Global governance, international health law and WHO: looking towards the future

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Abstract The evolving domain of international health law encompasses increasingly diverse and complex concerns. Commentators agree that health development in the twenty-first century is likely to expand the use of conventional international law to create a framework for coordination and cooperation among states in an increasingly interdependent world. This article examines the forces and factors behind the emerging expansion of conventional international health law as an important tool for present and future multilateral cooperation. It considers challenges to effective international health cooperation posed for intergovernmental organizations and other actors involved in lawmaking. Although full consolidation of all aspects of future international health lawmaking under the auspices of a single international organization is unworkable and undesirable, the World Health Organization (WHO) should endeavour to serve as a coordinator, catalyst and, where appropriate, platform for future health law codification. Such leadership by WHO could enhance coordination, coherence and implementation of international health law policy.

Keywords Treaties; International law; Legislation, Health; World health; International cooperation; Intersectoral cooperation; World Health Organization (*source: MeSH, NLM*).

Mots clés Traités; Droit international; Législation sanitaire; Santé mondiale; Coopération internationale; Coopé

Palabras clave Tratados; Derecho internacional; Legislación sanitaria; Salud mundial; Cooperación internacional; Cooperación intersectorial; Organización Mundial de la Salud (*fuente: DeCS, BIREME*).

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Introduction

The planetary context of development has profound implications for global public health and, concomitantly, international health law — particularly conventional international treaty law. Today, the burgeoning field of international health law encompasses increasingly diverse and complex concerns, including aspects of biomedical science, human reproduction and cloning, disability, infectious and noncommunicable disease, and safety control for health services, foods and pharmaceuticals (1, 2). Furthermore, international health law is increasingly recognized as integrally linked to most other traditionally defined realms of international legal concern.

Despite growing awareness of the capacity of conventional international law to complement national action and other forms of international collaboration, and serve as a dynamic tool for multilateral health cooperation in an increasingly interdependent world, little scholarly consideration has been paid to how twenty-first century global health lawmaking should be managed from an international institutional basis. With a plethora of international organizations sharing lawmaking authority for global health and with other health actors engaged in the international legislative process, international lawmaking shows potential for fragmented, uncoordinated and inefficient sprawl.

This article examines the forces and factors behind the expansion of conventional international health law and argues that the World Health Organization (WHO) can help enhance

the development of rational and effective international health law. Conventional international law is the primary international legal vehicle by which international organizations can advance international cooperation to improve global health status and reduce the global burden of disease, so the article focuses on treaty law rather than other sources of international law.

The evolution of international health law Globalization and the expanding domain of international health law

Globalization is the process of increasing economic, political and social interdependence, and global integration that occurs as capital, traded goods, people, concepts, images, ideas and values diffuse across national boundaries (3). It has critical implications for public health and global public health governance (4). Contemporary globalization encompasses many "interconnected risks and opportunities that affect the sustainability of health systems worldwide" (5). The significant impact of globalization on public health has been examined in a special edition of the *Bulletin of the World Health Organization* (6) and elsewhere (7–13).

As a consequence of globalization, governments must turn increasingly to international cooperation to attain national public health objectives and achieve some control over the transboundary forces that affect their populations. The widespread influence of globalization has increased the need for new frameworks of international collaboration, including

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conventional international law, to address emerging opportunities for and threats to global health and improve the health status of poor states that have not benefited from globalization — the so-called "losers" of globalization (14–17). The burgeoning literature that analyses health and international health law as global public goods testifies to the significance of the globalization of public health for future international cooperation, including conventional international law (18, 19).

Globalization also has an impact on the development of international health law, because increasing global integration compounds exponentially the public health implications of other contemporary developments strongly connected with health status. For example, rapid worldwide dissemination of recent advances in scientific knowledge and technology has propelled international agreement and action by providing the evidence and tools needed for effective national and international action through a wide range of treaties including those concerned with the safety of chemicals, pesticides and food and the disposal of hazardous wastes. At the same time, the use of environmentally damaging technologies has contributed to the codification of international law by propelling global health threats such as land degradation, marine pollution, depletion of the ozone layer and climate change. Furthermore, continuing scientific progress and developments generate ongoing global debate on codifying new international commitments, including global bans on certain novel technologies, such as reproductive human cloning (20, 21).

Issue linkage

Globalization has also hastened the growth of international health law by enhancing contemporary appreciation of the interconnectedness of health and other contemporary global concerns. International legal scholars have traditionally compartmentalized and treated substantive subject matters such as human rights, environmental protection, health and arms control, as discrete, self-contained areas with limited connections (22). Scholars of international law have only recently identified and debated the relationship between different subjects of international law, such as trade and human rights, and human rights and environmental protection (23).

As a consequence of "issue linkage" international health law is increasingly understood to be central to other traditional legal realms, including human rights, trade, environmental law, international labour law and arms control. As a consequence, health is emerging as a central issue of multilateralism. For example, the expansion of international trade means the link between health and trade in a number of the treaties of the World Trade Organization (WTO) is becoming increasingly evident in areas including access to medicines, food security, nutrition, infectious disease control and biotechnology (24). In addition, health has been linked to international peace and security issues in multiple contexts, including those of HIV/AIDS, and biological and other weapon systems.

Issue linkage involving coordinated action on health and other traditionally distinct substantive concerns has also become increasingly commonplace in contemporary codification efforts. For example, sustainable development encompasses the idea of intersectoral coordination of environmental, economic and social policy to improve the human condition (22, 25). The notion of sustainable development informed the 1992 Rio Declaration on Environment and Development and

has been elaborated in a number of international instruments, including the conventions on Climate Change and Biological Diversity. Broad intersectoral action (on matters including trade, agriculture, education and the environment) to improve global health status is also at the core of recent intergovernmental debates surrounding the proposed WHO Framework Convention on Tobacco Control (FCTC).

International law and international health development

As nations at all levels of development increasingly recognize the need for frameworks for coordinated action on increasingly complex, intersectoral and interrelated global health problems, international health development in the twenty-first century will be likely to include the expanded use of international law. It is important to understand that conventional international law is an inherently limited mechanism for international cooperation and that the international legislative process suffers from numerous defects — including challenges to timely commitment and implementation — although considerable advances have been made in the last few decades (26). The extent to which international agreements are effective — and under what conditions — is a continuing source of theoretical fascination and dispute among scholars of international law and relations.

Despite their limitations, treaties can be useful for raising public awareness and stimulating international commitment and national action. Conventional international law can provide a legal foundation for international health commitments, and it can include institutional and procedural mechanisms to encourage compliance with international norms by, for example, enhancing the capacity of states to implement legal obligations. Such mechanisms established in international agreements can include financial and technical assistance, information exchange, scientific research and surveillance, as well as treaty supervision and dispute resolution.

Global health governance and its limitations Contemporary global health governance

In recent years, the number of intergovernmental organizations and other actors in the domain of health and other fields of international relations has grown dramatically. For example, as a consequence of the growing diversity of international law related to public health, a broad array of intergovernmental organizations now contribute to the elaboration of international health law (2). These include the United Nations and its agencies, organs and other bodies, and international and regional organizations outside of the United Nation's system. An increasing number of these intergovernmental organizations with express lawmaking authority and relevant mandates have served as platforms for the codification of international law related to health; others have influenced contemporary international law in this field.

In recent years there has also been a proliferation of private-sector actors in international health. These include a wide range of nongovernmental agencies, foundations and forprofit organizations — such as the pharmaceutical industry — with a powerful influence on international health policy, including global lawmaking. Contemporary international health cooperation is also characterized by innovative "inter-

national health coalitions" that involve diverse global health actors (18). Particularly notable is the recent proliferation of health research networks and public–private partnerships for health (18, 27).

The vast array of international health actors actively involved in global health cooperation, combined with wide-spread criticism of the United Nations and its specialized agencies, has led some commentators to suggest a diminishing role for intergovernmental organizations in global health governance. Some have emphasized a "power shift" from intergovernmental organizations to private-sector actors and the innovative health coalitions described above (18).

However, it can be argued that increasing global health interdependence requires multilateral organizations to play a greater role in international health cooperation rather than a lesser one (7) — at least in the realm of international health lawmaking and implementation. Generally, as global integration progresses, intergovernmental organizations with lawmaking authority will provide an increasingly important mechanism through which states can develop and implement public policy. Private-sector actors and international health coalitions cannot displace international organizations as institutional focal points for global debate and codification of binding norms by state actors.

Institutional overload

The proliferation of multilateral organizations with overlapping legal authority raises concern that the burgeoning field of international health law may develop in an unplanned and inconsistent manner.

The experience of international environmental law over the last 20 years provides an important lesson for international health lawmaking efforts and global health governance. Despite notable achievements in this field, the absence of an umbrella environmental agency has led to uncoordinated lawmaking activity by many intergovernmental organizations and, at times, counterproductive and inconsistent results (28–30). Keohane & Levy argue that global environmental governance suffers from "institutional overload": so many treaties and organizations relating to the environment exist that the capacity of states to participate in and comply with them all has been exceeded (31). The inefficient management of global environmental lawmaking has, in part, led numerous commentators to call for the creation of a new public international organization — the "World Environment Organization".

Institutional overload and inconsistent standard-setting are already emerging in international health. For example, dramatic advances in biomedical science — a realm with vast implications for global public health — recently triggered numerous regional and global initiatives (21).

As the global standard-setting endeavour in biotechnology has moved from non-binding declaratory resolutions to codification of international law, there has been growing evidence of fragmentation, duplication and inconsistency. Implications of the biotechnology revolution for biodiversity are addressed in provisions of the United Nations Environment Programme's Convention on Biological Diversity and Biosafety Protocol. The WTO's Convention on Trade-related Aspects of Intellectual Property establishes standards for protection of intellectual property applicable to biotechnology; several other WTO agreements also apply to biotechnology-related trade disputes. The United Nations Education,

Scientific and Cultural Organization has announced the "possible preparation" of an "international instrument on genetic data" and a "universal instrument on bioethics" as a follow-up to its Universal Declaration on the Human Genome and Human Rights (32); it is unclear whether these proposed instruments would be designed as binding international law. Most recently, in December 2001, the United Nations General Assembly established an Ad Hoc Working Group of the Sixth Committee to consider an international treaty to ban reproductive cloning of human beings (20).

International law in biotechnology is thus emerging in a fragmented and amorphous manner in which intergovernmental organizations with overlapping jurisdictions are addressing sector-specific aspects of the genetics revolution in a piecemeal and incomplete manner. The splintered legal process exacerbates uncertainties about the legal regime that governs biotechnology. This is partly because standards adopted under the auspices of different international organizations are being developed in increasingly contradictory ways, including conflicting legal standards related to intellectual property (33, 34). The experience of international lawmaking in biotechnology strongly suggests that the current decentralized organizational framework is ill-equipped to deal with international legal aspects of the massive public health implications of new genetic technologies and other realms of global public health.

Taking the agenda forward: WHO and international health law

An international health law mandate for WHO: coordination and collective management

A larger role for WHO, involving coordination of the international health law enterprise, is essential for rational development and effective implementation of international health law policy. Recent codification efforts in biotechnology and lessons from the last several decades of global environmental governance strongly suggest that international health lawmaking requires more effective institutional coordination than exists in the current decentralized organizational framework. More effective collective management is also needed because the phenomenon of "issue linkage" in contemporary lawmaking could compound the problem of contradictory international health law rules emanating from different organizations with overlapping legal authority. In international law generally, the question of issue linkage is increasingly understood to concern the allocation of legal jurisdiction among international organizations (35).

Coordination does not imply consolidation of all international health lawmaking functions under WHO's auspices; full centralization is neither possible nor desirable. As we have seen, the domain of international health law is rapidly encompassing progressively more diverse and complex concerns, and although health comes increasingly within the context of contemporary codification efforts through issue linkage, not all such treaty efforts fall squarely within WHO's core mandate. In addition, other international organizations with overlapping legal jurisdiction may resist diminutions of their respective jurisdictions in support of full centralization under the auspices of WHO. Governments too are unlikely to grant WHO such broad jurisdiction or to provide it with the resources needed to implement such a mandate.

Further, not all aspects of decentralization of international lawmaking are dysfunctional. The growing complexity and interconnectedness of global health problems suggest that certain situations will require moving beyond the "single instrument and single institution" approach, while simultaneously avoiding excessive fragmentation and lack of coordination. Decentralization provides the conditions and generates the opportunities for specialization, innovation and dynamism. For example, some existing international organizations, such as the Food and Agriculture Organization of the United Nations and the International Atomic Energy Agency (36), have developed substantial technical expertise and will be a considerable resource for future global health legal cooperation (29).

WHO can provide leadership and promote more coherent and effective development of international health law by serving as coordinator, catalyst and, where appropriate, platform for important international health agreements. WHO has a unique mandate to provide leadership and promote the rational and effective development of international health law. As the largest international health organization, and one of the larger specialized agencies of the United Nations, WHO has far-reaching responsibilities to address global public health based on responsibilities assigned by its constitution and its affiliation with the United Nations (14, 37). The general idea that WHO should promote system-wide coordination is not new to global health governance literature, but it deserves more attention in the context of international health lawmaking because of the implications of a leadership vacuum in the current decentralized framework.

WHO's leadership in coordinating codification and implementation efforts among the diverse global actors actively engaged in health lawmaking could, in theory, foster the development of a more effective, integrated and rational legal regime and, consequently, better collective management of global health concerns. Expectations must be realistic, however. Effective coordination of international legal efforts cannot be assured by WHO or by any other intergovernmental organization. Efficiency of international standards and consistency among different treaties and legal regimes may not always be a priority among states codifying international commitments or the wide array of global health actors that influence the international legislative process. In addition, WHO has no binding authority over the activities of other autonomous intergovernmental organizations.

Although effective coordination of the increasingly complex international health law cannot be guaranteed, it should be pursued with reasonable expectations and recognition of the limitations of organizational action. This article cannot fully describe the strategies WHO could use to promote rational management of international legal developments, but several starting points can be mentioned.

Agenda-setting and promoting dialogue

WHO can catalyse more effective and coordinated international health cooperation by contributing to the agenda-setting that is clearly needed for international health law. It can establish a key role for itself in catalysing international agreements and national action by, among other things, institutionalizing a process of identifying priority issues for international legal cooperation and promoting them among relevant constituencies. By identifying priorities for international legal action and coordinating relevant

public health and legal information, WHO can serve a critical role and meet an essential need by educating governments, other global health actors and the public about global health issues ripe for legal consideration.

WHO can also promote effective consideration, better collective management and development of international legal matters by actively participating, where appropriate, in the increasing array of treaty efforts with important implications for global public health initiated in other forums. For example, in December 2001, the General Assembly of the United Nations established an Ad Hoc Committee to consider proposals on a Comprehensive and Integral International Convention on Protection and Promotion of the Rights and Dignity of Persons with Disabilities. In its first session, the Committee emphasized the human rights framework necessary to promote the full participation of persons with disabilities in economic and social life. WHO can make an important contribution to this codification effort, and the development of international health law generally, by informing and educating state delegations participating in negotiations about relevant public health and legal information within its domain. Such information could include details of the global incidence of disabilities, and public health considerations involved in human rights issues of accommodation and access. WHO may also be able to broaden the dialogue by bringing forth information and stimulating global public opinion on aspects of prevention, treatment and rehabilitation that are ripe for international legal action.

Given its position as a highly visible international organization, WHO has the opportunity to play a pivotal role in setting the international health law agenda and, thereby, to contribute to the coherent development of international health law. Through these and other measures, WHO may promote global dialogue, build effective partnerships and stimulate effective, and perhaps more coordinated, governmental and intergovernmental action.

Platform for treaty negotiations

WHO can also lead global health cooperation by serving, where appropriate, as a platform for codification and implementation of agreements with important public health law implications. The experience of environmental law and biotechnology suggests that critical public health issues of global legal concern may not be addressed in a timely and effective manner and may be subject to excessive institutional fragmentation, substantial overlaps, unrecognized linkages and fundamental gaps in the absence of a legislative role for WHO. WHO is the only public international organization that brings together the institutional mandate, legal authority and public health expertise for the codification of treaties that principally address global public health concerns.

Given the jurisdictional problems raised by issue linkage and overlapping legal authority, the difficult question is which types of issues will benefit from codification under WHO's auspices. This needs to be decided on a case-by-case basis and always will be debatable. WHO is, however, the appropriate institutional focus for codification efforts related to issues, such as international tobacco control, that overlap with other realms of international concern (such as human rights, trade, customs and the environment) but are central to the public health mandate of WHO and are beyond the core mission of another public international organization.

Mandates and capacities

An "overarching lesson" in global governance is that "the mandate should fit the organization and vice versa" (29). It is useful to ask therefore whether WHO fits the international health law leadership mandate proposed in this article.

A decade ago, I made the case that, although WHO had the technical and legal capacity to serve as a platform for codification efforts to address increasing global health interdependence, it was unclear whether it had the necessary organizational capacity. Despite dramatic advances in international law made by numerous intergovernmental organizations since the founding of the United Nations, WHO traditionally neglected the use of international legislative strategies to promote its public health policies. WHO's "traditional conservatism" about the use of legal institutions was attributed largely to its cultural predispositions — its organizational culture (14).

Some observers continue to subscribe to this concept of WHO conservatism and marginalize the role of WHO in international law, but it is unclear whether this analysis is still relevant. Evidence of organizational behaviour that contradicts WHO's traditional culture is accumulating (38). Under the leadership of Dr Gro Harlem Brundtland, the relevance of existing international law has become more widely integrated into WHO's work. Most significantly, WHO has revived and accelerated the process of negotiating its first convention — the FCTC — which was initially proposed in the mid 1990s (39).

The FCTC may signal a turning-point: a new era in international health cooperation. WHO's unconventional consideration of the role of international law and institutions in promoting public health policies suggests a revision and expansion of the organization's traditional scientific, technical approaches to public health and, perhaps, an evolution of its traditional culture.

Ultimately, WHO's capacity to fulfil the leadership mandate described depends on political consensus, particularly on the part of its member states. The willingness of governments to support this mandate will depend on factors external and internal to WHO. For example, consistency of legal regimes may not always be a priority, or even a goal, for states facing competing interests (principally from private-sector actors). Furthermore, the broadened mandate has important implications for WHO's budget and resources, which must be supported by states who may also face conflicting financial priorities. Governmental support of the mandate may also depend partly on assessment of WHO's organizational capacity: the institution's existing strengths and past successes in contributing to the management of global health law.

The FCTC may be a critical test of WHO's organizational and political capacity for more active involvement in international health lawmaking. Governments' evaluations of WHO are unlikely to depend on the substantive outcome of the FCTC — whether the proposed convention and its protocols are effective or ineffective at promoting multilateral coordination to counter the tobacco pandemic or even if the FCTC is ever adopted or entered into force. The international legislative process is a sovereign exercise involving concerted action by states to negotiate and, if successful, to reach consensus on collective problems that transcend their national borders. Although intergovernmental organizations have important catalytic functions in treaty development, they ultimately have limited capacity to influence the factors that encourage states to adopt and implement effective commitments.

Rather, the willingness of states to use WHO as a platform, catalyst and coordinator for international health law negotiations in the near future may depend on governments' final evaluations of WHO's effectiveness as manager of the FCTC negotiations and, potentially, the treaty regime. Ultimately, governments are likely to evaluate WHO's capacity to provide leadership in international health lawmaking on the basis of the procedural platform that it establishes for the FCTC negotiations and the treaty regime. That is, governments are likely to assess whether or not WHO provided the administrative coordination, public health expertise and legal skill necessary for complex, multilateral negotiations. Most importantly, perhaps, governments may evaluate WHO's capacity to address global health law matters in the near future on the basis of whether WHO was able to serve as a neutral actor — an honest broker — for all states participating in the negotiation exercise, while simultaneously maintaining the institution's vigilance for protection of public health.

Conclusion

An essential component of global health governance in the twenty-first century is an active, effective and politically responsive institution to promote collective management as well as the rational development and implementation of international health law policy. The extent to which WHO will be able to provide such leadership in the rapidly evolving field of international health law will have an important influence on the collective ability of intergovernmental organizations to promote effective global cooperation to address global health problems.

Conflicts of interest: none declared.

Résumé

Gouvernance mondiale, droit international de la santé et OMS: perspectives d'avenir

Le domaine du droit international de la santé, en constante évolution, recouvre des sujets de préoccupation d'une diversité et d'une complexité croissantes. Les observateurs s'accordent à dire que le développement sanitaire au XXI^e siècle devra de plus en plus compter sur le droit international conventionnel pour qu'un cadre de coordination et de coopération entre des Etats de plus en plus interdépendants puisse être instauré. Dans le présent article, l'auteur étudie les forces et les facteurs à l'origine du récent développement du droit international conventionnel de la santé en tant qu'instrument clé de la coopération multilatérale actuelle et future. Il y examine les problèmes auxquels se heurtent les organisations

intergouvernementales et les autres acteurs de l'élaboration des lois pour parvenir à une coopération internationale en matière de santé. Bien qu'il ne soit ni réaliste ni souhaitable de réunir sous les auspices d'une seule et même organisation internationale l'ensemble des aspects inhérents à l'élaboration d'un futur droit international de la santé, l'Organisation mondiale de la Santé (OMS) devrait s'efforcer de servir de coordonnateur, de catalyseur et, le cas échéant, de tribune pour l'élaboration de ce futur droit de la santé. L'OMS, de par son rôle de chef de file, permettrait ainsi de renforcer la coordination, la cohérence et la mise en œuvre de politiques en matière de droit international de la santé.

Resumen

La gobernanza mundial, la legislación sanitaria internacional y la OMS: mirar hacia el futuro

El ámbito de la legislación sanitaria internacional no cesa de evolucionar y abarca aspectos cada vez más diversos y complejos. Los analistas coinciden en que a lo largo del siglo XXI el desarrollo sanitario probablemente ampliará el uso del derecho internacional convencional para crear un marco de coordinación y cooperación entre los Estados en un mundo cada vez más interdependiente. En este artículo se examinan las fuerzas y los factores que explican la incipiente expansión de la legislación sanitaria convencional internacional como un instrumento importante para la cooperación multilateral presente y futura. Se examinan los retos que han de afrontar las organizaciones

intergubernamentales y otros agentes implicados en la actividad legislativa para conseguir una cooperación sanitaria internacional eficaz. Si bien es inviable e indeseable que la plena consolidación de todos los aspectos de la futura elaboración de leyes sanitarias internacionales se lleve a cabo bajo los auspicios de una sola organización internacional, la Organización Mundial de la Salud (OMS) deberá procurar actuar como coordinadora, motor y, si procede, plataforma de la futura codificación de legislación sanitaria. Ese liderazgo de la OMS podría facilitar la coordinación, la coherencia y la aplicación de las políticas en materia de legislación sanitaria internacional.

References

- 1. Grad F. Public health law: Its forms, function, future and ethical parameters. *International Digest of Health Legislation* 1998;49:19-40.
- Taylor AL, Bettcher DW, Fluss SS, DeLand K, Yach D. International health law instruments: an overview. In: Detels R, McEwen J, Beaglehole R, Tanaka H, editors. Oxford textbook of public health: the scope of public health. Oxford: Oxford University Press, 2002:359-86.
- Ruggie R. At home abroad abroad at home international liberalization and domestic stability in the new world economy. *Millennium Journal of International Studies* 1995;24:447-70.
- Lee K. Shaping the future of global health cooperation: Where can we go from here? Lancet 1998;351:899-902.
- Yach D, Bettcher D. The globalization of public health 1: Threats and opportunities. American Journal of Public Health 1998;88:735-8.
- Theme issue on globalization. Bulletin of the World Health Organization 2001:79:802-905.
- 7. Walt G. Globalisation of international health. Lancet 1998;351:434-7.
- 8. Bettcher D. Think and act globally and intersectorally to protect national health. Geneva: World Health Organization, 1997 (WHO/PPE/PAC/97.2).
- Taylor AL, Bettcher DW. WHO framework convention on tobacco control: a global good for public health. *Bulletin of the World Health Organization* 2001;78:920-9.
- Bettcher DW, Yach D, Guindone GE. Global trade and health: Key linkages and future challenges. *Bulletin of the World Health Organization* 2000;78: 521-24
- Yach D, Bettcher D. The globalization of public health II: The convergence of self-interest and altruism. American Journal of Public Health 1998;88:738-41.
- McMichael AJ, Beaglehole R. The changing global context of public health. *Lancet* 2000;356:577-82.
- Lee K, Dodgson R. Globalization and cholera: Implications for global governance. Global governance: a review of multilateralism and international organizations 2000;6:213-36.
- Taylor A. Making the World Health Organization work: a legal framework for universal access to the conditions for health. *American Journal of Law and Medicine* 1992:18:301-46.
- 15. Drager N, Beaglehole R. Globalization: changing the public health landscape. *Bulletin of the World Health Organization* 2001;79:803.
- Woodward D, Drager N, Beaglehole R, Lipson D, Globalization and health: a framework for analysis and action. *Bulletin of the World Health Organization* 2001;79:875-81.
- Woodward A, Hales S, Litidamu N, Phillips D, Martin J. Protecting human health in a changing world: the role of social and economic development. *Bulletin* of the World Health Organization 2000;78:1148-55.
- Chen LC, Evans TG, Cash RA. Health as a global public good. In: Kaul I, Grunberg I, Stern M, editors. Global public goods: International cooperation in the 21st century. London: United Nations Development Programme, 1999:284-305.
- 19. Taylor AL, Bettcher DW, Peck R. International health lawmaking as a global public good for health: a case study of the Framework Convention on Tobacco Control. In: Smith R, Beaglehole R, Woodward D, Drager N, editors. Global public goods for health. Oxford: Oxford University Press (forthcoming).

- 20. Taylor AL. The contribution of international law: the proposed United Nations convention against the reproductive cloning of human beings. In: Andreson J, editor. Once in a Lifetime: Interdisciplinary Perspectives on Cloning and Genetic Technologies. Cambridge: Cambridge University Press (forthcoming).
- Taylor AL. Globalization and biotechnology: UNESCO and an international strategy to advance human rights and public health. *American Journal of Law* and Medicine 1999;25:479-541.
- Sands P. Sustainable development: Treaty, custom and the cross-fertilization of international law. In: Boyle A, Freestone D, editors. Sustainable development and international law. Oxford: Oxford University Press, 1999:39-60.
- 23. Alvarez JE, editor. Symposium: The boundaries of the WTO. *American Journal of International Law* 2002;96:1-158.
- 24. World Health Organization. *WTO Agreements and Public Health.* Geneva: World Health Organization, 2002.
- 25. Brundtland GH. Address to the World Business Council for sustainable development: our common future and Rio 10 years after: How far have we come and where should we be going? Geneva: World Health Organization, 1999. Available from: URL:http://www.who.int/director-general/speeches/ 1999/english/19991104_berlin.html
- Szasz, PC. International norm-making. Weiss EB, editor. In: *Environmental change and international law.* Tokyo: United Nations University Press, 1992:340-84.
- 27. Buse K, Walt G. Global public-private partnerships: Part 1 a new development in health? *Bulletin of the World Health Organization* 2000;78:549-61.
- 28. Charnovitz S. A world environment organization. *Columbia Journal of Environmental Law* 2002;27:323-62.
- Doyle MW, Massey RI. Intergovernmental organizations and the environment: looking towards the future. In: Chasek PR, editor. *The global environment* in the twenty-first century: prospects for international cooperation. Tokyo: United Nations University Press, 2000:411-26.
- 30. Birnie P, Boyle A. *International law and the environment*. Oxford: Oxford University Press, 2002.
- 31. Haas PM, Keohane RO, Levy MA. *Institutions for the earth: sources of effective international environmental protection*. Cambridge: MIT Press, 1993.
- 32. UNESCO. *Bioethics programme of UNESCO: priorities and prospects.* Paris: UNESCO, 2002.
- Murphy SD. Biotechnology and international law. Harvard Journal of International Law 2001:42:47-139.
- Pridan-Frank S. Human genomics: A challenge to the rules of the game of international law. Columbia Journal of Transnational Law 2001;40:619-76.
- 35. Trachtman JP. Institutional linkage: Transcending "trade and ..." *American Journal of International Law* 2002;96:77-93.
- 36. Szasz, PC. IAEA safeguards: Sanctions. In: Szasz PC. *Selected essay on understanding international institutions and the legislative process.* New York: Transnational Publishers, 2001:201-20.
- 37. Burci GL, Vignes CH. World Health Organization. In: *International Encyclopedia of Laws*. Dordrecht: Kluwer (forthcoming).
- 38. Taylor AL. An international regulatory strategy for global tobacco control. *Yale Journal of International Law* 1996;21:257-304.
- 39. Taylor AL, Roemer R. An international strategy for tobacco control. Geneva: World Health Organization, 1996 (WHO document WHO/PSA/96.6).