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Comment

Human Resources in Health Care Systems: Reflecting on 'Cross-National Comparisons of Human Resources for Health – what can we learn?'

MIRIAM J. LAUGESEN*
Department of Health Policy and Management, Columbia University, USA

In 2014 people in the United States developed a new appreciation of our reliance on those taking care of patients when the media extensively covered cases of professionals infected the Ebola virus. Ebola highlighted the heroism of health care workers and it illustrated the importance of *human* resources in the delivery of health care, from highly trained infectious disease specialists to those charged with safely removing bodies.

The issue of 'manpower' or workforce 'planning' as it was once called, has long been a concern of those interested in learning both about and from international comparisons. Dubois and McKee (2006) revived this question and argue that reshaping health care systems requires rearranging attributes of human resources for health, which includes 'individuals engaged in the improvement of the health of populations' including professionals and nonprofessionals 'providing care for individuals to family and volunteer caregivers providing non-personal health services'. Their definition goes well beyond physicians and nurses (the main focus for earlier studies), and broadens our consideration of the multitude of occupations and professions involved in health, as well as people working unpaid in homes. It is thus a 'big tent' approach to human resources in health because it suggests we should be more systematic regarding the diversity of occupations and individuals working in the health care sector.

As Dubois and McKee point out, health care delivery is labor-intensive; therefore labor is a significant expense in health care systems. Policy choices around human resources not only impact cost, they also may have consequences for health status. In the United States, for example, people living in states with more general practitioners receive more effective and lower-cost care (Baicker and

*Correspondence to: Miriam J. Laugesen, Ph.D., Assistant Professor of Health Policy and Management, Department of Health Policy and Management, Mailman School of Public Health, MSPH Box 14, Columbia University, 722 W. 168th Street, New York, NY 10032, USA. Email: ml3111@cumc.columbia.edu

Chandra, 2004), and states with more specialists have higher mortality rates (Valderas *et al.*, 2009). Given the impact of human resources on costs and health, Dubois and McKee rightly argue that there is value in making international comparisons. These include monitoring and evaluating the workforce, to improving the international competitiveness of each country's labor market; to learn from others more generally, but also to provide learning opportunities when countries have special or specific conditions to contend with (such as HIV); and to evaluate the effects of different or alternative models. In terms of the policy strategies that can be applied, countries have choices regarding how they plan, produce, distribute, organize, pay, motivate and combine their health personnel (pp. 59–60).

Dubois and McKee's thoughtful analysis is emblematic of *Health Economics, Policy and Law* since the journal was founded in 2006. First, health policies are best understood if we use a variety of analytic tools to shed light on the content and improvement of health policy – in this case the authors draw on a variety of approaches and advocate a mix of quantitative and qualitative analysis. Second, their approach reflects the journal's support over the last decade for comparative analysis of health care systems, and a willingness to combine in-depth studies of national health policy making with comparative analyses.

As the authors acknowledge, doing comparative analysis of this kind is not always straightforward, and to this issue the authors ask whether universalistic or particularistic health care system forces drive health system personnel structures. Is each country too rooted in their cultural, political, and economic contexts, requiring a particularistic approach? In general, acknowledging national differences is absolutely necessary, especially when applying lessons to policy contexts. However, I would argue that cross-national learning is achieved when policy issues are viewed through organizing theoretical frames, and we need to search for commonalities along with comparable units. The particular may need to be generalized, as much as possible.

Conceptually one powerful theoretical frame is the theory of professionalization (encompassing autonomy, self-regulation and specialized training). This frame views human resources for health primarily along a continuum of professionalization and recognizes that the policy problems and policy strategies for hospital orderlies, nurse aides, and home-health workers are distinct from nurse practitioners or physicians. There are differences in the level of human capital investment, time horizons, and cost of employing different kinds of workers. Health care occupations are segmented by the extent to which highly skilled and highly educated people are providing the services; these essentially reflect barriers to entry imposed by foregone earnings while training. Thus there are significant differences across the health workforce, which create very different policy challenges and motivations to comparing or developing new policies. For multiple reasons, professionalization raises the power of some human resources over others, often because people are part of formal associations with political power to restrict entry. A less skilled and less educated workforce is usually less organized and will not have the market power to set prices or limit entry.

Professionalization is predictive of multiple policy questions relating to human resources for health because we can better understand the common drivers that suggest countries are less unique than they seem. For example, the attractiveness of primary care is declining in many countries, not simply the United States. There are some common subjective and cultural attitudes that elevate highly technical and specialized work performed by physicians that have served to reinforce economic monopolies. Across many countries physicians and the public give higher status rankings to surgeons or physicians who perform complex procedures (Schwartzbaum *et al.*, 1973; Shortell, 1974; Rosoff and Leone, 1991; Norredam and Album, 2007). If higher value is given to more professionalized human resources, there are implications for how we pay and organize the health care system. Variation in the prices and incomes in the health care workforce partly reflects higher status.

In developing a better comparative understanding of human resources in health through the lens of professionalization, we should ask why the occupational structures seem to be relatively consistent over time. The roles and the types of jobs people hold or the work they do from day to day in health care – even in areas where the technology is always changing – shows remarkable stability. In most sectors of the economy market forces and technological changes have down skilled some jobs or eliminated them, but even today offshoring of health care work is not the norm. This is because professionalization and specialty training proscribes (and usually fixes in stone) the duties and 'work' which individuals do. In the United States, this is called 'the scope of practice'. Professional roles tend not to vary dramatically, which points to the common logic of professional power. Nurses have been able to prescribe some drugs in the United Kingdom since 1998 (Mays *et al.*, 2006: 30) and in the Netherlands since 1978 they have performed physical and laboratory examinations, diagnosis, and treatment (usually under the supervision of a physician) (Mays *et al.*, 2006: 30). Nurses in Sweden also work under the supervision of a physician, but they manage chronic conditions such as diabetes (Mays *et al.*, 2006: 55). Conversely some countries minimize the use of paraprofessionals as substitutes for physicians, such as France (Mays *et al.*, 2006).

In some cases intra-professional turf is at stake. For example, the American Board of Obstetricians and Gynecologists issued a directive forbidding its board-certified physicians from treating men. Some men with urinary and other conditions felt they were more successfully treated by gynecologists than urologists (Grady, 2014). Granted, under public and member pressure this ban was reversed, but it serves to show the extent to which human resources for health are restricted by professional bodies. This control may explain why, in the United States, the same work is paid very differently depending on the training of the provider. Medicare, Medicaid and private insurance reimburse nurse practitioners at a rate that is 75–85% of physicians' payment for the same service, or 100% if directly supervised by physicians (Naylor and Kurtzman, 2010). As Naylor and Kurtzman note, the main Congressional agency (the Medicare Payment Advisory Commission)

overseeing Medicare said there is 'no analytic foundation' for these kinds of differences in payment. This difference, with significant implications for the health care system, is likely a function of professional demarcation and politics that is likely to only slowly and incrementally change this paradigm. For example, some changes in areas such as nurse prescribing have occurred in specific states in the United States, but nationally there is not necessarily a comprehensive effort to re-evaluate the myriad of professional and nonprofessional human resources in health and their role in providing services.

A second important issue in resolving this dynamic of particular vs universalistic analysis, which is long-standing in comparative health systems and comparative fields more generally, is how do we design studies that allow us to learn? Particularism in comparative health system analysis is (as Dubois and McKee argue) encouraged due to differences in terminology and concepts, different data collection systems, fragmentation of data, lack of data, differences in professional roles, analytic options, and the wide range of stakeholders. This suggests that there are essentially two problems: (1) consistency issues that arise from differences in concepts and terminology that often reflect underlying differences in professional roles, (2) logistical problems with data collection. One example of the first kind if problem is that in some countries, physicians are counted as those only engaged in providing patient care, whereas others count those registered or licensed (who may or may not be providing care). This makes a difference as to whether full-time or part-time physicians are counted.

International agencies such as the OECD play a critical role, because they may develop a capacity to standardize country-level data. Only they have the depth of country-specific data definitions from a large number of member countries directly. However, organizations and researchers have also successfully addressed these differences, such as one study completed in Europe on general practice which worked diligently to transcend national differences (Boerma, 2003). Another approach is to focus less on the human resources and use patient access as an indicator of human resources, such as asking patients about their experiences regarding access to specialists more generally. One study found that US patients say they have problems waiting for specialists – at the same rate as UK patients: in both countries 28% of patients said they 'often' have trouble with very long waits to see a specialist (Commonwealth Fund, 2012). This specific datapoint measures access while being an indicator of human resources. Thus there are models of successful standardization that should be emulated.

Instead there is a tendency to let data constraints and different terminologies stymie our understanding of many subjects, not just human resources in health. Restricting analysis to a limited range of comparable data prevents cross-national learning. In fact, there are more consistencies than often appreciated, and indeed while caution is warranted, too often it paralyzes us from making comparisons – *particularly* those of a statistical or data-driven nature. This is not to downplay the challenges parsing professional roles, education, and incomes cross-nationally in

just a small group of countries. However, on occasion, these can be overcome (Laugesen and Glied, 2011).

Ideally, countries can take a thoughtful and comprehensive approach to examining and/or changing who does what in the health care delivery system. Most policy makers and many researchers value overall average snapshots, even if there is a confidence interval around those numbers. Comparative studies that translate and standardize (to some extent) the contextual features of health care systems may provide the best opportunities for policy learning. Future articles in this journal may continue the kinds of analyses that Dubois and McKee published, in an effort to distinguish between what can and cannot be applied from one country to another and one continent to another within a critical, but perhaps understudied, area of cross-national health systems.

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