Tactics against scheming diseases

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Cover Page Footnote
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Achieving good health can be thought of as a struggle against opponents—disease and unhealthy practices—that are imagined to be active agents, in a type of thought experiment. These opponents of health, to reduce outrage about their activities, draw on a standard set of tactics: cover-up of the threat, devaluation of victims, reinterpretation of what is happening, use of official processes to give an illusion of safety, and intimidation. To promote good health, each of these tactics can be countered, by exposure of the problem, validation of victims, reframing of what is happening, mobilisation of support, and resistance. Three case studies are used to illustrate how this framework can be applied: AIDS, smoking, and human evil. Conceptualising good health as a strategic encounter against scheming disease agents highlights the value of thinking strategically and of recognising the importance of public outrage in campaigning.

Keywords: tactics, disease, AIDS, smoking, human evil

Diseases are often seen as enemies that need to be conquered. In the war on cancer, techniques of attack include surgery, chemotherapy, and radiotherapy, backed up with research and development to produce better weapons and with strategic planning by policy makers. This battle metaphor has been questioned, largely on the grounds that it creates misleading priorities for responding to disease.

On the other hand, the metaphor of struggle has remained undeveloped, in that most disease agents are seen as lacking agency and therefore lacking any capacity for strategic initiative. Is it possible to build on the struggle metaphor and gain some insight useful for health policy?

Much of health policy currently has a strong strategic dimension: goals are set, such as reducing the incidence or halting the progress of a disease, and means to achieve the goals are developed and applied. There is certainly a struggle against disease. The extra idea here is to attribute agency to disease and, more widely, to sources of ill health. A military commander has to develop plans that take into account the likely tactics of the enemy. Similarly, researchers and doctors develop their plans taking into account the likely patterns of disease agents. However, usually this analysis of the enemy is restricted to the biological level. It can be productive to look at disease as an enemy that has allies and a strategy that can be understood and opposed.
Strategy basically means a plan of action to achieve a goal, while tactics are the actions taken along the way. Strategy and tactics are regularly addressed in military and business studies but only rarely in the social sciences. There are some exceptions. Erving Goffman (1970) studied interpersonal dynamics as a set of interaction games, with each participant making moves responding to the other’s actions, actual or anticipated. James Jasper (2006), in his key book Getting your way, looked at a range of strategic encounters in everyday life, highlighting the role of special circumstances and the dilemmas involved in making decisions. However, he did not focus on identifying regular patterns that might be used in developing counter-strategies.

Actor-network theory was developed for studying systems of humans and non-humans, including living things like scallops and human-constructed objects like trains and door-closers (Callon et al., 1988; Latour, 1987). In this theory, humans and non-humans, called actors or actants, are treated symmetrically, without privileging humans alone as having agency. The actants are seen as linked together through networks. The theory includes a number of concepts for interactions, such as recruiting allies, called enrolment.

Actor-network theory abjures the usual concepts of social structure, interest groups, power and the like, instead building an understanding of dynamics by “following the actors,” namely observing how actants, of all types, do things. This theory shows the possibility of treating disease agents on an equal theoretical footing as humans. For example, bacteria can enrol doctors (that is, recruit them as allies) by getting them to be less conscientious in washing their hands, allowing the bacteria to spread. Most research using actor-network theory has dealt with technological systems; it seems not to have been applied to developing strategies against disease.

Here, a framework called the backfire model (Martin, 2007) is used to offer insight into tactics to promote health. According to this model, when a powerful perpetrator does something potentially perceived as unjust, the perpetrator is likely to use one or more of five types of tactics that reduce public outrage: covering up the action, devaluing the target, reinterpreting the events, using official channels to give an appearance of justice, and intimidating or rewarding those involved.

In the next section, this model is described in more detail. The following three sections outline how this model can be applied to AIDS, smoking, and human evil. The disease AIDS is analysed by imagining HIV as an agent that has deployed the five methods that powerful perpetrators commonly use to reduce outrage. Then follows a similar treatment of smoking, which highlights the human systems that conspire with a disease
agent to reduce outrage. The third case study is unusual: it addresses human violence, cruelty, and ecological destruction, treating them as a type of pathology. It is possible to identify the same sorts of tactics that serve to reduce outrage.

If disease agents can be thought of as using tactics to reduce outrage about their activities, this analysis points to the possibility of using counter-tactics to promote health. In the penultimate section, examples of counter-tactics are presented from all three case studies, plus additional examples. Conclusions are given in the final section. The implication of this analysis is that, in a countering disease, it can be useful to imagine how a disease agent and its allies scheme to reduce outrage over damaging impacts.

To think of disease agents as conscious plotters can be considered a type of thought experiment, which involves thinking through the implications of a principle or imaginary situation. In science, there have been many thought experiments, for example Einstein imagining riding with a beam of light (which helped inspire special relativity), Schrödinger’s cat in quantum theory, and Maxwell’s demon in thermodynamics. In history, counterfactuals are a type of thought experiment (e.g., Evans, 2014). In literature, utopias and dystopias, as well as some science fiction, might be categorised as thought experiments. In these and other areas, imagining a hypothetical situation, even an impossible one, can be a way of gaining insights.

By the same token, it is not necessary that disease agents actually plan their efforts, or to believe that they do. Whether or not they do, it can be useful to imagine that this occurs and thereby gain insights that can be useful for opposing disease.

A related example is the idea of the “selfish gene” (Dawkins, 1976), which offers a way of thinking about evolution but does not require imagining that genes are conscious agents. Ideas such as this should be evaluated in terms of whether they provide useful insights. The example of the selfish gene, which has been criticised for valorising selfish human behaviours and for over-emphasising the role of genes, also points to possible downsides of imagining that non-conscious entities are plotters.

The backfire model

When something is perceived as unjust, excessive or horrible—when it violates a social norm—many people respond with concern, anger or revulsion, and may react negatively against whoever or whatever is seen as responsible (Moore, 1978). For example, torture is widely seen as an
abuse of human rights; those responsible are condemned widely, though not universally.

Perpetrators usually try to avoid being held accountable. Powerful perpetrators have several ways to do this (Martin, 2007). They can:

- cover up the action
- devalue the target
- reinterpret the events, including by lying, minimising consequences, blaming others, and reframing perspectives
- use official channels to give an appearance of justice
- intimidate or reward targets and witnesses.

Torture, especially since the 1970s and campaigning by Amnesty International and other human rights organisations, is so widely reviled that no government openly endorses it. However, torture continues to occur in dozens of countries. To minimise the outrage from exposure, torture is routinely done in secret. This is an illustration of the first method of reducing outrage: cover-up.

Sometimes, though, cover-up fails. An example is the 2004 publication of photos graphically showing US prison guards physically abusing and sexually humiliating prisoners at Abu Ghraib prison in Iraq. This revelation was a severe threat to the US government, which valued its reputation as an upholder and defender of human rights, especially given that the 2003 invasion of Iraq had been justified on human rights grounds. The US government used all five methods to reduce outrage from the Abu Ghraib story (Gray & Martin, 2007, where sources are provided for the following points).

First, cover-up: although many photos were published, others—some of them even more graphic—were not released by the government. Note also that journalists have not been allowed access to prisons in Iraq, Afghanistan, or Guantánamo Bay. Furthermore, the programme of extraordinary rendition was so secret that even its existence was hidden.

Second, devaluation of the target: the prisoners at Abu Ghraib were labelled criminals or terrorists even though many of them were never convicted of any crime. More generally, torture is often justified on the grounds that the person tortured is less than worthy.

Third, reinterpretation: US government spokespeople described the actions at Abu Ghraib as “abuse,” and the US media followed suit. The word “torture” was not applied, although many of the actions fit the standard definition of torture. The US government blamed the prison
guards involved, saying that they acted independently. Critics, though, have said that actions at Abu Ghraib were a logical outcome of US policy.

Fourth, official channels: after the publicity about the photos, charges were laid against some of the Abu Ghraib prison guards, giving the appearance that justice was being done. However, the formal processes were slow, complex and disjointed; to the extent that anyone could follow them, they tended to defuse outrage. Furthermore, no senior officials were charged: legal channels in this case implicitly endorsed blaming prison guards and exonerating policy makers.

Fifth, intimidation: a number of US soldiers who spoke out against actions taken by the military were arrested and threatened with prosecution.

If powerful perpetrators use five methods to reduce outrage, then targets and their supporters can counter each one of them. They can:

• expose the action
• validate the target
• interpret the events as unfair
• avoid or discredit official channels and instead mobilise support
• resist intimidation and rewards.

At Abu Ghraib, exposure occurred after soldier Joseph Darby gave a disc with photos to the army’s Criminal Investigation Division. Military investigators did their job conscientiously and journalists and editors publicised the story. The Iraqi prisoners were—sometimes—presented as individuals who had human rights. Members of the public, seeing the photos, saw for themselves the cruelty involved. Publication of the photos took the issue out of the military’s hands and limited the capacity for intimidation.

The events at Abu Ghraib could be said to have backfired on the US government. Practices of imprisonment and interrogation developed over many years and used in several parts of the world had, previously, generated relatively little attention because of cover-up and reinterpretation. Publication of the Abu Ghraib photos cut through the usual apathy and caused a public relations disaster for the US government.

This framework applies to a wide variety of perceived injustices, including censorship (Jansen & Martin, 2015), sexual harassment (McDonald et al., 2010), labour disputes (Smith & Martin, 2007), treatment of refugees (Herd, 2006), massacres (Martin, 2007, pp. 9–34) and genocide (Martin, 2009). In each arena and case, tactics are different because the
circumstances are different: sexual harassers and governments have different resources. But the same types of tactics are found in every case.

Because of the wide applicability of this model, it seems plausible to apply it to human health. From the point of view of humans, disease is often perceived as a bad thing, with disease agents behaving in uncaring, hostile and disastrous ways. Human concern or revulsion at disease and, more generally, ill health is a common trigger for action. A disease agent that is too obvious in its threat will stimulate the greatest efforts to counter it—a type of backfire. To be more effective in its attacks on humans, a disease agent might be said to use tactics to:

• cover up its presence, spreading, and killing without being recognised
• devalue its targets, so concern about the disease is less
• reinterpret what is happening, so people gain misleading ideas about the seriousness or operation of the disease
• be dealt with through official processes that give only an illusion of protection
• intimidate targets into passivity.

In the next three sections, this model of outrage management is applied to AIDS, smoking, and human evil, showing how disease agents and their allies operate to reduce outrage about their activities. Following this is a discussion of counter-tactics by opponents of disease.

AIDS

AIDS is a lethal recently emergent disease, with an estimated death toll of over 30 million. It has spread throughout the world and continues to kill. To help understand why AIDS has been so deadly, it is useful to look at the five methods by which powerful perpetrators reduce outrage over their action. In this picture, HIV is treated as a scheming disease agent, doing what it can to escape detection or divert attention from its activities (Pascal, 1991).

Cover-up
HIV infection does not announce itself, but instead lies low, allowing further infections, which would normally be countered by a healthy immune system, to occur. HIV lurked in the human community for decades before AIDS was initially identified in March 1981, which meant HIV was able to evolve and spread in the absence of countermeasures.
Contrast this with Ebola: symptoms develop very quickly, causing a horrifying spectacle and often death. It is precisely because Ebola is so obviously dangerous that urgent efforts are made to contain it.

**Devaluation**

HIV especially targets several categories of people, including gay men and injecting drug users, who are stigmatised independently of AIDS and hence thought by some to have deserved their illness. (In contrast, people infected by HIV through blood donations are thought of as innocent.) In the early years of awareness of AIDS, devaluation of HIV's key targets limited measures taken against the disease (Shilts, 1987). Having AIDS can cause devaluation, partly because of the association with stigmatised behaviours and partly because of the perceived risk of infection.

**Reinterpretation**

AIDS has been the subject of a variety of controversies about origins, transmission, control and treatment. Here no attempt is made to adjudicate these disputes. Instead, the point is that whatever position one takes, those with contrary positions can be seen as muddying the issue and detracting from effective action.

A discredited minority position, championed by Peter Duesberg (1996) and a number of other scientists, is that HIV is not responsible for AIDS, which is a label applied to a variety of adventitious diseases. From this perspective, attributing AIDS to HIV is a dangerous error.

The mainstream position is that HIV is the key infectious agent implicated in immune suppression leading to AIDS. HIV is most easily transmissible by blood-to-blood interactions, for example sharing of injecting needles, and is also transmissible via unprotected sexual activity. There have been disputes about the risk of unprotected heterosexual sex. For those who argue that the heterosexual population is seriously at risk, an emphasis on injecting drug users and men who have sex with men minimises the wider danger and stigmatises vulnerable groups. For those with the contrary position, effective measures to protect the most highly at-risk groups are jeopardised by alarmism about the danger to the wider population. Meanwhile, the spread of AIDS in Africa, the most highly affected continent, suffers from a similar dispute, except that the positions are reversed, with the dominant view being that most transmission occurs via heterosexual sexual activity (Potterat, 2015, pp. 175–229).

These disputes are effective in preventing unified action. From HIV’s point of view, it is advantageous for scientists, politicians and members of the public to be divided or confused about transmission dynamics, and for public health officials to be intolerant of those who disagree with them.
**Official channels**

In the early years of the AIDS epidemic in the US, government policy and research efforts failed to address the problem, especially by not providing adequate funding for research and prevention. The US federal government diverted attention away from immediate measures to limit the spread of HIV (Shilts, 1987).

**Intimidation and rewards**

Especially in early years, having AIDS attracted stigma, so quite a few people with HIV decided not to reveal their status, thus helping the virus to spread. The association of AIDS with the taboo topics of sex and illicit drug use served, in many countries, as a form of intimidation that discouraged open discussion and thus hindered prevention efforts.

In summary, it can be useful to imagine that HIV is a scheming disease agent using a variety of methods to reduce awareness and concern about its activities. Its most effective techniques seem to have been cover-up and devaluation.

**Smoking**

The adverse health consequences of smoking are enormous (Proctor, 2011). Today, these consequences are widely acknowledged, but decades ago this was not the case. Imagine tobacco as an agent that seeks to insinuate itself into the lives of humans, thereby expanding its domain: the more people who smoke, the more tobacco will be grown. Because tobacco is a deadly agent, it has to take measures to prevent people becoming alarmed. So it uses the techniques of cover-up, devaluation, reinterpretation, official channels, and intimidation and rewards. Tobacco can’t do this unassisted. It relies on human allies for cultivation, manufacture, distribution and use. Tobacco also needs allies to defend against those who oppose its widespread use.

**Cover-up**

Smoking is insidious in part because its health impacts occur years or decades down the track and hence are not immediately apparent to smokers themselves. Tobacco companies—key allies of tobacco—hid their own evidence of the dangers of smoking.

**Devaluation**

Tobacco companies have long advertised cigarettes by associating them with youth, virility, liberty, and unspoilt nature. Product placement in movies associates smoking with glamour and rebellion. This glorification of smoking is paralleled by devaluation of those who succumb to smoking-
related diseases: they are painted as responsible for their own plight. Because lung cancer is seen as invariably due to smoking, and because smokers are blamed for contracting lung cancer, there has not been as much medical research into treatments as for some other cancers. Tobacco thus exacts its toll with less accountability.

**Reinterpretation**

Diseases and unhealthy behaviours do not give reasons, but their human allies can and do. Tobacco companies are well known to have lied—often by omission—about what they knew about the health impacts of smoking (Glantz et al., 1996; Proctor, 2011). They have claimed that research findings about health hazards are not conclusive, so more research is needed. They have funded research designed to cast doubt on the dangers of smoking (Oreskes & Conway, 2010). They have argued that smoking is not all that dangerous, or that the risk is acceptable.

The companies blame the consequences of smoking on smokers by saying it is a personal choice, an adult choice, indeed a right or freedom. The companies’ interpretation is that they are simply providing a legal product desired by consumers and that as suppliers they have no responsibility for addiction or the health consequences of consumers’ voluntary choices. Blaming the victim is tobacco’s tactic (Proctor, 2011).

**Official channels**

Courts are crucial official channels, widely seen as dispensing justice. For decades, when legal actions were taken against tobacco companies, they used their enormous financial resources to draw out cases interminably. Rather than lose a case, they aimed to settle out of court to avoid precedents. Although anti-smoking legal actions have had some important victories, the legal process itself has in some ways been a distraction from campaigning.

As the anti-smoking movement became stronger, some official channels were turned against the tobacco industry, for example in the form of taxes and advertising bans. Official channels do not always or automatically aid purveyors of ill health.

**Intimidation and rewards**

Tobacco companies promote their products using advertising and product placement, in which the inducement is payment, and through sponsorship for sports, arts, and the like. In anti-smoking legal actions, tobacco company defendants often offer plaintiffs a settlement package. In accepting the settlement—a type of bribe—there is no judgement against the company, no precedent and less outrage.
In summary, tobacco and its allies, to reduce outrage over the effects of smoking, have used all five methods that powerful perpetrators commonly use to reduce concern about their activities.

**Human evil**

The concept of evil is usually associated with religion. However, a number of thinkers and researchers have attempted to approach the topic logically and scientifically. For them, evil is manifested in human violence and cruelty towards others, as in the title of Roy Baumeister’s (1997) book *Evil: Inside human violence and cruelty*. Based on a study of the psychology of perpetrators such as murderers, torturers, and killers in genocide, Baumeister challenged the usual idea that they are malevolent. Instead, he discovered that, most commonly, they feel they are victims themselves and that their actions are justified or not all that important. Simon Baron-Cohen, in his book *The science of evil* (2011), attributes malicious actions to a lack of empathy, and elucidates the parts of the brain implicated.

For the purposes of looking at how disease agents use tactics to reduce concern about their activities, I rely primarily on *The pathology of man: A study of human evil*, a mammoth and erudite study by philosopher and psychologist Steven James Bartlett (2005). Bartlett combed through the work of numerous thinkers—for example psychiatrists Sigmund Freud and Carl Jung, mathematician and peace researcher Lewis Fry Richardson, and ethologist Konrad Lorenz—for insights into the psychological origins of human evil. He also examined studies of war, terrorism, genocide, and ecological destruction. His conclusion is disturbing: humans have an inbuilt capacity to hate and destroy other humans, and in many situations derive satisfaction from doing this. Bartlett argues that most people who are involved in killing, for example in genocide and war, are psychologically normal according to the usual criteria used by psychiatrists. He therefore concludes that, in a clinical sense, the human species is itself pathological.

There is not space here to fully explicate Bartlett’s arguments and the evidence on which he draws. Instead, without trying to assess the validity of his view, his analysis is used to illustrate how, if a pathology of the human species exists, it uses various techniques to reduce concern about its existence and effects.

**Cover-up**

Human violence and cruelty are well known, and indeed given prime media coverage, but the role of psychologically normal people in evil deeds is usually hidden. As Baumeister documented, most people who harm others think of themselves not as bad but as justified. Arendt (1963)
documented the “banality of evil,” but few people think in terms of the “evil of banality” (Minnich, 2017).

Bartlett argues that most people do not want to think about the capacity for evil in “normal” humans, which would mean acknowledging their personal role in relation to violence and cruelty. For example, few people think it is their personal responsibility to oppose arms manufacture or preparations for war; indeed, they are far more likely to endorse patriotism and military forces. Few people think about their personal role in enslaving and exterminating other species, or how this reflects human domination and exploitation of the biosphere. Instead, the possibility of personal involvement in human evil, or personal responsibility for intervening against it, never enters most people’s consciousness. Such ideas might be said to be repressed, in the Freudian sense, which can be likened to a type of psychological cover-up.

**Devaluation**

Powerful perpetrators can reduce concern about their actions by devaluing the target of violence or injustice, because what is done to a stigmatised person or group does not seem so bad. Examining the role of devaluation in reducing concern about human evil is complicated because it is human thinking and feeling that is devaluing the victims of human actions. Devaluation is most obvious in human treatment of enemies, animals and the environment. Enemies are dehumanised (Keen, 1986), so what is done to them does not seem so bad. The very word “dehumanisation” points to a deeper process of devaluation: other species and the environment are commonly treated as lower in value than humans, so much lower that their existence is assumed of value only in service to humans (Leiss, 1972). The destructive capacity of the human species is most obvious in massive population increase, enslaving other species, causing numerous species to become extinct, and destroying the environment that supports all life.

**Reinterpretation**

Violence and cruelty can be explained in ways that reduce concern about them. Several common psychological processes are involved here. One is to blame murder, genocide and atrocities on bad people, or on various personality disorders such as psychopathy, thereby exempting “us,” the blamers, from guilt. Patriotism is commonly seen as laudable, even when it is the basis for militarism and war. It is a convenient reframing of the acceptance and use of violence. Another framing technique is the idea that humans are basically good, which makes it possible to think that bad actions are aberrations.
Official channels
The lurking capacity for evil within humans can benefit from formal processes that exempt those who are deemed “normal.” One important official channel is psychologists and psychiatrists with their categories and procedures for assessing mental illness, epitomised by the *Diagnostic and Statistical Manual*, the authoritative guide to mental disorders. Those without disorders are normal and, by implication, qualitatively different from malevolent wrongdoers who are assumed to be psychologically deviant. Bartlett’s (2013) contention is that the potential for evil exists within psychologically normal people, whereas those who actively resist evil (such as whistleblowers and war resisters) deviate from the human norm. Therefore, expert assessments of normality help to legitimise the human capacity for violence, cruelty and destruction.

Another relevant official channel is the legal system that certifies a small minority as criminals and, by implication, the remainder of the population as innocent. When there are massive atrocities, as in war and genocide, so many people are implicated that courts seldom even attempt to try every transgressor, again providing an exemption for what Bartlett (2005, p. 315) calls “the human evil of normality.”

Intimidation and rewards
During war preparation and wars, those who resist may be subject to intimidation; for example, conscientious objectors may be imprisoned, and deserters from the army are court-martialled and sometimes executed. Meanwhile, those who enthusiastically support war are lauded as patriots. This differential response serves to stigmatise refusal to support systems for killing other humans and endorse the support for such systems. If there is a deep-seated capacity for human violence and cruelty, there is a psychological reward for ignoring it: people feel better about themselves.

In summary, if there is a pathology of the human species built into the way humans think about themselves and relate to the world, a pathology that fosters behaviour destructive of humans and the environment, then awareness of its presence and concern about its effects are reduced by a series of tactics. Awareness is reduced by methods of cover-up, including wilfully turning away from evidence of human evil in “normal” people; concern is reduced by methods of devaluation and reinterpretation; experts and courts give authoritative pronouncements that exonerate psychologically normal humans from responsibility; and there are penalties for challengers and rewards for those who go along with the usual lack of concern about psychologically normal people being implicated in evil deeds. Whether or not Bartlett’s views are accepted, this analysis shows how it is possible to study tactics that serve to reduce concern about a problem afflicting humans.
Counter-tactics

To respond to the tactics of cover-up, devaluation, reinterpretation, official channels, and intimidation/rewards, there are straightforward counter-tactics:

- expose the disease and its impacts
- validate disease sufferers
- interpret the disease as something to be opposed
- avoid or discredit official channels; instead, mobilise support
- resist intimidation and rewards.

**Expose the disease and its impacts**

When most people are unaware of a health problem, it is hard to generate concern and stimulate action. Therefore, fostering awareness of health problems, and disease agents, is vital for dealing with them. Exposure can be to medical researchers, doctors, patients and the general public.

HIV tried to remain hidden; exposing its role and methods of operation was, and continues to be, crucial in addressing AIDS. The role of smoking in causing disease needed to be exposed. Both HIV and tobacco initially hid their role by contributing to diseases that also had other causes. The campaign against smoking has relied on publicising research on health effects and using public awareness to promote measures to restrict and reduce smoking, from higher taxes to bans in aeroplanes and cinemas (Chapman, 2007).

If the capacity of psychologically normal people to tolerate and participate in evil deeds is seen as a pathology, then exposing this capacity is crucial to countering it. Most people prefer not to focus on the evil side of normality, thereby allowing it to persist and wreck havoc via torture, war and ecological destruction.

Diseases in poor countries, like schistosomiasis, are well known to local doctors and to international specialists, but they have a low visibility in wealthy countries. This contributes to a lack political pressure to act against such diseases. In rich countries, there is a fierce competition for attention to different health problems, with some diseases receiving disproportionate visibility and attracting massive funding, while others with larger impacts receive relatively little attention.

**Validate disease sufferers**

When victims are stigmatised or otherwise devalued, diseases may be taken less seriously or systemic causes neglected. This applies to ill health in poor countries, to diseases linked to stigma such as AIDS, and to
health problems linked to behaviours attributed to individual choice, such as smoking and obesity.

Ill health will receive less attention if its targets are lower status. This helps explain why the 1984 Bhopal disaster, which killed some 200,000 people and led to ongoing health problems for hundreds of thousands, has received relatively little attention: most of the victims were poor people in India. Union Carbide, owner of the Bhopal factory, survived the affair (Engel & Martin, 2006).

The case of thalidomide illustrates the power of validation. Thalidomide killed or injured far fewer than in Bhopal but many victims were members of affluent families in western countries. When targets of disease and ill health are shown as personally worthy, others respond more sympathetically and are more willing to support campaigns. Furthermore, when targets can be presented vividly as real people who are suffering, it is easier to mobilise against the problem. Children affected by thalidomide, with missing limbs and misshapen bodies, were vivid testimony, arousing anger against the company thought to be responsible.

The environmental and animal liberation movements have challenged devaluation of other species and the environment but have had only a limited impact on conventional assumptions of human superiority and privilege that underpin damage to non-human parts of the world. The peace movement has challenged the devaluation of the victims of war.

The typical ways that likely and actual victims are perceived thus have a big effect on the urgency and significance of the issue. Human rights campaigners have learned a lot about the role of information and images in stimulating support for their campaigns. Statistics are useful, but far more powerful are images of torture and other human rights violations. Care has to be taken to humanise victims without exploiting them (Cohen, 2001). The same can be said about ill health. Most people respond more to images than statistics, and the images need to stimulate suitable concern.

Interpret the disease as something to be opposed
Ill health needs to be interpreted as a problem, not as a normal situation, and blame appropriately allocated.

Tobacco companies' argumentative techniques are easy to understand because the issues have been analysed so thoroughly. Tobacco control campaigners have promoted images of smoking-related diseases, such as ugly mouth cancers, but have seldom had the budgets to directly counter cigarette advertisements by showing smoking as a dirty, furtive habit, with
cigarette burns on clothes and potential romantic partners repelled by the smell.

Governments fund huge military establishments and invoke patriotism to justify war preparations and war making. In challenging this framing of the issues, peace activists have argued that war, and associated activities such as arms manufacture, are crucial social problems that need to be opposed. As part of the peace movement, health professionals have argued that war is a health issue (Wiist & White, 2017).

For other health issues, the arguments are less transparent. Consider the health benefits of exercise or, in other words, the ill health that results from sedentary lifestyles. There is no pathogen or other agent discouraging exercise, but for the sake of argument imagine a hostile force that thrives on lack of fitness. What would it say? It would adopt terms that glorify avoiding use of muscles, such as “labour-saving,” “convenient,” and “relaxing.” It would promote technologies that make it attractive to limit muscle use, such as cars, lifts, and lawnmowers to reduce exertion, and television and video games to encourage physical inactivity. It would encourage a set of social norms for dress and behaviour: in offices, for example, body odour is frowned upon, whereas nothing is said about auto emissions.

Much of the discussion about health issues fits into this category. There are endless debates about what is the cause of someone’s poor health, about treatments, about funding priorities, and about public health measures. A nefarious agent might promote lines of argument like the following:

- “Focus on heroic measures to save lives. That way disease can attract most of the energy while attention will be diverted from prevention, which can be much more effective.”

- “Blame illness on pathogens and try to zap them. That way the conditions that allow pathogens to flourish—in bodies and the wider environment—will be neglected.”

_Avoid or discredit official channels; instead, mobilise support_

For particularly dangerous and damaging problems, the emphasis should be on action rather than formal processes such as more research. In the early years of AIDS, citizen activists were impatient with the way researchers and policy-makers were addressing the crisis; they studied the issues themselves and campaigned for access to drugs (Epstein, 1996). Anti-smoking campaigners have used a variety of techniques, not relying on health authorities to act on their own (Chapman, 2007). For decades, peace activists have taken direct action, for example through
rallies, marches, boycotts, strikes and blockades; they haven’t relied on disarmament negotiations. Indeed, citizen action has often been what has pushed governments to negotiate, for example on nuclear weapons (Wittner, 1993–2003).

Resist intimidation and rewards
Doctors and patients need to be able to be courageous in the face of frightening diseases and to resist the blandishments of powerful groups that have a stake in health-damaging behaviours, from smoking to sedentary lifestyles. In the face of homophobia, gay activists took a leading role in demanding action on AIDS. Many medical researchers have resisted blandishments from tobacco companies to undertake smoking-sympathetic research. War resisters have remained committed to their views despite imprisonment and worse.

Conclusion
Powerful perpetrators of injustice commonly use five kinds of methods to reduce public outrage from their actions: cover-up, devaluation, reinterpretation, official channels, and intimidation/rewards. Given that these same sorts of methods are found in such a wide range of injustices, from sexual harassment to genocide, it seems worthwhile to explore whether the same framework can be used to provide insights into the struggle against disease and ill health. For the purposes of analysis, agency is attributed to diseases and behaviours hostile to good health.

This approach is most likely to be fruitful when analysing powerful perpetrators, with the resources to deploy the full range of methods. AIDS, smoking, and human violence are prime examples, with their death tolls of tens of millions.

There is a possible downside to attributing agency to diseases: it might reduce people’s sense of responsibility for their health. If the disease agent is scheming, this might suggest that one’s own actions are of less importance. On the other hand, if the disease is thought to be scheming, this might inspire extra efforts to outwit it.

Other approaches to diseases—for example, political economy and social medicine—can potentially provide many of the same insights as the scheming diseases model. Nevertheless, it is important to note that every way of looking at disease highlights some issues and downplays or obscures others. Conceptualising diseases as conscious agents highlights the value of thinking strategically, in particular taking into account the likely tactics adopted by opponents and their allies. The importance of this way of viewing diseases is illustrated by the rise of antibiotic resistance in
microbes. For decades, antibiotics were overprescribed, without much awareness that bacteria would evolve to become resistant. Thinking from the point of view of a hypothetically conscious bacterium intent on not raising concern about its plans to adapt to a new environment is a potential counter to complacency about the use of antibiotics.

For some sources of ill health, imagining that a disease agent is consciously plotting may not be so helpful. Assessing the value of this framework is an empirical matter; in other words, it is worth applying it to different health challenges and seeing what insights it offers, if any. A plausible expectation is that the framework is likely to be most helpful for sources of ill health that are low profile, develop gradually, target low-status groups, and are less susceptible to quick fixes. These features mean that outrage is less likely to be triggered, at least in the short term.

The role of outrage is crucial. When people are concerned, disturbed, angry, or otherwise emotionally aroused by a problem, they are more likely to push for effective action. Any disease or behaviour that triggers outrage is likely to come under scrutiny: pressure will be applied to various groups for action, including governments, medical researchers, companies, and others, depending on where a solution is thought to be found. This pressure, well directed, is a powerful tool for change. Analysis of the five methods of reducing outrage is a convenient way of capturing the diversity of ways a disease or damaging behaviour may avoid attention and action.

For anyone concerned about a health problem, mobilising concern—by the people affected, by researchers, governments or non-government organisations—is of central importance in developing a strategy. Methods for increasing public outrage thus are tactics within the strategy. More generally, when assessing health promotion campaigns, it is worthwhile paying attention to tactics for inhibiting or amplifying outrage.

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References


