Healthy by law: the missed opportunity to use laws for public health

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Health is the result of biological and social determinants; both are important. Nature dictates the laws for biological determinants; people create the laws for social determinants. Nature's laws are hard to discover and are eternal whether or not they suit humanity; people's laws are easily written and can be changed at anytime to suit humanity better. So why is it that the public health community, which expends much effort and expense probing natural laws, places negligible emphasis on collection, analysis, and making greater use of the world's public health laws?

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Laws are arguably the ultimate public good for health; without laws, the health professions would not be licensed, public health systems would be rudimentary, many medical and consumer products would be unsafe, the natural environment would be insanitary, social benefits would be arbitrary, and physical violence against people would be unpunished. Yet laws are not always a force for good; bad laws may institutionalise social disadvantage in ways that damage health, or organise health systems in ways that sap their performance. Identification of the laws that are most beneficial to health and globalisation of knowledge of them is, therefore, an intervention from which all countries could benefit.

In this Viewpoint we give examples of creative or promising health laws, review the sources of health laws and explain why these sources are insufficient, and argue for a global project of evidence-based analysis and knowledge transfer in health laws. We do this in the belief that if effective public health laws were shared more widely, it would help to solve some of public health's deepest challenges.

Rwanda's experiment with health insurance for its citizens comes very close to WHO's longstanding goal of health for all. 85% of Rwandans subscribe to an inexpensive public insurance scheme called the *Mutuelles de Santé*.[1] For about US$2 annually, subscribers are covered for services including consultations, antenatal and peripartum care, generic drugs, hospital-based malaria treatment, and some tertiary services. Rwanda's success is underpinned by a law for the "creation, organisation, functioning and management of health mutuals".[2] Crucial to the law is Article 33, which makes it mandatory for all Rwandan residents to have health insurance. Kalk and colleagues[3] credit this universal insurance coverage, plus subsidised insurance premiums for the poorest people, with increasing health-care use, reduction in infant mortality, and improvement in treatment completion rates for tuberculosis. If Rwanda can achieve greatly improved health care, despite its tragic recent history, then surely there are lessons for other low-income countries. (Or perhaps high-income countries too; America's courts are now weighing whether to invalidate that country's new law on universal insurance coverage.)

Brazil's experience with transparency of medical supply pricing is a legal intervention consistent with the WHO Director-General's priorities to harness information for health and strengthening health systems. In the late 1990s, Brazil's Ministry of Health became concerned that federally-funded health facilities were paying too much for drugs, medical gases, and other supplies. The Minister of Health therefore signed a *portaria* (ordinance) requiring large public hospitals to publish the prices that they paid for medical supplies on the ministry website.[4]

Nowadays, Brazil's information system is known as the *Banco de Preços em Saúde* (price databank in health), and transparency has had positive effects. Health system managers, informed of the prices that their peers paid, drove prices downward; in a nationwide study,[5] less than 7% of medicine purchases occurred at a price exceeding the average in the *Banco* at the time. Furthermore, in a largely decentralised health system, centralisation of price information allows auditing and, in at least one case, enforcement action against overpayment for drugs.[6] In view of the evidence of large mark-ups preventing access to essential medicines in many countries[7] the lessons are obvious.

In Europe, several laws attempt to shift dietary habits and avoid the diseases of affluence. In Scotland, a 2008 regulation mandates in unprecedented detail standards for foods and drinks served in public schools: confectionery and sugary drinks are prohibited, oily fish must be served at intervals, deep-fried foods can be served three times per week but cannot contain excess saturated fat, and vitamins and energy have to conform to prescribed limits.[8] In Denmark, a 2003 Executive Order prohibits the sale of foodstuffs in which the oils or fats contain more than 2% industrially produced trans fatty acids.[9] In Latvia, a 2006 law passed in the face of sustained opposition from the food industry banned the sale of soft drinks containing additives, such as certain colours, sweeteners, and preservatives, in schools.[10] Time and careful assessment will tell how successful these laws are, but there is reason to expect at least some positive changes.

WHO published its first *International Digest of Health Legislation* in 1948, with editions appearing quarterly thereafter. It inherited this duty from the Office International d'Hygiene Publique, which has collected,

translated and reproduced the health-related laws of its member states since 1909. For $1·25 the *Digest* gave legislators and researchers in the pre-internet age a view on the health laws of other countries. The first edition of the *Digest* set a high bar for eclecticism; it excerpted laws concerning the registration of Australian nurses, hygiene in British schools, medical practitioners in Southwest Africa (today Namibia), and French physicians' duties in regard to social medicine.[11]

Nowadays however, the *Digest* is published only electronically, and much of the content is incomplete or out of date. Although the 1946 WHO Constitution expressly obliges member states to "communicate promptly to the Organization important laws [and] regulations…pertaining to health",[12] there is no adequate system inside WHO to aid compliance, which remains poor. Breathing new life into the *Digest*, rather than letting it wither in the face of the WHO's profound budgetary problems, is essential.

Ironically, in the internet age, access to health laws is hardly better than it was when the *Digest* began publishing more than 60 years ago. Not all countries put their current laws online, or do so only in their official language. Free databases such as the Legal Information Institutes, or the American Government's Global Legal Information Network, often have incomplete collections, particularly for low-income countries.[13] Even when the effort is made, the information can be outdated. In Namibia, online laws were last updated 6 years ago. In China, a well resourced and technologically advanced country, few current laws are available in translation. Even such an important law as China's 2009 amended patent statute in favour of drugs for public health emergencies is inaccessible to much of the global community; the English translation on the government's website is a decade old.

Why does this scarcity of information matter? Without reliable sources, good laws go unnoticed. All the laws that we cite as worth copying seek to bring about substantial, evidence-based changes to important social determinants of health. Yet none is easily accessible. None is indexed in WHO's *Digest*. We could find none on the relevant national ministry of health website, although if one knows about the laws already one can eventually find them on other governmental websites. Even then, only Rwanda's Government website has an official English translation.

The tragedy is that these and other worthwhile laws are consigned to near invisibility, when internationally they should be more widely studied and copied. Doing so could resolve many present challenges in health care. For example, Canada does not have a system of medicine price transparency approaching that in Brazil, although drug prices are a major political issue in Canada. Many other countries have excess mortality caused by trans fatty acids, but have no measures such as those in Denmark.

As with any knowledge, laws are only helpful if people are aware of them. In its earlier, stronger years, the *Digest* compiled and disseminated many health laws—not quite all, although that was the ambition—so that one could study and compare their strengths and weaknesses. Policy makers could more easily take stock of the best practices in foreign laws, researchers could more easily examine whether different legal approaches were associated with improved health outcomes, and legislators could take inspiration from or copy those laws. This process of international legal mimicry is inconspicuous but valuable. There is no requirement to pay royalties or to give acknowledgment when copying laws, which is perhaps why law reform is undervalued as a method of health system or service innovation. But like other knowledge that cannot be patented, such as surgical methods, the benefits of advancement are real even when unsung and unpaid.

Our argument will have opponents. Some dislike health laws for creating a so-called nanny state.[14] This epithet, however, is meaningless without a rule to explain, for instance, why dietary laws to encourage healthy eating are an unwelcome interference, whereas agriculture subsidy laws to farm unhealthy foods are not. Fear of the nanny state accusation is perhaps why public heath knowledge is translated mostly into guidelines, recommendations, or exhortations, but only rarely laws that bind. Has the public health community lost its nerve when it comes to law?

Previously, when WHO's *Digest* both stimulated and testified to intellectual curiosity about the law, the introduction of evidence-based legislation—for salt iodisation,[15] water fluoridation,[16] and seat belts,[17]—faced opposition but was successful in reducing mortality or morbidity. Recently, WHO's *Framework Convention on Tobacco Control* stimulated legal thinking, and resulted in effective legislation for smoke-free environments[18] and against tobacco advertising.[19]

A century after the introduction of the WHO's *Digest* and its Office International d'Hygiene Publique forerunner, the relation between the health and legal disciplines should be renewed. We call to launch the *Digest 2.0*, which can continue as a global repository of health legislation, but add interactive and learning features, such as a web forum to exchange ideas and practical experience (eg, not to introduce an indoor smoking ban in winter and penalise the owners of establishments for not enforcing it). *Digest 2.0* could also include a Wiki-like project area for commenting on existing health laws, or collaborative, open drafting of new health laws. Open-source encyclopaedias and software are already written in this way, suggesting that new health laws could be too.

We believe that *Digest 2.0*'s empirical approach can revolutionise health promotion through law. Currently, efforts might suffer from being too academic, since model laws are very seldom followed up to enactment (<7% of cases, in the USA[20]), or laws' effectiveness could be unrecognised by scientific methodologies (the

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confounding variables are many, and controlled trials are all but impossible). Instead of treading these exalted and highly academic paths to change, *Digest 2.0* is mundane—merely a global collection of health laws, and an electronic gathering place to discuss and to share ideas. Simple empiricism and pragmatism, we believe, can go a long way toward harnessing law for health promotion.

How can the *Digest 2.0* vision be implemented? Editorially, an independent network of WHO collaborating centres, housed in law and medical schools, or research institutions, or justice and health ministries, could function as regional sentinel sites, gathering laws in accordance with criteria that select for those affecting health or its social determinants. Administratively, a central secretariat could coordinate the editorial and database management functions, and support the collaborating network. Financially, private philanthropies and government donors could provide funding for the independent network and WHO, whether under the rubric of health system strengthening, or advancing the rule of law. An overall budget of about $1 million per year would suffice.

Now that global financial crisis is a reality, few investments would yield larger health improvements than a project to better translate public health knowledge into law. It deserves to be tried.

Contributors

AA provided the idea and the first draft; TP, JW, and MMcK provided comments on the draft. TP provided information about the *Digest* and its administration inside WHO. AO posed a query, in the course of another research project, to AA which led to discussions and agreement that the *Digest* was in need of updating. MMcK provided extensive comments on sources of laws in Europe.

Conflicts of interest

All the authors have worked with WHO, its expert committees, or collaborating centres in various capacities. TP's participation is in a personal capacity and views expressed do not represent the official position of WHO.

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