MEETING NEW PERSPECTIVES IN HEALTH SERVICES AND POLICY RESEARCH: STUDENT REFLECTIONS ON INTERDISCIPLINARY TRAINING

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ABSTRACT

This article presents a discussion of students' perspectives on encountering new, complex, and contrasting perspectives in health services research (HSR). Training in HSR traditionally requires students to attain a deep understanding of the philosophical, clinical, cultural, historical, and organizational discourses that contribute to understanding health services and policy. In this reflection, students discuss the impact on their education of encountering readings from beyond the traditional scope of HSR literature. They describe how new philosophical and conceptual perspectives impacted their understanding of healthcare organizations and health policy.

Keywords: Health services research, interdisciplinary, curriculum.

INTRODUCTION

Health services research (HSR) is "a scientific field that examines the structure, functions, policies, and outcomes delivered to individuals and populations" (Forrest *et al*., 2009). Interdisciplinary perspectives are critical to health services research curricula (Ricketts, 2009). Health systems, being complex, present significant challenges to students who require a deep understanding of the philosophical, clinical, cultural, historical, and organizational discourses that contribute to understanding health services and policy. However, the literature is scant regarding how HSR curricula might achieve this understanding. Instead there has been a focus on 'HSR competencies' (Forrest *et al*., 2009), which while formulaic, acknowledge that "didactic coursework is only a small part of doctoral education." Missing is the 'surprise' factor in learning; the impact of new perspectives on student thinking. These intellectual and cognitive shifts are critical to deep learning and expansion of knowledge and skills in addressing novel health services and policy research challenges.

The context for these reflections is a graduate seminar offered by the Western Regional Training Center for Health Services and Policy Research (WRTC) (Brachman *et al*., 2008) at the University of British Columbia. Seminar content consisted of diverse weekly readings provided by the instructor and students who drew from the literature of their own fields. This flexible structure provided students exposure to a wide variety of materials and allowed for a broader philosophical and conceptual understanding of healthcare organizations and health policy.

Five students in the 2012-2013 WRTC cohort provide brief personal reflections on how the seminar readings challenged their own thinking and highlight transformative learning about HSR and its complexities.

Is health services research useful? (SM)

"Health services research (HSR) aims to be useful" (Lewis, 2011a). A scan of the curricula for population and public health graduate programs across Canada, and knowledge translation expectations of tri-council funding agencies, reveals this basic assumption. We are trained to view HSR as an applied discipline; that the knowledge resulting from our research be *useful* for healthcare delivery. This assumption is problematic. What constitutes useful research? A series of recent commentaries (Lewis, 2007, 2011a, 2011b) asked such critical questions, deconstructing current assumptions driving HSR.

Funding agencies and government support the basic sciences and humanities pursuing research for research's sake, assuming it will pay off in the long-term; in contrast these stakeholders expect tangible, short-term, *useful* impacts from HSR (Lewis, 2011b). As a discipline, HSR has informed a litany of guidelines and policy recommendations based on quality evidence. Yet these findings have been largely ignored in practice and policy. Why, if HSR aims to be useful, are research results so rarely *used*?

Barriers to knowledge uptake and implementation account for much of this knowledge/action gap. It is challenging to complete quality research quickly enough to inform contemporary decision-making (Lewis, 2011a). Further, politics, money, and moral values play highly influential roles in decision-making and use of research findings (Lewis, 2011b). To produce research that is *useful* and *used*, Lewis argues, health services researchers must be cognizant of these barriers and work within them, not against them: "Evidence must get stronger, less probabilistic, more patient-specific and less contested … Research must be conceived and funded more programmatically to reflect the complex realities of communities, patients and the determinants of health" (Lewis, 2007). Integrated knowledge translation in research (i.e., health service users, clinicians, and decision makers collaborating and providing feedback from the beginning of the research process) is more likely to result in findings that are meaningful and lead to implementation. Funders, government, and researchers also need to be realistic about what HSR can and cannot do: "They should also recognize that HSR, like all forms of research, produces an inventory whose practical application cannot accurately be predicted" (Lewis 2011a).

Lewis's commentaries lead us to be reflexive and consider the aims of our research, its intended outcomes, and be comfortable that our work may be *useful* in unexpected ways: "You never

know when that long-neglected research will emerge from the dusty shelf when the decision-making context changes" (Lewis 2011b).

What counts as health services research *evidence*? (DV)

The WRTC program gave me a unique opportunity to learn about HSR and policy issues in Canada and led me to reevaluate my previous knowledge and beliefs in research methodology. I knew that crucial elements of research are critical appraisal of literature and evaluation of study results through comparison with similar studies. Researchers gain epistemological confidence from studies having similar results even when produced by using different methods. However, this standard approach can lead to epistemological over-confidence and be a source of major bias. The WRTC seminars initiated discussions that opened a completely new perspective on modern HSR.

Last (1988) defines HSR as the integration of epidemiologic, sociological, economic, and other analytic sciences in the study of health services. The multidisciplinary nature of HSR requires compliance with various methodologies and use of "gold standards" for evaluation of scientific evidence, the foundation for evidence-based/informed medicine. A question that arose repeatedly during our seminars was: "*Can we consider results of HSR studies as "hard evidence"?* Dekker *et al.* (2010) defines "hard evidence" as scientific observations and experiments that result in objective, time- and observation-independent facts. However, diversity among human populations and research environments does not allow consideration of results, say clinical trials, as incontestable "facts." Indeed, Lewis argued that the randomized controlled trial (RCT) is artificial and does not occur in nature. Moreover, the results of RCTs may conflict with other perceptions of reality (Lewis, 2007). Although observational studies have fewer problems with representativeness, the generalizability of study results to other populations remains limited, so "geography matters."

Another question that logically followed was *–"Even if research methods produced solid evidence, can we always rely on the evidence?"* Even "hard evidence" is still interpreted by the researcher. This is exemplified in Law's description of interdisciplinary groups of medical specialists having divergent interpretations of the same condition, and creation of multiple realities of the same disease (Law, 2004).

Finally, assuming the researchers produced quality evidence and an unbiased interpretation of results: "*Can we use the study results as guidance for an intervention?* Perhaps, like interdisciplinary healthcare researcher Trisha Greenhalgh *et al*. (2011), we can learn from the dead philosophers and "rather than pursue the inherently fruitless holy grail of generalization … we should instead seek to understand the particular in all its unique, contextual detail."

Leadership and change in healthcare systems and services (EW)

As a PhD student, it is a daunting task to become an expert in a field as extensive and complex as healthcare. Coursework provides important research skills, but is limited with regard to providing insight into why we do what we do. The seminar articles filled this gap and inspired me to a broader consideration of my research career.

For example, a Harvard Business Review blog by John Kotter – 'Management is (Still) Not Leadership' (Kotter 2013) describes management as a "set of well-known processes … which help an organization to predictably do what it knows how to do well." He contrasts this with leadership, which is "associated with taking an organization into the future." Healthcare systems need both. Healthcare systems are large and complex, and change is challenging given limitless demands and limited resources. Change therefore requires both strong leadership – the vision and capacity to set new goals, and effective management – the skill and aptitude to reach these targets. In our discussions, we recognized that as doctoral students, we hope to lead change in healthcare systems, recognizing that looking forward is equally as important as looking back. Other readings helped to challenge basic assumptions, to explore different theories and other disciplines to understand why and how changes take place.

My interest is public engagement – understanding and accounting for societal values in decision-making processes related to healthcare. Publics are one of the main elements in my research, and Nancy Krieger's "Who and What is a 'Population'?" (Krieger, 2012) reminded me of the importance of clearly defining the basic components of research questions. Finally, Entwistle and colleagues (2012) discussed the idea that understanding what people consider important is central to moving forward with healthcare reform; creating a new orientation to cost-effective, quality healthcare.

What is truth in HSR? (NI)

Throughout the seminar, we considered measures used to assess and apply HSR perspectives to actual health services scenarios. The importance of contextual or tacit evidence arose repeatedly. Thus, Handberg (2012) talks about the impact of 'guidelines' on performance measures, and the importance of concurrence between them. However, she also notes that evaluating the impact of guidelines can be challenging in clinical practice, specifically whether the intended outcome is appropriately reflected in the performance measures. In this instance, context is the key. She argues that, since guidelines are likely to be updated based on new data, performance measures should be "linked to guidelines at the time of performance."

Similarly, "What Is an Error" by Hofer *et al*. (2000), using organizational sociology and industrial psychology, identifies problems with existing definitions of medical error and major issues of measurement within complex systems, and offers some recommendations regarding how to proceed. The authors emphasize that medical errors should be causally linked with the adverse outcomes they produce and efforts to reduce them be 'proportional' to their consequences. The authors also advocate a deeper exploration of the context of errors, specifically *latent* system errors – resulting from the complex interaction between apparently trivial structural and process dynamics.

Ioannidis (2005) argues, surprisingly, that *most published research findings are false* because of design and statistical errors: sample size; effect size; study power and bias; level of statistical significance; and the *R* value "the ratio of true to no relationships among the relationships probed in each scientific field." Much research is limited by one or more such problems. Ioannidis encourages us to interpret research claims in context and maintain a critical outlook toward the key methodological issues that play pivotal roles in terms of outcome and interpretation.

Interpretation and translation of evidence in health services research (RR)

The seminar stimulated me to examine how the evidence for policy is structured and shaped as a tool to reinforce ideological beliefs. The idea that discourses regarding policy result from world views about both the health issue under examination and opinions about how to engage with the issue to produce a tenable outcome was novel. Outcomes only make sense relative to the context of the health issue and normative beliefs in society at the time of policy consideration. Health policy thus emerges more as a craft than a science, where decision makers attempt to orient their ideas to the evidence.

Policymaking is about assigning causal arguments to health phenomena, mediated by political ideological narratives. Stone (1989) noted that arguments frame phenomena within ideology to generate policy action. She provides an example of differing political interpretations on the same health issue to frame the evidence: "[a] liberal causal story rests on unintended consequences of the purposeful action: malnourished people do not know how to eat a proper diet or, alternatively, unwittingly sacrifice good nutrition in trying to stretch their meager resource. A Conservative story rests on intended consequences of purposeful action: malnourished people knowingly choose to spend their food money on beer and junk food" (Stone 1989).

Tesh (1982) observes that policy is an attempt to place particular constraints upon social action that outline a more comprehensive and coherent (but often hidden) argument: "Much of what we call politics is the attempt to transfer a phenomenon from the immutable category to the redressable category, or vice versa." Examination of policy moves beyond the absolute observation; instead, we craft causal stories that provide active narratives to address issues. One would be hard pressed to make the claim that evidence should not be included in the decision-making, but, there are processes for evidence generation that are overlooked or left unchallenged when adhering to an unwavering belief in positivist theories of knowledge which, "has a ring of obviousness to it which makes it difficult to argue against" (Greenhalgh *et al*., 2011).

CONCLUSION

The 'surprise' and subsequent intellectual growth of students as they meet new ideas and perspectives is clear from these reflections. They emphasize the importance and impact of novelty as an educational device. Moreover, they illustrate the critical value of qualitative understanding of how health services and policy works. The quantitative perspective, the core of most graduate programs in HSR is insufficient to understand the nuances of how healthcare organizations or policy work. Innovation, improvement, understanding care processes and outcomes that matter to patients are all subjective phenomena and quantitative methods are insufficient to tease apart the influences affecting healthcare organizations and the wider political context in which they work.

Students of HSR need to embrace this complexity. It is clear from the reflections above that they find diverse disciplinary perspectives both refreshing and useful. HSR, if it is to advance our understanding to address contemporary challenges regarding health services and policy, must strike a better balance in its acknowledgement of all relevant methods.

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