started
2005	£1,494,900	1
2006	£2,665,530	1
2007	£0	0
2008	£0	0
2009	£864,595	2
2010	£0	0
2011	£0	0
2012	£856,058	1
2013	£0	0
2014	£340,090	2
2015	£763,817	5
2016	£17,042,699	4
2017	£16,665,104	15
2018	£3,949,852	4
TOTAL	£44,642,646	35

Annual spending on 'nanny state' projects rocketed to £17million in 2016 and £16.7million in 2017. In 2018, annual spending was £3.95million, still markedly above historical levels.

The sharpest periods of increase in the overall ODA budget occurred from 2007-2010 and 2012-2013. Between 2007 and 2010, aid spending was ratcheted up to reach 0.57 per cent of GNI (£8.53billion), as had been agreed between EU members at a meeting of the G8 in Edinburgh in 2005.⁶ For 25 years prior, UK aid spending had floated between 0.2 and

6 'G8 leaders agree £50bn aid boost', *BBC News*, 8 July 2005. http://news.bbc.co.uk/onthisday/hi/dates/stories/july/8/newsid_4922000/4922316.stm

0.4 per cent of GNI.⁷ Then, from 2012 to 2013, aid spending increased by 30 per cent, bringing the total to 0.7 per cent of GNI (£11.4billion), in line with the UN's foreign aid target for developed countries. UK aid spending has remained at 0.7 per cent of GNI since 2013.

Data by region and country

Table 2 breaks down ODA lifestyle-modification spending between 2005 and 2018 by four major regions: Asia, Africa, the Americas and Europe.

Table 2: UK foreign aid spent on lifestyle interventions, 2005-2018, by top four regions

Continent	Amount spent 2005-2018
Asia	£19,654,808
Africa	£12,473,305
Americas	£5,374,707
Europe	£1,057,400
	£38,560,220

The total £44.6million of UK 'nanny state' spending between 2005 and 2018 is broken down by country in Table 3. The 31 countries fall into eight regions: Africa (four countries), Asia (six), the Caribbean (three), Central America (one), Europe (one), North America (one), Oceania (one), and South America (three). The geographical target of 11.3 per cent (£5.03million) of total spending could not be identified due to patchy government data. Mixed/unspecified categories were added to encompass projects that only mentioned a region and not a country, or which mentioned many countries without providing information of how the funding was apportioned between them.

⁷ DFID Statistics on International Development 2010 - UK ODA, OOF and Private Flows to Developing Countries 1970-2009. <https://www.gov.uk/government/statistics/dfid-statistics-on-international-development-2010-uk-oda-oof-and-private-flows-to-developing-countries-1970-2009>

Table 3: UK foreign aid spent on lifestyle interventions, 2005-2018, by country

Continent	Country	Cost of projects
Africa	Malawi	£1,182,157
Africa	Kenya	£312,385
Africa	Ghana	£312,385
Africa	South Africa	£152,251
Africa	Mixed/unspecified	£10,514,127
Asia	China	£7,945,515
Asia	India	£2,244,963
Asia	Bangladesh	£1,623,122
Asia	Malaysia	£702,651
Asia	Pakistan	£666,666
Asia	Vietnam	£152,818
Asia	Mixed/unspecified	£6,319,075
Caribbean	Jamaica	£227,113
Caribbean	Dominica	£227,113
Caribbean	Guyana	£227,113
Caribbean	Mixed/unspecified	£686,936
Central America	Mexico	£52,645
Central America	Mixed/unspecified	£686,936
Europe	Georgia	£1,057,400
North America	El Salvador	£1,057,400
Oceania	Samoa	£1,057,400
South America	Colombia	£1,798,402
South America	Chile	£348,108
South America	Brazil	£62,940
Unknown	Unknown	£5,025,025
		£44,642,645

Of the six African countries, Malawi received the most lifestyle-modification spending: £1.18million. That consisted of a single project in 2018 for a salt reduction plan aimed at school children.⁸

China and India came out on top of the eleven Asian countries, attracting £8.44million and £6.69million in ‘nanny state’ spending respectively. In China, the three costliest interventions were a £6.81million project in 2017 to reduce salt consumption by 30 per cent within eight years, another £856,058 on a school-based salt-reduction project in 2012 and £143,709 in 2015 on the ‘development of a tobacco control trial among migrant workers in Guangzhou’. The three most expensive projects in India were a £1.55million research project in 2015 using text messages to persuade people to drink less alcohol; £795,463 in 2017 training Imams to warn about the risks of second-hand smoke during Quran classes (see Case Study 1); and £666,666 for researchers at the University of York to lobby for regulations on chewing tobacco in India.

In the Americas (North America, the Caribbean, Central America and South America), Colombia and El Salvador topped the list for the most money received for lifestyle interventions between 2005-2018, attracting £1.8million and £1.06million respectively. A multi-country tobacco control programme implemented by the WHO in 2015 cost £1.06million in both Colombia and El Salvador.⁹ In Colombia, another £741,002 was spent on a study using ‘Game Theory to assess the effects of social norms and social networks on adolescent smoking in schools’ in 2018.

8 The appendix of this paper contains a full list of the ‘nanny state’ projects with web links directing to sources.

9 Colombia and El Salvador were two of 15 countries to receive attention from a WHO anti-tobacco project (2016-2021) which cost UK taxpayers £15.9 million in total. As information about the breakdown of this funding between the 15 countries could not be found, the number was simply divided by 15 and an even £1.06 million attributed to each country.

Case Study 1

Imams trained to preach tobacco control during Quran classes

Project cost: £795,463

Year: 2017-2020

Target country: Bangladesh

Funder: Medical Research Council

Provider organisation: University of York

This project recruited 45 mosques as part of a study to see if Imams could be trained to successfully impart anti-tobacco messages during Quran study classes.

In particular, the researchers instructed their Imams to condemn indoor smoking, due to the health risks of second-hand exposure.

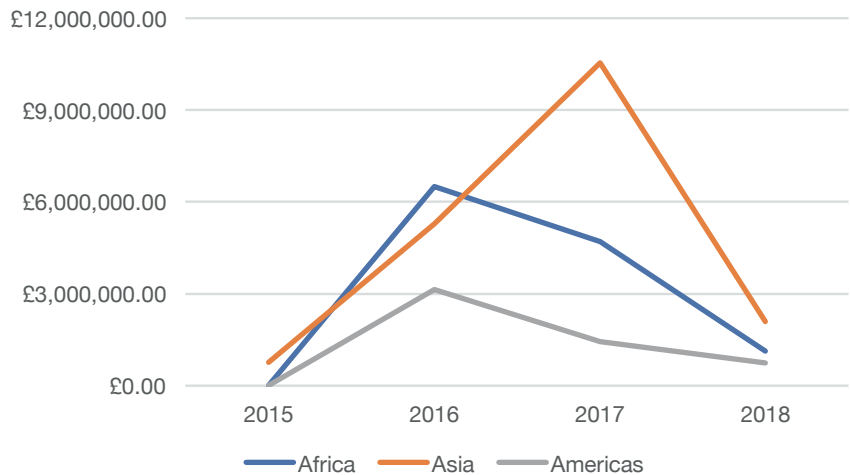
Participants in the study had to open up their homes to the University of York researchers, who fitted devices to measure indoor air quality. It was a randomised controlled trial, meaning only mosques in the treatment group received the anti-smoking sermons; air quality inside homes was used as one of multiple variables to measure the intervention's effectiveness.

The researchers from the University of York claimed that the smoking ban in Bangladesh, active since 2005, was lacking in effectiveness due to 'existing social attitudes', which they hoped their project would change. The costly trial constituted part one of three projects planned by the Medical Research Council to change social attitudes toward smoking in Bangladesh.

Data by country and continent, over time

Figure 2 shows a time series from 2005 to 2018 of total 'nanny state' foreign aid spending and the sub-totals for Africa, Asia and the Americas.

Figure 2: UK foreign aid spent on lifestyle interventions in Africa, Asia, the Americas and the World, time series from 2005-2018



The 2015-2017 boom in lifestyle intervention spending abroad is well documented in terms of its geographical composites. From 2015 to 2016, annual spending in Africa shot up from zero to £6.5million; in Asia from £753,275 to £5.29million; and in the Americas from £10,543 to £3.14million.

The next year of the boom, from 2016 to 2017, was driven entirely by 'nanny state' spending in Asia, which climbed from £5.29million to £10.53million, while spending in Africa fell from £6.5million to £4.71million and in the Americas from £3.14million to £1.43million.

Data by commissioning government departments and their arms-length bodies

The Department for International Development (DfID) spends the overwhelming majority of ODA but was responsible for just over half (51.3 per cent) of ‘nanny state’ foreign aid between 2005 and 2018.¹⁰ Meanwhile, the Department of Health and Social Care (DHSC), which commands a tiny proportion of total ODA (0.7 per cent in 2017), was responsible for 27.8 per cent of the ‘nanny state’ foreign aid projects identified by our research. The Department for Business, Energy and Industrial Strategy (BEIS) was responsible for 20.8 per cent of ‘nanny state’ foreign aid. (BEIS had 5.4 per cent of the foreign aid budget at its disposal in 2017.)

DfID is bound by the 2002 International Development Act to put poverty reduction at the heart of its programmes. This legislation does not apply to non-DfID spenders of the aid budget,¹¹ and as a result they spend a greater proportion of their funds in middle-income countries, where infectious diseases are less of a problem relative to the degenerative diseases that ‘nanny state’ projects target. According to a recent Center for Global Development (CGD) report, in 2016 non-DfID departments (e.g. BEIS; DHSC; the Foreign and Commonwealth Office) and cross-government funds spent 25 per cent of their bilateral aid in low-income and least developed countries; by contrast, DfID spent 41 per cent of its bilateral aid in countries from these categories (McKee et al. 2018: 13).

The proportion of ODA managed by DfID has been falling in recent years – a result of a ‘cross-government approach’ to aid introduced in 2015, designed to draw on the ‘complementary skills’ of civil servants in different departments (DfID 2015:10). From 2014 to 2017, DfID’s share of ODA spending has fallen from 86 to 72 per cent.¹² Among the many departmental benefactors are the DHSC and BEIS: over the same period, the DHSC’s

10 More precisely, DfID was in charge of 45.1 per cent of ‘nanny state’ projects *which could be attributed to a particular department of government*. £39.2 million (out of a total of £44.6 million) was traced either to DfID, DHSC and BEIS - £20.1 million, £10.9 million and £8.15 million, respectively. This spending is accounted for below. Some of the ‘missing’ £5.4 million came from the ‘Global Health Trials’, projects jointly funded by DfID, the MRC and the Wellcome Trust. The exact proportions coming from each donor were not available, meaning these projects could not be included in this section.

11 ‘What does UK law say on aid?’, Center for Global Development blog <https://www.cgdev.org/blog/what-does-uk-law-say-aid-how-new-development-secretary-mordaunt-can-meet-her-aid-effectiveness>

12 Data from National Statistics, Statistics on International Development, ‘Table 3: UK ODA Contributors’.

aid budget has rocketed from £11million to £101million; BEIS's aid budget, meanwhile, has grown from £271million¹³ to £765million. This timeline correlates very neatly with the boom in 'nanny state' foreign aid spending, shown in Figure 2 above.

Table 4: Breakdown of ODA budget by departments and cross-government funds

Spender of Official Development Assistance (ODA)	UK ODA – 2017	UK ODA – 2017
Department for International Development	71.9%	£10,104m
Department for Business, Energy and Industrial Strategy	5.4%	£765m
Foreign and Commonwealth Office	4.5%	£627m
Conflict, Stability and Security Fund	3.9%	£555m
Home Office	2.4%	£333m
Department of Health and Social Care	0.7%	£101m
Department for Environment, Food and Rural Affairs	0.5%	£67m
Prosperity Cross - Government Fund	0.3%	£46m
Department for Work and Pensions	0.2%	£31m
Department for Education	0.2%	£24m
HM Revenue and Customs	0.1%	£14m
Ministry of Defence	<0.1%	£6m
Department for Culture, Media and Sport	<0.1%	£4m

¹³ BEIS was created in 2016 by a merger between the Department for Business, Innovation and Skills and the Department of Energy and Climate Change; therefore, the value for 2014 is the sum for BEIS' two progenitors.

Export Credits Guarantee Department	<0.1%	£3m
Cabinet Office	<0.1%	£3m
HM Treasury	<0.1%	£1m
Office for National Statistics	0	0
CDC Group PLC	0	0

Source: National Statistics, *Statistics on International Development: Final UK Aid Spend 2017*, Table 3

Department for International Development (DfID)

DfID spends a large majority of the ODA budget: 71.9 per cent in 2017, or £10.1billion (Table 4). Only three of the 35 projects in total were commissioned directly by DfID, although they were among the most expensive ones, worth £20.1million in total.

The biggest single expenditure was £15.9million in 2016 given to the WHO to strengthen tobacco taxes, put graphic health warnings on tobacco packaging, ban tobacco advertising, etc. in 15 developing countries. DfID gave a further £1.5million in 2005 and £2.67million in 2006 to Canada's 'International Development Research Centre' to develop the case for international tobacco control.

Department for Health and Social Care (DHSC)

The DHSC finances the Global Health Research Fund, which is distributed by the National Institute for Health Research (NIHR). It is a £430million pot to be spent between 2016 and 2021. The fund's website says the research is 'vital to protect the UK at home. Disease knows no borders and we are continually under threat from poorly understood infections and antimicrobial resistance'. However, at least £10.9million from the Global Health Research Fund has been spent on 'nanny state' projects aimed at tackling NCDs – which by definition cannot cross borders. The £10.9million was spread between just three projects and represented 27.8 per cent of total 'nanny state' foreign aid identified in this research.

The costliest project to date has been a £6.81million grant aimed at cutting salt consumption in China by 30 per cent between 2017 and 2025. This was followed by £2.06million given in 2017 to the University of Cambridge's Centre for Diet and Activity Research to investigate the lifestyles of people in Africa, the Caribbean and Central America. The NIHR also awarded £2million in 2018 to research chewing tobacco in South Asia.

The DHSC pays an annual subscription to the WHO. A proportion of this payment is classified as ODA eligible. Theoretically, it would be possible to draw up a list of WHO-funded lifestyle intervention projects and attribute the relevant proportion of the cost to the UK 'nanny state' foreign aid tally, depending on the UK's contribution to the overall WHO budget in each year. However, a lack of detailed spending and project data published by the WHO made this task impractical.

Department for Business, Energy and Industrial Strategy (BEIS)

BEIS manages and finances the Newton Fund and the Global Challenges Research Fund (GCRS). Through these two development funds, BEIS funded 21 of the 35 'nanny state' projects identified by this research. These 21 projects had a combined value of £8.15million.

The Newton Fund was launched in 2014 to build 'research and innovation partnerships' with developing countries. It distributed £735million of funding between 2014 and 2021 to seven arms-length organisations, three of which used the money to commission 12 of the 35 'nanny state' projects identified in this study. Those 12 projects had a total value of £1.54million.

Case Study 2

Lobbying for taxes and regulations on sugar, salt and trans-fats in seven countries

Project cost: £625,410

Year: 2017-2019

Target countries: Afghanistan, Bangladesh, Iran, Nepal, Pakistan, Tunisia and Vietnam

Funder: Medical Research Council

Provider organisation: University College London

Researchers at UCL used foreign aid money to produce ‘stakeholder maps’ for seven countries, showing the key civil society, industry and political groups wielding the levers of power – all part of a plan to push regulations on the food industry, including sugar taxes and reformulation of salty and fatty products.

The project’s mission statement was to look for allies on the ground, from sympathetic local media to parents’ groups, to be supplied with resources to make the case for UK ‘nanny state’ regulations.

Levying burdensome taxes on food seems particularly ill-advised in countries still struggling with hunger. For example, the UN said three million Afghans were ‘one step away from famine’ after a drought in 2018. In the same year, a national nutrition survey in Pakistan found a startling 60 per cent of the population faced food insecurity.

The British Academy funded two ‘nanny state’ projects: £52,645 in 2014 for a study called ‘genomics and child obesity in Mexico: the resignification of race, class, nation and gender’; and £10,543 in 2015 for a study in Brazil ‘investigating the habits of shoppers when they do or don’t buy healthful foods’.

Meanwhile, the British Council commissioned four lifestyle intervention projects. The most expensive project cost £52,397 and was an initiative in 2017 to increase vegetable consumption among young adults in Brazil. Also in 2017, £25,436 was awarded ‘to encourage smoke-free homes in Malaysia’.

Finally, the Medical Research Council (MRC) funded six ‘nanny state’ projects worth £1.4million using their share of the Newton Fund, detailed in Table 5.

Table 5: ‘Nanny state’ projects funded by the Medical Research Council (MRC) using money from the Newton Fund

Project title	Cost (2018 prices)	Year commissioned	Country
Evaluating the role of fiscal policy in improving diets and preventing chronic disease in Chile: impact evaluation and modelling	£348,108	2016	Chile
Improving healthy energy balance and obesity-related behaviours among pre-schoolers in Malaysia	£320,025	2017	Malaysia
A multicomponent intervention to reduce home-exposure to second-hand smoke during pregnancy and postnatal period: a randomised controlled trial	£317,967	2015	South Asia - countries not specified

Diet, physical activity and cardiometabolic health in Malaysian adolescents: from epidemiology to intervention (see Case Study 4)	£207,567	2017	Malaysia
Population-based salt intake survey to support the national salt reduction programme for Malaysia	£149,623	2017	Malaysia
Breakfast, diabetes and poverty	£52,164	2015	Brazil
TOTAL	£1,395,454		

The GCRF was launched in 2015 to ‘strengthen capacity for research, innovation and knowledge exchange in the UK and developing countries’, with its website encouraging applications from ‘researchers who may not previously have considered the applicability of their work to development issues’. The fund consists of £1.5billion to be spent over five years, channelled through nine arms-length bodies.

Nine ‘nanny state’ projects got their funding from the GCRF – more specifically, through the MRC (detailed in Table 6). The total value of the nine projects was £6.61million. No arms-length body apart from the MRC commissioned lifestyle intervention projects using funding from the GCRF.

Table 6: ‘Nanny state’ projects funded by the Medical Research Council (MRC) using funds from the Global Challenges Research Fund (GCRF)

Project title	Cost (2018 prices)	Year commissioned	Country
GCRF: Tobacco control capacity programme	£3,462,164	2017	India, Ethiopia, Gambia, South Africa and Uganda
Integrating places of worship into the primary care pathway to prevent and control non-communicable diseases in the Caribbean	£681,340	2016	Guyana, Jamaica and Dominica
Analysing the policy and governance environment for NCD control and identifying potential policy options (see Case Study 2)	£625,410	2017	Afghanistan, Bangladesh, Iran, Nepal, Pakistan, Tunisia and Vietnam
Dietary transitions in African cities: leveraging evidence for interventions and policy to prevent diet-related non-communicable diseases (see Case Study 3)	£624,770	2017	Kenya and Ghana
Understanding non-communicable diseases (NCD) and the role of infection in Africa: a partnership to generate big data	£624,362	2017	Africa - countries not specified
Children learning about second-hand smoke (CLASS II): a pilot cluster randomised controlled trial	£160,992	2015	Bangladesh

Health through faith: can faith-based organisations support weight management and reduce the risk of NCDs in South Africa?	£152,251	2016	South Africa
Development of Tobacco Control Trial among migrant works in Guangzhou, China	£143,710	2015	China
Exploring the feasibility of school-based interventions to reduce sugar sweetened beverage consumption in India	£130,605	2015	India
TOTAL	£6,605,604		

Data by organisations commissioned to carry out the work

Almost three quarters of foreign aid spent on 'nanny state' projects between 2005 and 2018 (72.4 per cent) was funnelled through just five organisations: the WHO (in charge of £15.9million worth of interventions); Queen Mary, University of London (£7.81million); the University of Stirling (£3.46million); the University of York (£3.14million); and the University of Cambridge (£2.06million).

Table 7: The five organisations receiving the most UK foreign aid for ‘nanny state’ projects between 2005-2018

Organisation	Number of projects	Total value of projects (2018 prices)
WHO	1	£15,861,000
Queen Mary, University of London	3	£7,814,684
University of Stirling	1	£3,462,164
University of York	3	£3,143,569
University of Cambridge	1	£2,060,808
TOTAL	9	£32,342,225

The WHO

The WHO earned its league table topping £15.9million through a single project from 2016 to 2021 aimed at aiding ODA-eligible nations in the implementation of the WHO’s Framework Convention on Tobacco Control (FCTC), a treaty which came into force in February 2005 and has been signed by 168 of the 192 WHO member states.¹⁴ The UK sent £15.9million to be divided between 15 nations: Cambodia, Chad, Colombia, Egypt, El Salvador, Georgia, Jordan, Madagascar, Myanmar, Nepal, Samoa, Sierra Leone, Cabo Verde, Sri Lanka and Zambia. The money was given to increase tobacco taxes, ban tobacco advertising, put graphic health warnings on tobacco packaging and ban smoking in public places.

14 ‘WHO Framework Convention on Tobacco Control’. https://www.who.int/fctc/text_download/en/

Case Study 3

'Novel' research in Africa used culinary photography to reach the conclusion that 'junk food' should be taxed and regulated

Project cost: £624,770

Year: 2017-2019

Target country: Ghana and Kenya

Funder: Medical Research Council

Provider organisation: University of Sheffield

This bizarre project put cameras in the hands of Ghanaians and Kenyans and then analysed snaps of their lives and food in conjunction with interviews from the amateur photographers to find the 'social and physical factors' influencing participants' diets.

Researchers from the University of Sheffield, who employed other techniques such as 'mapping the food environment' as part of the project, said 'novel' methods and country-specific data were necessary to tackle the rising incidence of diet-related NCDs in Ghana and Kenya; they said crudely extrapolating policies used in rich countries to African countries would not work.

So far (its full results are pending publication), the project's website has uploaded a couple of briefs crammed with very familiar policy recommendations: taxes on 'unhealthy' foods, restrictions on selling sweets and salty snacks in 'child-laden settings' and regulation of 'junk food' adverts and sponsorship deals.

Queen Mary, University of London

Meanwhile, Queen Mary, University of London won £7.81million for three projects dedicated to reducing salt consumption in Asia. The work seems to have been brought in by Graham MacGregor, a professor of Cardiovascular Medicine at Queen Mary and an anti-salt and anti-sugar campaigner. In 1996, Professor MacGregor set up Consensus Action on Salt and Health (now known as Consensus Action on Salt, Sugar and Health), which successfully lobbied the government over the following decade to embark on a salt-reduction scheme in the UK.¹⁵In 2005, the Food Standards Agency (FSA) published salt targets for 85 categories of food to be met by 2010. Since then, three more sets of targets have been published, in 2009, 2011 and 2014.

Professor MacGregor set up an offshoot group called World Action on Salt and Health (WASH) in 2005, which offers resources and advice to anti-salt activists abroad.¹⁶ In 2012, Action on Salt was awarded £856,058 for a 'school-based education programme in China to reduce salt intake in children and their families', followed by much larger £6.81million grant in 2017 for a project that aimed to cut Chinese salt consumption by 30 per cent in less than a decade. This came with a bonus of £149,623 for a much smaller project in Malaysia, also in 2017, involving a 'survey of salt intake to support the national salt reduction programme'.

The industry-led model of salt reduction, used in the UK where 75 per cent of sodium consumed comes from processed foods, will presumably not make much of a dent in Chinese salt consumption, where three quarters of salt consumed is added during cooking (Anderson et al. 2010). So far, China has instead experimented with other approaches, such as subsidising and promoting salt substitutes (Juan et al. 2013).

Professor MacGregor set up Action on Sugar in 2014, a pressure group that has had considerable success lobbying the British government for policies such as the sugar levy. It remains to be seen whether foreign aid is used to export the anti-sugar campaign as it has with the anti-salt campaign.

15 'Achievements and Awards', Action on Salt. <http://www.actiononsalt.org.uk/about/achievements-and-awards>

16 <http://www.actiononsalt.org.uk/about/timeline/>

University of Stirling

The University of Stirling ran £3.46million worth of lifestyle interventions abroad. This consisted of a single project from the MRC to 'carry out the research and advocacy necessary to design, implement and achieve compliance with good tobacco control policies' in Bangladesh, Ethiopia, Gambia, Ghana, India, South Africa and Uganda from 2017 to 2018.

The project's principal investigator was Professor Linda Bauld, who was the UK government's scientific adviser on tobacco control during the implementation of England's smoking ban in 2007. Nowadays, she is the Deputy Director of the UK Centre for Tobacco & Alcohol Studies and is on Public Health England's tobacco control implementation board. Professor Bauld left Stirling for the University of Edinburgh in November 2018.

University of York

York oversaw the implementation of three 'nanny state' projects, worth £3.14million in total.

The most expensive project cost £2million and was an investigation of smokeless tobacco in India, Bangladesh and Pakistan, carried out from 2018 to 2020. Chewing tobacco and nasal tobacco are popular in South Asia. The University of York researchers said that smokeless tobacco products 'have historically been assumed to be less harmful than cigarettes, so not very much research has been done'. Even without abundant evidence, they seem set on prohibition. Their project logo puts 'smokeless tobacco' in a red circle with a cross through it; beneath, a slogan reads 'Stop Smokeless Tobacco in South Asia'.¹⁷

A further £795,463 was awarded to train Imams to deliver anti-smoking messages in Bangladesh (see Case Study 1 for details).

Finally, an impact evaluation of Chile's sugar tax was carried out by researchers at the University of York, who received £348,108 in 2016 for their analysis. Their results were published in 2018, with Professor Marc Suhrcke, one of the study's authors, telling the *Daily Telegraph* that 'the results lend further support to the notion that fiscal policy incentives can

17 'Addressing Smokeless Tobacco and building Research Capacity in South Asia (ASTRA)', University of York. <https://www.york.ac.uk/igdc/research/astra-project/>

make a difference'.¹⁸ When the project was commissioned, Chile's income was too high for it to be on the list of aid-eligible countries; however, OECD rules state that after a country breaches the threshold, it can continue receiving ODA for three years. In 2018, Chile's grace period expired.¹⁹

The University of Cambridge

Cambridge won £2.06million worth of 'nanny state' aid in 2017. This came in the form of a grant to the Centre for Diet and Activity Research (CEDAR). CEDAR was set up in 2008 as one of five hubs in a research network designed to 'boost capacity and infrastructure in public health research'. The first rounds of funding came from the Department of Health, charities and research councils.²⁰ Its foreign aid grant was spent studying population-level factors determining diet and exercise levels in Africa, the Caribbean and Central America.

18 'Major new study shows Chile's sugar tax has sharply reduced sales of sugary drinks', *Daily Telegraph*, 3 July 2018. <https://www.telegraph.co.uk/global-health/climate-and-people/major-new-study-shows-chiles-sugar-tax-has-sharply-reduced-sales/>

19 'History of DAC Lists of aid recipient countries', OECD. <http://www.oecd.org/dac/financing-sustainable-development/historyofdaclistsofaidrecipientcountries.htm>

20 'UKCRC Public Health Research Centres of Excellence', Cancer Research UK. <https://www.cancerresearchuk.org/funding-for-researchers/how-we-deliver-research/our-research-partnerships/ukcrc-public-health-research-centres-of-excellence>

Case Study 4

The literature review that found nothing

Project cost £207,567

Year: 2017-2019

Target country: Malaysia

Funder: Medical Research Council

Provider organisation: University of Bristol

Over £200,000 went on a project looking at the associations between diet and physical activity as determinants of cardiometabolic risk factors in Malaysian adolescents.

A key ambition of the project was to review the current consensus among academics who had studied the issue – i.e. to conduct a systematic literature review. As it happened, there had not been any worthwhile studies written on the subject, and two years after being commissioned the researchers published a literature review that concluded it had found nothing.

As this chapter has shown, academic research projects account for a considerable number of the 'nanny state' projects covered by foreign aid spending. They include £348,108 spent assessing the effects of a sugar tax in Chile; £149,623 on a survey of Malaysian salt consumption; £52,645 on a study about 'genomics and child obesity in Mexico: the resignification of race, class, nation and gender'; and £130,605 spent researching the 'acceptability and feasibility' of taxing sugary drinks in India. How much the developing world benefits from this form of foreign aid is debatable, but it has undoubtedly been a boon for some British academics.

How cost effective are lifestyle interventions in developing countries?

Introduction

This section starts by exploring how health interventions can be assessed for cost effectiveness, beginning with a criticism of the popular approach of comparing the cost of one quality-adjusted life year (QALY) gained against the GDP per capita of a country. This method, recommended by the WHO, says an intervention that saves one QALY at a cost of three times GDP per capita or less is cost effective. For example, Malawi's GDP per capita is around £275, meaning a vaccination drive would be considered cost effective if it saved at least one QALY per £825 spent.

We argue that the GDP per capita 'rule of thumb' is arbitrary and not suitable for allocating health budgets. Instead, we settle on cost-effectiveness thresholds estimated by researchers at the University of York, who argue the marginal efficiency of a country's health system is the relevant figure against which the cost per QALY of an intervention should be compared.

Finally, using these cost-effectiveness thresholds, we assess the following 'nanny state' projects: salt-reduction schemes in China, Malaysia and Malawi; smoking bans and taxes in Sub-Saharan Africa; and an adolescent-targeted anti-smoking intervention in India.

Cost per QALY saved

Whether an intervention (e.g. a vaccination drive, a new drug or a weight-loss course) provides 'value for money' can be judged using incremental cost-effectiveness ratios (ICERs). ICERs are calculated by dividing the incremental cost of the intervention by the incremental number of QALYs saved. This ratio tells us the cost per QALY.

How much is too much for a QALY saved?

Knowing the cost per QALY is not enough information alone to judge whether an intervention should be commissioned. For example, if an intervention costs £200 for every QALY gained, this will not be cost effective while interventions with a lower price tag remain unrealised. An efficient health system will maximise QALYs saved with the budget it has.

Where should the cut-off point be set? The WHO recommends that cost effectiveness should be judged by comparing the intervention's ICER with the developing nation's GDP per capita. If the cost per QALY saved is between one and three times the value of GDP per capita, the WHO says it is cost effective and should be commissioned. That is, the right price for an additional QALY is, according to the WHO, up to three times GDP per capita (Woods et al. 2013: 7).

The WHO's approach is the most popular one and has been in use for over two decades, especially for low-income countries (Marseille et al. 2014). By linking the cut-off point for cost effectiveness to GDP per capita, it accounts for the fact that the richer the country, the higher the social willingness to spend on marginal health improvements (Woods et al. 2016: 7).

Criticism of the WHO's cost-effectiveness threshold

The weakness of the GDP per capita rule can be shown in a single thought experiment. Imagine a drug that adds a year to everyone's life and costs two times the annual GDP per capita for each person treated. Under the WHO's rule, this drug would be considered cost effective, even though a nation would need to spend twice its annual income to provide it each year to all its citizens (Marseille et al. 2014).

The WHO's decision rule fails because it disregards budget constraints. As a result, many more interventions are presented as 'cost effective' than

can be afforded. This means policymakers are not strictly bound by decision rules and are free to ‘revert to political or organisational interests’ when considering the plethora of ‘cost-effective’ policies presented (ibid.). All the while, a facade of rule-based policymaking is maintained with a nod and a wink towards the ‘cost-effectiveness’ stamp of approval.

The marginal productivity of health spending

The University of York’s Centre for Health Economics has estimated an alternative set of thresholds for developing countries, ones firmly grounded in the reality of finite budgets (Woods et al. 2016). The authors calculated the opportunity cost of spending on a new treatment in the form of health foregone for developing countries: what would be displaced by the new spending?

Assuming the health budget is fixed and spent rationally, the least productive (or the marginal) treatment will be the one that is dropped to make space for the new one. Therefore, it is important to know the cost effectiveness of this marginal treatment so we can compare it with that of the intervention we are introducing – the one which will displace it. We need the new intervention to be more efficient than the marginal one we are cutting to increase total QALYs saved.

Table 8: Estimated cost-effectiveness thresholds (or marginal value of health spending) for a selection of UK ‘nanny state’ foreign aid recipients, in actual dollars and ‘international dollars’

Country	Cost threshold per quality-adjusted life year (QALY), (\$ 2016)	Cost threshold per QALY, (International \$, 2016)
Chile	7166	9980
Brazil	4969	6666
Malaysia	4837	10711
Mexico	4580	7315
Colombia	3444	5464
China	2851	4985

Dominica	2301	3317
Jamaica	1694	2846
El Salvador	1195	2424
Cape Verde	1139	1941
Guyana	1136	1989
Georgia	1108	2206
Samoa	1081	1481
Vietnam	563	1560
Ghana	528	1134
India	443	1599
Zambia	418	890
Pakistan	378	1365
Chad	286	566
Kenya	276	619
Sierra Leone	229	522
Bangladesh	229	704
Madagascar	122	373
Malawi	60	205

Source: Woods et al. (2016: 24-31). Mid-points of ranges taken.

The cost-effectiveness thresholds estimated by Woods et al. are much lower than the one to three times GDP per capita recommended by the WHO for developing countries (ibid: 13). For example, Woods et al. estimated the marginal productivity of health spending in Malawi was around \$60, or 20 per cent of Malawi's GDP per capita. This threshold is very different from the WHO's because it is based on a disparate concept. While the one to three times GDP per capita rule approximates 'societal willingness to pay' for an extra QALY, Woods et al.'s thresholds estimate the marginal productivity of healthcare spending – i.e., the amount currently being paid in the least efficient part of the health system for each QALY saved (ibid: 7).

Woods et al. admit their estimates are based on limited data and strong, uncertain assumptions (ibid: 13). The data are extrapolations from empirical estimates of opportunity cost (from the English NHS), estimates of the relationship between a country's GDP per capita and the value of a statistical life and a series of explicit assumptions (ibid: 3). While this description does not inspire confidence, Woods et al.'s thresholds are at least approximations of the appropriate measure for cost-effectiveness analysis.

The next sub-section compares the cost effectiveness of UK 'nanny state' foreign aid projects with the country-specific thresholds estimated by Woods et al. A dearth of cost-effectiveness estimates for lifestyle intervention projects in developing countries severely limited the scope of our analysis.

Salt reduction in China, Malawi and Malaysia

The UK has spent £9million trying to reduce salt consumption in China (£7.67million), Malawi (£1.18million) and Malaysia (£149,623).

In 2017, a study published in the British Medical Journal (BMJ) modelled salt-reduction schemes in 183 countries (Web et al. 2017). Assuming the worldwide programme produced a 10 per cent reduction in sodium consumption over ten years, the model forecast 58 million disability adjusted life years (DALYs) per year would be saved at a cost of \$11.8 billion international dollars. Based on these findings, the WHO recommends salt-reduction schemes to developing countries as a 'best buy' policy – i.e. extremely cost effective.²¹

However, a strident rejoinder, also published in the BMJ, called the computer simulation a 'surrealistic fantasy' (Graudal 2017). Dr Niels Graudal, a senior consultant at Copenhagen University Hospital, said the model was built on cherry-picked evidence. Most strikingly, Dr Graudal pointed out problems with the model's estimates of:

- how effective salt-reduction schemes are in reducing sodium intake;
- how sodium intake affects systolic blood pressure

21 'Tackling NCDs', World Health Organization. <https://www.who.int/ncds/management/best-buys/en/>

The simulation extrapolated effectiveness from two case studies:

- The UK, which saw a 14.7 per cent proportional reduction or 0.6g per day absolute reduction in sodium intake over 10 years after setting industry salt targets
- Turkey, which reported a more rapid reduction of 16 per cent (1.2 grams per day) over four years

To be 'conservative', the researchers used a 10 per cent fall in sodium reduction as the baseline case. However, this is not a conservative estimate at all when one considers that any number of factors could have made sodium intake fall in the UK and Turkey during those periods. There has only been one randomised controlled trial of a salt-reduction programme: that was in China in 2013, where treatment villages were given 'education' and subsidies were put on potassium-rich, low-sodium salt substitutes (Li et al. 2013). The treatment group's sodium intake fell by just 5.5 per cent and blood pressure stayed the same. Meanwhile, a meta-analysis of uncontrolled, pre-post studies of 15 national initiatives in rich countries found five cases where salt intake reduced, five where no change occurred at all and two where salt consumption increased (McLaren et al. 2017).

Furthermore, the designers of the simulation used a dose-response relationship of 3.8 mmHg/100 mmol sodium. However, Dr Graudal argues this is grossly overestimated and derived partly by 'forcing the dose-response regression line through zero, a procedure which assumes no confounding and therefore is discouraged by the manual of the statistical software used to perform the analyses'. He goes on to show the dose-response relationship could be almost halved, to 2.2 mmHg/100 mmol sodium, by following the recommended procedure.

Even taking the computer model at face value, the Department of Health's £1.18million of foreign aid aimed at reducing salt consumption in Malawi was a bad investment. The model's authors found that the generally low sodium intakes in Sub-Saharan Africa meant the cost-effectiveness ratio would be six times GDP per capita for each DALY saved, when the optimal intake of sodium threshold was assumed to be 3g per day. This equates to a cost of around \$1,830 per DALY in Malawi, compared with the cost-effectiveness threshold of \$60 estimated by Woods et al. At six times Malawi's GDP per capita, the policy does not even pass the WHO's generous decision rule of one to three times GDP per capita.

For comparison, an antiretroviral therapy for the prevention of mother-to-child transmission of HIV in Malawi costs \$40 per DALY saved (Orlando et al. 2010). In Malawi, 60 per cent of deaths are attributable to communicable, maternal, perinatal and nutritional conditions.²²

The case for spending on salt-reduction campaigns in Sub-Saharan Africa is further undermined by evidence suggesting that the health effects of excessive salt intake are already well known. A survey of 588 participants (aged between 25 to 65 across five different Sub-Saharan African countries) found that 85 per cent of people knew high salt intake could cause health problems and 91 per cent agreed that it was important to limit salt intake (Leyvraz et al. 2018). The same survey found that 56 per cent of respondents regularly tried to limit their salt intake, while only eight per cent believed they ate too much salt. Although the authors concluded that this survey showed more educational campaigns were needed, it could equally be inferred that respondents were making a rational decision to accept the health risks (of which the majority were aware) in exchange for tastier food.

To summarise, the computer model commonly trotted out to justify the cost effectiveness of salt-reduction schemes in developing countries used uncontrolled case studies to derive its estimate of expected reduction in sodium consumption. The only controlled trial of a salt-reduction scheme, in China in 2013, showed a much smaller fall in sodium consumption and no significant effect on blood pressure. Furthermore, the global salt-reduction model's estimate of the relationship between sodium consumption and blood pressure was exaggerated by forcing the regression line through zero, a procedure discouraged by the manual of the statistical software used to produce the model. Even after seemingly stacking the deck in favour of salt-reduction schemes, the model could not produce strong support for implementing them in Sub-Saharan Africa, concluding that the cost-effectiveness would be around \$1,830 per DALY saved in Malawi, assuming the optimal intake of sodium threshold was 3g per day. The UK's £1.18million of 'nanny state' aid for salt reduction in Malawi could have been used to pay for antiretroviral therapy for the prevention of mother-to-child transmission of HIV, which would have cost only \$40 per DALY saved.

22 'Malawi', World Health Organization. https://www.who.int/nmh/countries/mwi_en.pdf?ua=1

Tobacco taxes, advertising bans, cigarette pack health warnings and smoke-free workplaces in Sub-Saharan Africa

In 2016, the WHO received £15.9million in UK foreign aid to help 15 ODA-eligible countries implement the WHO's Framework Convention on Tobacco Control. It is not clear exactly how that money was divided between the objectives; this study assumed it was split equally between a) tobacco taxes, b) advertising bans, c) cigarette pack health warnings and d) smoking bans.

Cost per life-year estimates for these policies were found only for Tanzania (Ngalesoni et al. 2017). Therefore, of the 15 recipients, we ran the analysis for the five Sub-Saharan African countries: Cape Verde, Chad, Madagascar, Sierra Leone and Zambia.

In Table 9, estimates of cost per DALY taken from the Tanzanian computer model were converted into 2016 values using GDP deflator data from the World Bank and then into international dollars using PPP exchange rates, also from the World Bank. International dollars were used to make the Tanzanian costings applicable to the other five Sub-Saharan African countries.

Table 9: Cost-effectiveness estimates for tobacco taxes, advertising bans, cigarette pack health warnings and smoke-free workplaces in Tanzania (I\$, 2016)

Policy	Cost per DALY (2016, I\$)
Tobacco tax	16
Advertising ban	389
Health warnings on packs	125
Smoke-free workplaces	837

The authors estimated intervention costs under the following categories: 'strategy development and evaluation; human resource requirements; promotion, media and advocacy; program supplies; rent equipment and office supplies; and general operations'.

Ngalesoni et al. assumed intervention effects fizzled out after 10 years. Effect sizes were taken from studies conducted in developed countries, as the relevant data were not available from developing countries. Health effects were measured in DALYs, not QALYs. This created an incompatibility with the cost-threshold data estimated by Woods et al. used by this study.

In Table 10, grey boxes indicate that a policy breached the country's cost-effectiveness threshold, as estimated by Woods et al. in terms of the cost of a QALY in I\$.

Table 10: Cost-effectiveness thresholds for five recipients of WHO tobacco control funding with estimates of intervention cost effectiveness (I\$, 2016)

Country	CE threshold I\$ per QALY (2016 prices)	Tobacco tax I\$ (2016 prices)	Advertising ban I\$ (2016 prices)	Package labelling I\$ (2016 prices)	Smoke-free workplaces I\$ (2016 prices)
Chad	566	16	304	125	614
Cape Verde	1941	16	304	125	614
Madagascar	373	16	304	125	614
Sierra Leone	522	16	304	125	614
Zambia	890	16	304	125	614

Table 10 shows that tobacco taxes, advertising bans and health warnings on cigarette packs were cost effective in all five countries.

Meanwhile, smoke-free workplaces were not cost effective in three countries: Chad, Madagascar and Sierra Leone. All three are classed as low income by the World Bank; Cape Verde and Zambia are lower middle-income countries.

By comparison, one cost-effectiveness study from Zambia found that expanding access to insecticide-treated bed nets to prevent malaria would cost I\$30 per DALY saved (Marseille et al. 2014). That makes insecticide-

treated bed nets 20 times more cost effective than implementing smoke-free workplaces, ten times more cost effective than banning smoking advertisements and four times more cost effective than putting health warnings on cigarette packs. Three million insecticide-treated bed nets could have been bought for the price of the anti-smoking intervention in the five Sub-Saharan African countries.²³

In Sub-Saharan Africa, malaria is a major cause of morbidity and mortality. In 2017 alone, there were 201 million cases of malaria with 404,500 deaths attributable to the disease.²⁴ Children under five and pregnant women are most susceptible to the infection.

Adolescent-targeted anti-smoking interventions in India

UK foreign aid funded two anti-smoking interventions aimed at adolescents: one in India in 2017 (£599,065) and the other in Colombia in 2018 (£741,000).

The Indian study surveyed students in grades six to eight about exposure to 'tobacco imagery in films and music videos and in retail displays' and collected other variables related to age, gender, family background and even 'rebelliousness'. A year later, the researchers returned to assess smoking uptake among the cohort. Factors correlated with uptake were then presented to policymakers and community groups.

In Colombian schools, UK foreign aid paid to 'develop and test new measures of social norms around smoking behaviours in adolescents using Game Theory approaches'.

A cost per QALY estimate for an adolescent-targeted anti-smoking programme was found only for India, equal to \$2,140 (Brown et al. 2013). This is nearly five times higher than Woods et al.'s threshold for India of \$443. Therefore, adolescent targeted anti-smoking programmes are not cost effective in India.

23 'Why nets?' Against Malaria Foundation. <https://www.againstmalaria.com/WhyNets.aspx>

24 'Malaria: Key Facts', World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/malaria>

By contrast, inoculating Indian pre-adolescent girls against the human papillomavirus (HPV) would be cost effective: \$100 per QALY saved (Prinja 2017). Currently, the Indian government does not include the HPV vaccine in its Universal Immunisation Programme. Girls are inoculated only if their parents pay for it privately.²⁵ The £599,065 the UK spent on its anti-smoking intervention in Indian schools could have gone towards vaccinating 3700 girls from low-income families, reducing their lifetime risk of cervical cancer.²⁶

25 'Controversy over HPV vaccines in India accelerates', *The Pharma Letter*, 10 May 2018. <https://www.thepharmaletter.com/article/controversy-over-hpv-vaccines-in-india-accelerates>

26 Prinja (2017) estimated the cost of the vaccine and delivery expenses at about £8 per dose; two doses are recommended, so £16 per person was the figure used.

Conclusion

This study found that foreign aid was used for £44.6million of lifestyle interventions in 47 countries between 2005 and 2018. More than four fifths (84.4 per cent) of this amount was spent in the last three years, representing a rapid increase in the rate of expenditure.

There are two plausible explanations for this rise in 'nanny state' foreign aid spending. First, the overall foreign aid budget has grown in the last two decades. From 1980 to 2005, Official Development Assistance (ODA) hovered between 0.2 and 0.4 per cent of GNI. By 2013, spending had increased to 0.7 per cent of GNI (the amount the UN recommends rich nations spend) where it has stayed ever since. A commitment to spend 0.7 per cent of GNI as ODA every year was written into UK law in 2015.

Second, the share of ODA managed by DfID has been falling in recent years, because of a 'cross-government approach' to aid introduced by the coalition government in 2015. From 2014 to 2017, DfID's share of ODA spending has fallen from 86 to 72 per cent. Meanwhile, the Department of Health and Social Care (DHSC) and the Department for Business, Energy and Industrial Strategy (BEIS) have seen their budgets grow rapidly. This timeline matches up neatly with the boom in 'nanny state' foreign aid and is an obvious explanation, given that DHSC and BEIS funded almost half (48.6 per cent) of the lifestyle interventions identified in this research. In 2018, a report by the IDC, a group of legislators who monitor UK aid spending, said the cross-government aid strategy had led to a lack of focus on poverty reduction.²⁷

27 'UK aid brand at risk from cross-government funds, says IDC report', Devex, 5 June 2018. <https://www.devex.com/news/uk-aid-brand-at-risk-from-cross-government-funds-says-idc-report-92877>

Taxpayers may be dismayed by some of the findings in this paper: £795,463 training Imams in Bangladesh to preach about second-hand smoke; £348,108 analysing a sugar tax in Chile; and £207,567 on healthy living classes for Malaysian toddlers. These types of projects do not sit comfortably with common conceptions that foreign aid is about feeding the hungry, digging wells and routing infectious diseases.

The government is used to taxpayers demanding to know why problems in foreign countries should be any of Britain's business (DfID 2015: 3). Soon, the 'aid' recipients themselves may be angrily asking the same question – when they realise that the UK is to blame, say, for not being allowed to smoke in bars or for having to pay more for a sugary drink. 'Nanny state' interventions may improve health, but they often do so at the expense of pleasure.

Our cost-effectiveness analysis found that the £599,065 spent in India on an anti-smoking intervention in schools could have inoculated 3,700 Indian girls against the human papillomavirus, reducing their lifetime risk of cervical cancer. Meanwhile, the £5.3million spent tightening anti-tobacco laws in Cape Verde, Chad, Madagascar, Sierra Leone and Zambia could have paid for three million insecticide-treated bed nets to prevent malaria. In both cases, more life-years would have been saved.

The stakes are especially high in the world's most impoverished countries, such as Chad, Madagascar and Sierra Leone: in these environments, a small amount of money goes far, and misallocating resources means wasting opportunities to save many lives.

References

- Anderson, C.A.M., Appel, L.J., Okuda, N. et al. (2010) Dietary sources of sodium in China, Japan, the United Kingdom and the United States, Women and Men Aged 40 to 59 years: The INTERMAP Study. *Journal of the American Dietetic Association* 110(5): 736-745(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4308093/>)
- Brown, H.S., Stigler, M., Perry, C. et al. (2013) The cost effectiveness of a school-based smoking prevention program in India. *Health Promotion International* 28(2): 178-86(<https://www.ncbi.nlm.nih.gov/pubmed/22271928>)
- Defo, B. K. (2014) Demographic, epidemiological, and health transitions: are they relevant to population health patterns in Africa? *Global Health Action*(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6457287/>)
- DfID (2015) Tackling global challenges in the national interest. London: DfID(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/478834/ODA_strategy_final_web_0905.pdf)
- Graudal, N. (2017) Surrealistic fantasies on cost effectiveness of decreased sodium intake. *British Medical Journal* 356: i6699(<https://www.bmj.com/content/356/bmj.i6699/rr-1>)
- Juan, C., Ye, T., Yixing, L. et al. (2013) Salt-restriction spoon improved the salt intake among residents in China. *PLoS One* 8(11): e78963(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3823994/>).

- Leyvraz, M., Mizéhoun-Adissoda, C. and Houinato, D. (2018) Food Consumption, Knowledge, Attitudes, and Practices Related to Salt in Urban Areas in Five Sub-Saharan African Countries. *Nutrients* 10(8) (<https://www.ncbi.nlm.nih.gov/pubmed/30087242>).
- Li, N., Yan, L.L. and Niu, W. et al. (2013) The effects of a community-based sodium reduction program in rural China – a cluster-randomized trial(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5147834/>)
- Marseille, E., Larson, B., Kazi, D. S. et al. (2014) Thresholds for the cost effectiveness of interventions: alternative approaches. *Bulletin of the World Health Organisation* 93(2): 118-124(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4339959/>).
- McKee, C., Mitchell, I. and Baker, A. (2018) UK Aid Quality Indicators. London: Center for Global Development(<https://www.cgdev.org/publication/uk-aid-quality-indicators>).
- McLaren, L., Surmar, N. Barberio, A. M. et al. (2017) Population-level interventions in government jurisdictions for dietary sodium reduction. *International Journal of Epidemiology* 46(5): 1351-1405(<https://www.ncbi.nlm.nih.gov/pubmed/27633834>).
- Ngalesoni, F., Ruhago, G., Mayige, M. et al. (2017) Cost effectiveness analysis of population based tobacco control strategies in the prevention of cardiovascular diseases in Tanzania. *PLoS One* 12(8): e0182113(<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0182113>).
- Omran, A. R. (1971) The epidemiologic transition: a theory of the epidemiology of population change. *Milbank Quarterly* 83(4): 731-757(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690264/>).
- Orlando, S., Marazzi, M. C., Mancinelli, S. et al. (2010) Cost effectiveness of using HAART in prevention of mother-to-child transmission in the DREAM project Malawi. *Journal of Acquired Immune Deficiency Syndrome* 55(5): 631-634(<https://pdfs.semanticscholar.org/71ab/8fae999b7679e2df29cd77ae146eae0f9266.pdf>).

Prinja, S., Bahuguna, P., Faujdar, D. S. et al. (2017) Cost-effectiveness of human papillomavirus vaccination for adolescent girls in Punjab state: Implications for India's universal immunization program. *Cancer* 123(17): 3253-3260(<https://www.ncbi.nlm.nih.gov/pubmed/28472550>).

UN (2017) World Mortality data booklet(<https://www.un.org/en/development/desa/population/publications/pdf/mortality/World-Mortality-2017-Data-Booklet.pdf>).

Webb, M., Fahimi, S., Singh, G.M. et al. (2017) Cost effectiveness of a government-supported policy strategy to decrease sodium intake: global analysis across 183 countries. *British Medical Journal* 356: i6699 (<https://www.bmj.com/content/356/bmj.i6699>).

WHO (2000) Global strategy for the prevention and control of noncommunicable diseases(http://apps.who.int/gb/archive/pdf_files/WHA53/ea14.pdf).

Woods, B., Reville, P., Sculpher, M. and Claxton, K. (2016) Country-level cost-effectiveness thresholds: Initial estimates and the need for further research. *Value in Health* 19(8): 929-935(<https://www.journals.elsevier.com/value-in-health/most-cited-articles>).

Appendix: Full list of 35 'nanny state' foreign aid projects

Project title	Inflation-adjusted cost	Start date	Country	Source
WHO Framework Convention on Tobacco Control 2030 (FCTC 2030)	£15,861,000	2016	Cambodia, Chad, Colombia, Egypt, El Salvador, Georgia, Jordan, Madagascar, Myanmar, Nepal, Samoa, Sierra Leone, Cabo Verde, Sri Lanka and Zambia	https://devtracker.dfid.gov.uk/projects/GB-GOV-10-HB-TOB-FCTC_2030
Action on Salt China	£6,809,002	2017	China	http://www.worldactiononsalt.com/less/global-manufacturers/
GCRF: Tobacco control capacity programme	£3,462,164	2017	India, Ethiopia, Gambia, South Africa and Uganda	https://gtr.ukri.org/projects?ref=MR/P027946/1

Accountable Grant Ag4223: Research for International Tobacco Control (RITC) - Harvesting the Evidence for Global Tobacco Control	£2,665,530	2006	Unspecified countries	https://devtracker.dfid.gov.uk/projects/GB-1-112092
Grant to Cambridge's Centre for Diet and Activity Research (CEDAR)	£2,060,808	2017	Cameroon, Kenya, South Africa, Jamaica, Belize, Dominica, Grenada, Guyana, St Lucia and St Vincent and the Grenadines	https://www.cedar.iph.cam.ac.uk/gdar-19-07-2017/
Addressing smokeless tobacco and building research capacity in South Asia	£1,999,998	2018	Bangladesh, India, Pakistan	https://www.york.ac.uk/igdc/research/astra-project/
Research for International Tobacco Control (RITC): Program Strategy 2005-2010	£1,494,900	2005	Unspecified countries	https://www.idrc.ca/en/project/research-international-tobacco-control-ritc-program-strategy-2005-2010
NoToNa: Tackling cardiovascular risk in the adolescent life-course through a schools' salt-reduction intervention in sub-Saharan Africa	£1,031,457	2018	Sub-Saharan Africa	https://gtr.ukri.org/projects?ref=MR%2FR022186%2F1

Tobacco International Perspective (A2, A7) (2011800993)	£864,595	2009	Unspecified countries	https://euaidexplorer.ec.europa.eu/content/explore/recipients_en
A school-based education programme to reduce salt intake in children and their families	£856,058	2012	China	https://gtr.ukri.org/projects?ref=MR%2FJ015903%2F1
Muslim Communities Learning About Second-hand Smoke in Bangladesh (MCLASS II): An effectiveness-implementation hybrid study	£795,463	2017	India	https://gtr.ukri.org/projects?ref=MR%2FP008941%2F1
Using Game Theory to assess the effects of social norms and social networks on adolescent smoking in schools: a proof of concept study	£741,002	2018	Colombia	https://gtr.ukri.org/projects?ref=MR%2FR011176%2F1
Integrating places of worship into the primary care pathway to prevent and control non-communicable diseases in the Caribbean	£681,340	2016	Guyana, Jamaica and Dominica	https://gtr.ukri.org/projects?ref=MR%2FN015959%2F1

Analysing the policy and governance environment for NCD control, and identifying potential policy options.	£625,410	2017	Afghanistan, Bangladesh, Iran, Nepal, Pakistan, Tunisia and Vietnam	https://gtr.ukri.org/projects?ref=MR%2FP025188%2F1
Dietary transitions in African cities: leveraging evidence for interventions and policy to prevent diet-related non-communicable diseases (NCDs)	£624,770	2017	Kenya and Ghana	https://gtr.ukri.org/project/DA34F082-F871-4821-9D76-AE18B3962902
Understanding non-communicable diseases (NCD) and the role of infection in Africa: a partnership to generate big data	£624,362	2017	Not specified	https://mrc.ukri.org/research/funded-research/ . (Download the 'grants and fellowships awarded' file at the bottom of the page.)
Preventing smoking uptake among adolescents - A primary prevention initiative for chronic lung disease in India	£599,065	2017	India	https://gtr.ukri.org/projects?ref=MR/P008933/1
Evaluating the role of fiscal policy in improving diets and preventing chronic disease in Chile: impact evaluation and modelling	£348,108	2016	Chile	https://mrc.ukri.org/research/funded-research/

Improving healthy energy balance and obesity-related behaviours among preschoolers (toddlers) in Malaysia	£320,025	2017	Malaysia	https://mrc.ukri.org/research/funded-research/
A multicomponent intervention to reduce home-exposure to second-hand smoke during pregnancy and postnatal period: a randomised controlled trial	£317,967	2015	South Asia (unspecified)	https://mrc.ukri.org/research/funded-research/
Diet, physical activity and cardiometabolic health in Malaysian adolescents: from epidemiology to intervention	£207,567	2017	Malaysia	https://gtr.ukri.org/projects?ref=MR/P013821/1
Capacity building in dietary monitoring and public health nutrition in the Eastern Mediterranean Region Countries	£177,395	2018	Morocco, Tunisia, Egypt, Jordan, Palestine, Sudan, Lebanon, Pakistan, Iran and Afghanistan	https://gtr.ukri.org/projects?ref=MC_PC_MR%2FR019576%2F1
Children learning about second-hand smoke (CLASS II): A pilot cluster randomised controlled trial	£160,992	2015	Bangladesh	https://gtr.ukri.org/projects?ref=MR/M020533/1

Alcohol use disorders- Mobile based Brief Intervention Treatment (AMBIT)	£156,193	2017	India	https://gtr.ukri.org/projects?ref=MR%2FP020348%2F1
Healthier lifestyles through a peer-education and peer-support system: a school-based pilot project in adolescents in Ho Chi Minh City, Vietnam	£152,818	2017	Vietnam	https://gtr.ukri.org/projects?ref=MR%2FR004587%2F1
Health through faith: can faith-based organisations support weight management and reduce the risk of NCDs in South Africa?	£152,251	2016	South Africa	https://gtr.ukri.org/projects?ref=MR/N028260/1
Sodium reduction in Malawi, part one. 'NotoNa' (see above) constitutes part two of the UK-backed sodium reduction project in Malawi	£150,700	2014	Malawi	https://gtr.ukri.org/projects?ref=MC_PC_13082
Population-based salt intake survey to support the national salt reduction programme for Malaysia	£149,623	2017	Malaysia	https://mrc.ukri.org/research/funded-research/

Development of Tobacco Control Trial among migrant works in Guangzhou, China	£143,710	2015	China	https://gtr.ukri.org/projects?ref=MR%2FM021513%2F1
Reduction in antenatal and early life exposure to secondhand smoke among Chinese children	£136,745	2014	China	https://mrc.ukri.org/research/funded-research/
Exploring the feasibility of school based interventions to reduce sugar sweetened beverage consumption in India	£130,605	2015	India	https://gtr.ukri.org/projects?ref=MR/M021467/1
Genomics and child obesity in Mexico: the resignification of race, class, nation and gender	£52,645	2014	Mexico	https://www.thebritishacademy.ac.uk/newton-fund-2014-awards-list
Veg+: Increasing vegetable consumption for young adults...	£52,397	2017	Brazil	https://www.britishcouncil.org/sites/default/files/institutional_links_april_2017_-_grants_awarded.pdf
Developing interventions to encourage smoke-free homes in Malaysia	£25,436	2017	Malaysia	https://www.britishcouncil.org/sites/default/files/researcher_links_workshops_april_2017_-_grants_awarded.pdf

Investigating the habits of shoppers when they do or don't buy healthful foods	£10,543	2015	Brazil	https://www.thebritishacademy.ac.uk/newton-fund-2015-awards-list
Total	£44,642,645			

The Institute of Economic Affairs
2 Lord North Street
London SW1P 3LB
Tel 020 7799 8900
email iea@iea.org.uk


Institute of
Economic Affairs