

INVITED EDITORIAL

Balancing Asclepius and Hygeia: A personal reflection on health literacy and the “addictionogenic” modern world

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Abstract

Asclepius and Hygeia were two ancient Greek gods of health who inspired contrasting activities — medical intervention in disease and disorder for the former, prevention and health promotion for the latter. Modern Western Medicine is dominated by an Asclepian approach, which I was immersed in for much of my career in addiction medicine. However, soon after turning 50 and realising more clearly that the rising wave of addictive disorders in our communities was not going to be solved through treating individuals, I became involved in a project advocating for stronger regulation of alcohol with a group of colleagues. One outcome of this work was a successful defamation case yielding an extraordinary admission that “addictionogenic” businesses work sneakily behind the scenes to denigrate public health advocates who threaten their profit. Not only is stronger regulation of these businesses necessary to reduce harm, but we are now also in urgent need of even broader change in our economics and way of life to avoid the worst of environmental destruction. A better balance of Asclepian and Hygeian values will enhance the place of Medicine in bringing about a better world for all.

Many of us were motivated to pursue a career in Medicine out of an emerging interest in health, although perhaps our knowledge of health during those formative years tended to be overly idealistic. It certainly was for me. I viewed health as a categorical state of sparkling wellness physically, mentally, and spiritually.

This state of virtual perfection is actually close to the World Health Organization's definition of health as stated in its constitution: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹

However, this state does not correlate with Medicine in real life or indeed for life itself. Life for individuals is quite fragile even though there has been life on Earth for more than three billion years. Our individual lives are short. We grow up and then we grow down. We all exist for less than 120 years, and most of us for less than 90. Our personal “rebellion against entropy” is a lost cause.² The struggle against the second law of thermodynamics is never won by us as individuals. We all wear out; our health expires. It is in that arena of dysfunction and decay that we ply our clinical skills.

I have come to realise that a 100% state of wholeness is aspirational and have strongly valued the clinical pragmatism taught at medical school and subsequently practiced by most clinicians thereafter. Our jobs as medical practitioners often involve relieving symptoms and assisting people to improve their health from a particular low point that has been reached at the time of presentation, rather than curing disease or ensuring a person achieves an optimal state of health.

In my own specialty of addiction medicine, we are largely engaged in symptom relief, the second element of the famous saying French physician Edward Livingstone Trudeau (1848–1915) is credited to have formulated: “To cure sometimes, to relieve often, to comfort always.” Less than 10% of people presenting clinically will achieve a relapse-free recovery from their addiction problems, a transformation of their health and lives underpinned by stable continuous abstinence from

consuming the addictive product. However, despite periodic lapses and relapses, a majority will experience a significant improvement in their condition as a result of treatment.

At the turn of the century, in the lead-up to the findings of the human genome project, it was anticipated that addiction, like other complex disorders such as hypertension, rheumatoid arthritis and Type 2 diabetes, would have at its core a handful of primary genes explaining the underlying genetic vulnerability. It was imagined that clinical medicine could quickly deal with the scourge of addiction with the use of effective pharmacotherapies. This was a classic Asclepian vision.

Asclepius was the Greek god of medicine, whose practitioners believed their role was treating disease by correcting underlying imperfections that had come about in the individual as a result of “accidents of birth or of life.”³ In fact, there were two Greek gods of health and medicine, Asclepius and Hygeia. Hygeia inspired a contrasting approach to disease. Rather than promoting interventionism, Hygeian adherents took a broad view of health and considered it a positive attribute, which was the outcome of living well in a healthy environment. Western medicine clearly has been dominated by an Asclepian approach to health and disease, given the degree of time given to training medical students about interventions with diseased and disordered individuals rather than prevention and health promotion through a population-based lens. Doctors graduate primarily as individualistic chronic disease managers rather than broad-based health professionals.

In the addiction field the hope for Asclepian pharmacological “patches” that would right the addiction defect at a molecular level soon changed to pessimism in the early 2000s. It became obvious that complex disorders remained truly complex and associated with hundreds of genes, each contributing minutely to the overall genetic impact and interacting with each other as well as with multiple environmental factors.

It was at this time in my career, around 2005, that I had a public health epiphany. I had spent twenty years in the clinical trenches by that stage, treating people with addiction and co-existing problems, and now the genetic complexity revealed by the human genome project disappointingly had not produced the simple and powerful interventions that had been anticipated. Quite quickly environmental factors began to look less complex than they perhaps once had, and I began to realise with a fresh outlook that the setting in which we live our lives and the style in which we live them has an enormous impact on our health and wellbeing. Furthermore, I saw more clearly how changes in the environment can have enormous impacts on our lifestyles and therefore our individual health. My attention subsequently turned away from pharmacogenetic solutions to addiction problems and towards environmental factors that both initiate and maintain the life-destroying nature of addiction. I added a Hygeian strategy to my medical work.

One environmental factor stood out at the time and has continued to stand out like an ugly beast — “addictionogenic” industries — businesses that deal in addictive products. These are those “moreish” products that have the capacity for leading to compulsive habits in people, stimulated and encouraged by these industries’ brainwashing marketing. “Addictionogenic” industries have no apparent concern for their customers except to prey upon them and ensnare them to become habitual consumers of their products for the sole purpose of profit making. I began to teach that the most important thing known about addiction is that “behind every addiction is an industry scheming to make you and your children their favourite customers for life.”

Just how aware citizens are of the influence that “addictionogenic” industries have on them is not a well-researched area, in the same way that research is lacking into how “addictionogenic” industries exert their influence on populations and governments.⁴ However, it is likely there is low health literacy amongst significant proportions of the population, evidenced by the large numbers of people who continue to overconsume addictive products, presumably not being fully aware of the health risks. A pertinent exception to this is now tobacco. Strong regulation of the industry, in particular the banning of all marketing of tobacco, has resulted in wide population awareness of the link between tobacco smoking and lung cancer, a key aspect of health literacy underpinning the reducing rates of cigarette smoking over the past 30 years. In contrast, the awareness of the health impacts of alcohol and junk food remains low in the face of heavy marketing of these products as fun and harmless. A recent review of 32 studies confirmed this in terms of low levels of knowledge across the world about the carcinogenic nature of alcohol.⁵

Becoming aware myself of the fundamental influence of industry in driving consumption induced a strong motivation to try and do something about it in New Zealand. I had turned 50 and, entering a final stage of my career, I did not want to end up having spent my whole career dealing with the victims of poor public policy. I wanted to try and help change the public policy that was underpinning our “addictionogenic” society. The most obvious drug addiction that was not being dealt with at that time was alcohol, given the excellent public health moves that were already underway for tobacco.

I teamed up with colleagues, originally Professor Jennie Connor, a public health specialist from Dunedin, and Dr Geoffrey Robinson, a general medicine and addiction medicine specialist from Wellington. A little later on, general practitioner and addiction specialist Dr Tony Farrell from Tauranga and Dr Sam McBride, a Wellington-based psychiatrist and addiction medicine specialist, joined us to initiate a medically-led advocacy group in 2009 known as Alcohol Action NZ. We focused on scientifically supported public health measures, drawing from the World Health Organization’s sponsored publication, *Alcohol: No Ordinary Commodity*.^{6,7} From this publication we formulated a “5+ Solution” to the national alcohol crisis. It represents a pushback to the excessive commercialisation of alcohol that is facilitated by a weakly regulated marketplace.

THE 5+ SOLUTION

1. Dismantle the marketing
 2. Increase the price
 3. Limit accessibility
 4. Raise the purchase age
 5. Strengthen drink-driving countermeasures
- PLUS: Increase treatment opportunities for heavy drinkers

At the same time, the then Labour-led government contracted the New Zealand Law Commission to undertake a major review of the liquor laws, led by Sir Geoffrey Palmer. A final report was produced in 2010 to a National-led government.⁸ The report had the 5+ Solution well represented in its major recommendations; perhaps not surprisingly, because the Law Commission took a strong evidence-based approach to its review. The subsequent government response was therefore shocking to us because none of the major recommendations were taken up by the government, which cynically introduced a bill to Parliament titled the Alcohol Reform Bill — a bill with no significant reforms in it. We were given a rather painful lesson about how strong the lobbying power of “Big Business” is on the governance of the country. The way the government managed the political process to see off the threat the Law Commission’s final report posed to the profits of the alcohol industry starkly demonstrated the degree to which money trumps public health in our contemporary neoliberal-dominated economy.⁹

However, “addictionogenic” businesses do not just prey upon the public with their marketing and lobby governments behind the scenes. It has been known for decades they also have a strategy of identifying those who dare to question their tactics and making active attempts to silence them.¹⁰ But could this happen in New Zealand?

It took one of New Zealand’s foremost investigative journalists, Nicky Hager, to uncover such shenanigans here.¹¹ The process Hager revealed involved the alcohol, junk food and tobacco industries. The central character was Carrick Graham, a PR consultant with a long history of working for the tobacco industry who was also paid hundreds of thousands of dollars by the Food and Grocery Council led by CEO Katherine Rich. The Council’s members are dominated by the alcohol, ultra-processed food, and tobacco industries.

Graham had a bag of dirty PR tricks he used for his clients. This included writing derogatory articles about myself, Boyd Swinburn, and Shane Bradbrook, three public health advocates who had each been active in the media calling out those three respective “addictionogenic” industries about the harm their products were inflicting on citizens. Graham then paid Cameron Slater to publish the articles on his blog, *Whale Oil*, which was at the time New Zealand’s most frequently visited blog. Graham then added snide and defamatory comments to the published articles using various fake names.

With the assistance of a top-class legal team, the three of us mounted a defamation case against the Food and Grocery Council, Rich, Graham, and Slater. The Food and Grocery Council and Rich settled several months prior to the court case without admitting liability, and Graham capitulated following a dramatic first morning of the trial with an extensive apology. The apology included a vital admission: “I wish to apologise publicly for the untrue statements I have made about the plaintiffs... I did so as part of my business and in order to advance the interests of industry.” These words provide definitive evidence that smearing of public health advocates by Big Business has been a feature of the commercial world here in New Zealand, a social dynamic all doctors would do well to be aware of.¹² The outcome of this trial means all doctors undertaking such advocacy work in the future are less likely to encounter such dirty tactics.

The negative influence of “addictionogenic” industries will continue to impact on human health until they are each brought under greater control through strong regulation. The erosion in health includes the misery of enslavement experienced by severely addicted individuals and across the population, the secondary impacts on physical, mental

and interpersonal health from the consumption of these products by both addicted and non-addicted individuals. In the contemporary world, addictive products have expanded dramatically to include a tantalising range of highly accessible, electronically-based consumptions and engagements; particularly gambling, gaming, pornography, online buying, online communications and most recently, nicotine vaping, driven by the commercialisation of an effective nicotine replacement therapy.

The tobacco reforms in recent years have shown the way forward for stronger reform of alcohol and junk food industries, as well as those peddling new behavioural addiction products. All of these industries currently have a grip on governments that is impervious to scientific reasoning. Therefore, we can expect to see continuing excessive suffering, morbidity and death associated with these various products until courage is shown at government level to introduce stronger regulation. Negative health impacts have recently been identified as being particularly prevalent in those populations such as the United States of America that follow a highly independent, individualised ethos rather than a communal, supportive approach to social life.¹³

However, there is a wider context to consider now as well.

It appears we are entering an unprecedented and dangerous phase of the human odyssey, a phase that threatens not only our health but the integrity of our current civilisation. The presence of *Homo sapiens* on Earth, which began some 300,000 years ago, was associated with little impact on the Earth's natural cycles for the vast majority of that time. However, population growth and energy consumption has now accelerated to such an extent that the natural world we are an integral part of and which we have wastefully extracted so much from is changing into an increasingly harsh and toxic environment. This polluted environment, risking catastrophic ecosystem collapses and climate change, will be one within which we will increasingly struggle to live at the level of security and comfort that has been such a feature for the rich countries of the world, including New Zealand. It is important to note these rich countries are responsible for the majority of pollution and damage through the pursuit of economic growth.¹⁴ Tragically, this destruction has intensified over the past 40 years, through neoliberal turbocharging of capitalism, at the very time when the warnings about "limits to growth" in the early 1970s needed to be heeded.¹⁵ Our pursuit of pleasure and comfort in the "addictionogenic" modern world is being found out. Furthermore, the system underpinning this consumptive hedonism — "growthist" capitalism — is now being exposed as well.¹⁴ The compulsive and addictive pursuit of economic growth through exploitation of natural resources and human slave labour has itself become like a systemic mega-addiction that is now threatening the lives of all within it. Interruption of this deeply dysfunctional economic system is sorely and swiftly needed.

Optimistic thinkers are beginning to see a fundamental change of heart for humankind on the near horizon. They view the current global crises as exactly the jolt humanity needs to move towards a sustainable, connected, equitable, nurturing, and peaceful world.^{2,14,16} Humanity could be quickly reaching a "rock-bottom" state, similar to that of an individual who is finally brought to their knees by the unavoidable impact of their alcoholic damage to themselves and others. The threat of environmental catastrophe could very well be bringing us all to our senses, from which a recovery path can be forged for a simpler yet happier way of life.

Close to home has been the sterling work of colleagues in the health professional group Ora Taiao: New Zealand Climate and Health Council in advocating about the association between climate and health.

In conclusion, life on Earth will continue to include individual suffering, and the underlying diseases and disorders will be alleviated and occasionally cured by the interventions of caring, scientifically-based doctors and other health practitioners — Asclepius in action. However, it is my hope that the Medicine of the future will more strongly encompass a Hygeian outlook as well — a health promoting, environmental perspective — and that doctors will increasingly devote

a significant proportion of their time to improving the health of the globe through work and advocacy for the greater good and a better world. Finally, I hope that the doctors of the future will have this greater balance in their careers from the outset, rather than discovering it later in life as I did.

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About the author

> Professor Doug Sellman has been fascinated by health since teenage years. He is now in the process of retirement from the University of Otago, having been employed since 1987, promoted to a Chair in Psychiatry & Addiction Medicine in 2005, and was Director of the National Addiction Centre from 1996-2017. His retirement plans include a small private clinical practice, continuing engagement in alcohol law reform and promotion of evidence-based fasting, some writing, and further reflection on what constitutes a worthwhile life.

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