

INTRODUCTION

Open Access



The physician and professionalism today: challenges to and strategies for ethical professional medical practice

Jean-Pierre Unger^{1*}, Ingrid Morales², Pierre De Paepe¹ and Michel Roland³

Keywords: Medical professionalism, Medical education, Medical research, Public health, Health management, Health policy

Medicine in the twenty-first century

Imagine that physicians could multiply their impact on people's health and improve community health whilst tailoring the delivery of care to each individual patient. The ambit of the present supplement is to say how, with a public health insight into medical practice and physicians' professionalism.

But clouds obscure the future of the medical profession. Artificial intelligence (AI) threatens to make it obsolete. The commoditisation of care undermines ethics. Bureaucracy is infiltrating practice. Worldwide, cultures are turning materialistic. However, some physicians are resisting these trends. In spite of being well paid, the suicide rate of physicians in the United States is the highest of all occupations, almost twice the national average, and higher than in the military [1]. Taking decisions against one's intimate convictions partly explains that [2].

To help doctors surmount this existential crisis and resist harsh intangible work conditions, this collection of articles gives them reasons to believe in the survival of medicine as a profession. To do so, the series elaborates on the changes needed in medical culture to keep medical practice as a sacred art, concentrating on what AI does not do or does not do well, especially ethical thinking. With such cultural changes, physicians would impose on AI design the function to support professional

endeavour and undermine the opposite process that transforms professionals in technicians. To remain in control, the doctor's intelligence, emotions, knowledge, communication, ethics, and creativity will have to surpass those of AI, not only in delivering biopsychosocial, ethical care but also in another, insufficiently explored domain that is, in improving collective health with clinical medicine.

Since taxes finance doctors, societies are entitled to demand them to optimise their impact on collective health whilst tailoring healthcare to the patient's individual needs as much as possible. To meet the practicalities of such a paradoxical norm, the series advocates and delineates the practical and theoretical integration of clinical and public health practice to meet the challenges that medicine faces to survive as a profession, be they financial, political, managerial, or socio-cultural.

In practice, clinicians need to think and act whilst bearing in mind community health stakes - a duty, the importance of which has been clearly demonstrated by the Covid-19 crisis. Conversely, public health physicians must improve clinical healthcare whilst tackling population health risks. Updating the physician's commitment and medical theory is necessary because dual clinical/public health medical practice is a scientific requirement to optimise the physician's impacts on individual and collective health.

We adopted the following definitions in collective health.

1. According to WHO, "Public health refers to all organised measures (whether public or private) to

* Correspondence: jeanpierre.unger@gmail.com

¹Department of Public Health, Institute of Tropical Medicine, Nationalestraat 155, B-2000 Antwerp, Belgium

Full list of author information is available at the end of the article



© The Author(s). 2020 **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

prevent disease, promote health, and prolong life among the population as a whole.” (Available: <http://www.who.int/trade/glossary/story076/en/>) Public health relies on medical, epidemiological, socio-cultural, and environmental techniques. Historically, It has been formed from attempts to control epidemics. Public health addresses “organic” society (such as communities or trade-unions) incidentally, as a disease control resource.

2. By contrast, community medicine treats “organic” society as a goal per se, health being one of many issues to improve. Community medicine expands the realm of family medicine to social entities larger than the nuclear or extended family for more effective family medicine, just as family medicine broadens the realm of general practice clinical care for the same reason.
3. Preventive medicine aims to improve the health of high-risk groups defined by demographic and epidemiological characteristics (general population, infants, pregnant women, immune-compromised, the elderly, and others) whilst relying on health professionals and a medical, biopsychosocial rationale. Preventive medicine is thus by definition a branch of public health but one tightly connected to community and family medicine because of its reliance on physicians to deliver care.

If such joint practice sounds abstract, consider what doctors can do to potentiate clinical outputs. They can build and lead teamwork, reflect on practice, coach, educate, train, improve health service organisation, coordinate and evaluate health care, improve care accessibility, contribute to disease and health risk control, participate in public health programmes, delegate tasks, improve resource utilisation, do operational research, and lobby for more appropriate health policy design.

Physicians who (inter-)connect all or part of this to their clinical and public health practice could be called “manager physicians”. The term manager is traditionally reserved for persons entrusted with decision-making to achieve their institutions’ predetermined goals most efficiently, but our proposed definition assumes that professional ethics can prevail over institutional missions.

To use her/his knowledge and experience fully, any doctor can adopt the role of “manager physician”, an appealing role when education and research are professionally valued. In fact, any doctor has to adopt this role because the opportunity cost of not adopting it is to be measured in terms of avoidable suffering and mortality [3]. In sum, doctors ought to be “manager physicians” independently of or prior to the adoption of ad hoc institutional policies, thus possibly without being commissioned to be so, for the sake of professional ethics.

To explore the boundaries of medicine and public health, we analysed their (practical, epistemological, ethical, managerial, heuristic, investigative, and political) common facets separately.

The papers are titled as follows:

1. A Plea to Merge Clinical and Public Health Practices. Reasons and consequences
2. Integrating Medical and Public Health Knowledge – in Support of Joint Medical Practice.
3. In Defence of a Single Body of Clinical and Public Health Medical Ethics
4. Medical Heuristics and Action-Research. Professionalism versus science
5. Objectives, Methods, and Results in Critical Health Systems and Policy Research. Evaluating the healthcare market
6. Neo-Hippocratic Health Care Policies. Professional or industrial health care delivery? A choice for doctors, patients, and their organisations

Patient and public involvement

Patients were not directly involved in the design and conduct of the present studies: the papers come out of a meta-analysis of the authors’ own experience and research.

In discussing the practice and theory of clinical medicine and public health, the series analyses the encounter of physicians and patients as follows: It uses the patients’ care quality demands as key yardsticks for professional behaviour, i.e., that care ought to be biopsychosocial, person-centred, and negotiated, and therefore highly individualised. This use of patient demand for setting health service standards is explicit throughout the analyses.

Besides, at some stage over the past 35 years, the following patients’, socio-political, and professionals’ organisations were unwittingly involved in the formulation of the concepts exposed here as they engaged in a dialogue with the authors and/or participated in their action-research: Health committees of first-line healthcare services in Congo (then called Zaire), Senegal, Burkina Faso, and Ecuador; Christian and Socialist mutual aid societies (Belgium); Plateforme Santé Solidarité (Belgium); Comisión Obrera de Bolivia; Sindicato Nacional de Trabajadores del Ministerio de Salud, Ecuador; Christian and Socialist Belgian trade unions; Fédération des maisons médicales (Belgium); Asociación Latinoamericana de Medicina Social; Royal Thai Association of Rural Doctors; Associação Brasileira de Saúde Coletiva; Entraide Fraternité Médicale Guinée; and Médecins du Monde, Belgium.

The authors

This series of papers, intended primarily as guidance for physicians, draws on what the authors have learnt from

their combined clinical and public health careers. In various ways, they have been involved in clinical, managerial, and/or public health practice; professional and scientific research; medical education; and health policy interventions for more than three to four decades.

In the course of their careers, Jean-Pierre Unger and Pierre De Paepe concentrated on the practice of physicians and inter-professional teams and researched healthcare policies. They used empirical learning and action-research to test strategies designed to improve medical professionalism with “non managed-care” techniques [4]; access to essential generic drugs (in Senegal) [5]; access to first-line health services (in Ecuador) [6]; the training and coaching of mid-level health managers (in Senegal) [7]; local health system organisation (in Senegal, Burkina Faso, and Niger) [8]; medical audits to enhance medical reflectivity and care coordination across institutional divides (in Belgium) [9]; family medicine-like healthcare practice by non doctors in LMICs [10]; the contribution of academic departments to the universal right to care (in Latin America and Belgium) [11]; public services strengthening with mother and child programmes (in Senegal) [12]; the national, publicly-oriented drug distribution system (in Burkina Faso) [13]; use of semi-quantitative epidemiological information to manage African local health systems [14]; symbolic motivation of health professionals in publicly-oriented health services; the effectiveness of malaria control (in Mali) [15]; GPs’ practice of family therapy in LMICs [16]; social assistance in medical practice (in Belgium) [17]; care coordination in Latin America [18]; and the control of physician and health professional burnout [2].

After practising clinical medicine in Bolivia and Brazil, Ingrid Morales shifted her focus, to epidemiology, nosocomial infection surveillance and control in academic and health service environments in Belgium and Europe in 1991. In 2011, she began a career in maternal and child health, guided by a concern to promote biopsychosocial care in preventive medicine and public health organisations. Ingrid is currently medical director of the maternal and child health programme of the French-speaking Community of Belgium (Office de la Naissance et de l’Enfance).

Michel Roland is a practising family doctor and professor emeritus who is concerned with the development of public health activities in medical practice. Whilst Ingrid, Jean-Pierre, and Pierre integrated clinical practice and culture in their public health practice, Michel did the opposite, integrating public health concerns in clinical practice and education, professional organisations, and government policies.

The authors came to question commercial clinical practice and pro-market health policies as their ethical,

professional principles were at odds with the essence of care commoditisation. Being moral, their professional culture influenced their research objectives and methods, and so may well have generated a confirmation bias. They tried to circumscribe that risk by choosing sound research methodologies and taking a phenomenological perspective. To allow for critical appraisal, they ought to give the reader sufficient information not only on their methods but also on philosophical values. Over their professional life, the authors shared the following values

- They treated access to professionally delivered health care as a human right.
- For the sake of this right, they favoured solidarity and equity in care financing and health policies.
- They were convinced that giving the best possible health care depends not only upon the doctors’ professional skills and scientific knowledge, but also upon their emotions, in particular their self-effacement and ability to empathise with others.
- Finally, they promoted individual and community participation in health services for the sake of more effective care and the democratic functioning of public services.

The readers will judge the practical relevance of the research conclusions drawn, assess whether the authors’ social and professional commitment was sufficiently grounded in a concern for reflective methods and scientific accuracy, and if their science was sufficiently governed by ethics.

Although this series is devoted mainly to medicine, we hope that nurses, dentists, psychologists, and physiotherapists will judge the relevance of the medical concepts, analyses, and conclusions presented here to their professions.

Abbreviations

AI: Artificial Intelligence; CME: Continuous Medical Education; GP: General Practitioner; LMIC: Low and Middle Income Countries

Acknowledgements

We are indebted to Professor Claudio Schuftan (Johns Hopkins University, editor of this series), Dr. Charles Boelen (Towards Unity for Health Network, former WHO Geneva programme coordinator in human resources for health), Professor Em. Jan de Maeseneer (Department of Public Health and Primary Care, University of Ghent); Professor John Frank (Chair of Public Health Research and Policy, Usher Institute, University of Edinburgh), Professor Em. Charlene Harrington (University of California San Francisco, Department of Social & Behavioral Sciences), Professor David Himmelstein (City University of New York, School of Public Health at Hunter College; Albert Einstein College of Medicine, and Harvard Medical School), Professor Em. Nuria Homedes (School of Public Health, University of Texas, El Paso); Prof. John Lister (Coventry University Department of Media and Communication); Professor Antonio Ugalde (University of Texas at Austin, College of Liberal Arts), and Professor Howard Waitzkin (Department of Sociology, University of New Mexico) for their comments, criticisms, and recommendations on the final version of the manuscripts. Although in two cases judgements were rather negative, all these contributions were pivotal to improve the manuscripts and place them within today’s contradictory

scientific, social, and political debates. Notice that no mistake can be attributed to any of these academics and professionals. The late Professors Pierre Mercenier and Harry Van Baelen influenced the authors' careers decisively, giving them direction and impetus. Drawing upon their experience in Africa, India, Latin America, and Europe, they were among the first to formulate the concepts of holistic, continuous, integrated care; the systemic management of publicly-oriented healthcare services; problem-based learning in continuing medical education (CME); action-research applied to medical and public health problems; and the development of reflective, professional methods, such as medical (self-)audits, technical supervision, and the coaching of professionals. Although they did not publish much, and their sparse publications were mainly in French, their influence on contemporary public health is huge and can be traced back through their network of friends, students, and professional relationships. They in turn were indebted to Prof. GL Engel, the British and Ugandan doctors and medical officers working at Makerere University in the 1950s and 1960s, Dr. Halfdan Mahler, former Director of WHO, and Professor Debabar Banerji of Jawaharlal Nehru University, Delhi. In Europe, they interacted with the friends and colleagues of the Belgian medical research and study group Groupe d'Etude pour une Réforme de la Médecine (which they helped to create), the Dutch Nivel Centrum voor Eerstelijns Zorg), the Institute for Development Studies (Brighton, UK), the Department of Medical Pedagogy of Maastricht University, and numerous alumni. Doctors Christian Darras (WHO), Pierre Daveloose (ITM), Pangu Kasa Asila (UNICEF), Remo Meloni (GTZ), Tony Musinde (UNICEF), Jean Van der Vennet (ITM), and Monique Van Dormael (ITM) were particularly important to their field projects.

In addition, we should like to thank the late Professor Marleen Boelaert (ITM), Professor Em. Marie-Christine Closon (Catholic University Louvain), Professor. Guy Decaux (Brussels Free University), Professor Em. Perinne Humblet (Brussels Free University), Michel Khleifi (cineast), Marianne Prevost, sociologist (Fédération des maisons médicales), Dr. Alain Quinet, the late Professor Sarah Schnek (Brussels Free University), Dr. Kasturi Sen (ITM), Jonathan Unger, geographer (Brussels Center for Intercultural Action), and Professor Em. Jacques Unger (Brussels Free University) for their invaluable intellectual contributions to our work.

Over the past three or four decades, several colleagues were essential to our understanding of the health sector. They include Professors and Doctors Celia de Almeida (Fiocruz, Rio), Ana Maria Costa (Centro Brasileiro de Estudos de Saúde, Rio), Ligia Giovannella (Fiocruz, Rio) Saul Franco (Universidad Nacional de Colombia, Bogota), Ruben Dario Gomez (Universidad de Antioquia, Medellin), Oscar Lanza (Universidad Mayor de San Andres, La Paz), Asa Cristina Laurell (Universidad Autonoma de Mexico), Alicia Stolkiner (Universidad de Buenos Aires), Ndeye Ngone Toure (UNICEF), Jef Van den Ende (ITM), and Adamou Yada (WHO). With a feeling of injustice to the many colleagues that we could not cite, we should like to single out a few field practitioners in healthcare services who shared with us their energy, experience, and thoughts: Doctors and Professors Valérie Alaluf, Bernard Hanson, and Marie-Jeanne Wuidar in Belgium; Lucio Abad and Edgar Rojas in Ecuador; and Abdoulaye Sow in Guinea. Finally, we should like to acknowledge early comments by Sarah Shelmerdine and final, thorough editing and comments by Gabrielle Leyden and Paul Vine.

About this supplement

This article has been published as part of *BMC Health Services Research Volume 20 Supplement 2, 2020: "The Physician and Professionalism Today: Challenges to and strategies for ethical professional medical practice"*. The full contents of the supplement are available online at <https://bmchealthservres.biomedcentral.com/articles/supplements/volume-20-supplement-2>.

Authors' contributions

The author(s) read and approved the final manuscript.

Funding

Publication of this supplement is funded by the Institute of Tropical Medicine, Antwerp.

Availability of data and materials

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

Ethics approval and consent to participate

Not Applicable (this manuscript does not involve human participants, human data or human tissue).

Consent for publication

Not Applicable (this manuscript does not contain any individual person's data).

Competing interests

The authors declare that they have no competing interests.

Author details

¹Department of Public Health, Institute of Tropical Medicine, Nationalestraat 155, B-2000 Antwerp, Belgium. ²Office de la Naissance et de l'Enfance, French Community of Belgium, Chaussée de Charleroi 95, B-1060 Brussels, Belgium. ³Département de Médecine Générale, Université Libre de Bruxelles, Route de Lennik, 808, BP 612/1, B-1070 Brussels, Belgium.

Published: 9 December 2020

References

1. P. Anderson. Physicians Experience Highest Suicide Rate of Any Profession. Medscape, 7 May, 2018. https://www.medscape.com/viewarticle/896257?src=soc_fb_180507_mscpedt_news_mdscp_suicide&faf=1 (accessed 9 May 2018).
2. Unger JP. Physicians' burnout (and that of psychologists, nurses, magistrates, researchers, and professors) for a control program. *Int J Health Serv.* 2020;50(1):73–81. <https://doi.org/10.1177/0020731419883525>.
3. Unger JP, Morales I, De Paepe P & Roland M. In defense of a single body of medical and public health ethics. Forthcoming as part of *BMC Health Services Research Volume 20 Supplement 2, 2020: "The Physician and Professionalism Today: Challenges to and strategies for ethical professional medical practice"*. The full contents of the supplement are available online at <https://bmchealthservres.biomedcentral.com/articles/supplements/volume-20-supplement-2>.
4. Unger JP, Vargas I, Vázquez ML. Non managed care techniques to improve clinical decision making. In: Unger JP, De Paepe P, Sen K, Soors W, editors. *International health and aid policies; the need for alternatives*. Cambridge: Cambridge University Press; 2010.
5. Unger JP, Mbaye AM, Diao M. Finances and drugs at the Core of district health service rehabilitation. A case-study in Senegal: the Kolda District. *Health Pol Plan.* 1990;5(4):367–77.
6. De Paepe P, et al. Improving access. In: Unger JP, De Paepe P, Sen K, Soors W, editors. *International health and aid policies, the need for alternatives*. Cambridge: Cambridge University Press; 2010.
7. Public Health Research and Training Unit of the ITM. The Training of District Medical Officers in the Organization of Health Services: a Methodology Tested in Sénégal. *Health Pol Plan.* 1989;4(2):148–56.
8. Unger JP. PhD thesis: "Role of health districts and methodology of their development in Africa" 1991, Free University of Brussels, Faculty of Medicine (in French).
9. Unger J-P, Marchal B, Dugas S, Wuidar MJ, Burdet D, Leemans P, Unger J. Interface flow process audit: using the patient's career as a tracer of quality of care and of system organisation. *Int J Integr Care.* 2004;4:1568–4156.
10. Unger JP, Van Dormael M, Criel B, Van der Vennet J, De Munck P. A plea for an initiative to strengthen family medicine in public healthcare services of developing countries. *Int J Health Serv.* 2002;32(4):799–815.
11. Unger JP, Van Dessel P. Reorienting academic missions: how can public health departments best support access to good quality comprehensive healthcare? In: Unger JP, De Paepe P, Sen K, Soors W, editors. *International health and aid policies; the need for alternatives*. Cambridge: Cambridge University Press; 2010.
12. Unger JP. Can intensive campaigns dynamize front line health services? The evaluation of a vaccination campaign in Thiès Medical District, Senegal. *Soc Sci Med.* 1991;32(3):249–59.
13. Unger JP, Yada A. Should medication be distributed in Africa by health services and/or pharmacies? A preliminary evaluation of the Boulgou project in Burkina Faso. *Health Pol Plan.* 1993;8(3):240–6.
14. Unger JP, Dujardin B. Epidemiology's contribution to health service management and planning in developing countries. *Bull WHO.* 1992;70(4):487–97.

15. Unger JP, d'Alessandro U, De Paepe P, Green A. Can malaria be controlled where basic health services are not used? *Trop Med Int Health*. 2006;11(3): 314–22.
16. Quinet A, et al. Family therapy in developing countries primary care. *J Fam Med Dis Prev*. 2015;1:006.
17. Unger JP, Shelmerdine S, van der Veer C, & Roland M (2016) How can GPs Best Handle Social Determinants in Practice? Application in the Brussels Environment. *J Fam Med Dis Prev*. 2016 ;2:025 ;2, 1 <http://clinmedjournals.org/articles/jfmdp/journal-of-family-medicine-and-disease-prevention-jfmdp-2-025.php?jid=jfmdp> (accessed 10 March 2016).
18. Vázquez ML, Vargas I, Unger JP, et al. Evaluating the effectiveness of care integration strategies in different healthcare systems in Latin America: the EQUITY-LA II quasi experimental study protocol. *BMJ Open*. 2015;5:e007037. <https://doi.org/10.1136/bmjopen-2014-007037>.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Ready to submit your research? Choose BMC and benefit from:

- fast, convenient online submission
- thorough peer review by experienced researchers in your field
- rapid publication on acceptance
- support for research data, including large and complex data types
- gold Open Access which fosters wider collaboration and increased citations
- maximum visibility for your research: over 100M website views per year

At BMC, research is always in progress.

Learn more biomedcentral.com/submissions

