Theories of Knowledge

Understanding context in healthcare research and development

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Key message(s)

We urgently need to develop a research approach adequate to the complex and dynamic nature of most aspects of primary care.

Related *LJPC* papers

Toon and Baeza (both in this issue).

Why this matters to me

I have long been amazed at, and worried by, the uncritical application of traditional research methods (examining issues one at a time without considering their context) to primary care. As a generalist, I deal with many issues at the same time and the best thing to do is often the best fit between multiple competing priorities. The paper I review in this article is one of the best I have ever read to explain what kind of research approach is needed in primary care.

ABSTRACT

This is a review of a paper by Bayliss *et al* in the *Annals of Family Medicine* that argues that traditional research methods ‘are not well suited to addressing multi-faceted problems, such as understanding the complex interaction of multi-morbid chronic illness with social, environmental and healthcare systems’. Bayliss *et al* conclude that

research that can be relied on requires methods that are ‘participatory, mixed methods, multi-level, and engage communities’.

Keywords: evidence-based medicine, evidence-based practice, primary care research agenda

LJPC readers who enjoyed reading reflections by Toon and Baeja, on the value of evidence-based practice when researching ethical issues¹ and stroke services,² will enjoy reading a landmark paper in the *Annals of Family Medicine* called ‘Understanding the context of health for persons with multiple chronic conditions: moving from what is the matter to what matters’.³ The paper was written by EA Bayliss and 18 co-authors – it has 99 high-quality references, and documents the conclusion of 45 experts from a broad range of disciplines about how to bring context into research efforts to improve the health of persons living with multiple chronic conditions (MCCs).

The paper holds many lessons for the UK when implementing the new NHS focus on care plans and collaborative working, to create community-oriented integrated care.^{4,5} In particular, it will help Clinical Commissioning Groups (CCGs) in the UK to lead and

evaluate improvement projects. It has lessons more generally for health policy and research funding, because it recommends ways to examine what is going on in any complex, dynamic situation, including ways to contain the costs to the NHS of patients with long-term conditions in different contexts.

The paper starts by reminding us that the growing number of people with MCCs puts strain on healthcare systems throughout the world. MCCs are greatly affected by contextual factors – the management of one person in one place with one set of co-morbidities needs to be different from that of another person in another place with a different set of co-morbidities. To understand these contextual factors, healthcare managers, academics and clinicians are often obliged to use traditional scientific approaches; but these are ‘designed to isolate objects of inquiry...’. The authors point out that ‘[these traditional methods] are not

well suited to addressing multi-faceted problems, such as understanding the complex interaction of multi-morbid chronic illness with social, environmental and healthcare systems’.

The paper elegantly points out that simple approaches to inquiry are inadequate for understanding the dynamic, multifaceted and co-evolving nature of most human situations. It goes beyond this to also propose practical alternatives. The paper explains that the process of isolating factors actually obscures truth because ‘contextual factors are dynamic, fluid, inter-related, and vary according to perspective’. By contrast, research that can be relied on requires methods that are ‘participatory, mixed, multi-level, and engage communities’. This conclusion is the same as that reached by Baeja when examining research into stroke care in Europe.²

The idea that illuminating complex situations needs inquiry to be participatory, multiperspective and build communities challenges the hallowed idea of ‘objective’ research, in which the researcher is purposefully separated from the object of study. The logic of the authors is irresistible – a single snapshot cannot see much of what is going on in a complex evolving situation, so researchers need to use a variety of different kinds of snapshots, coupled with a locally understood narrative that together can illuminate more of the unfolding story.

The argument of the authors, coupled with their use of appropriate research methods, persuaded me of the authenticity of the paper. But this is complex theoretical territory and the danger is that readers will put the paper on that ‘too difficult to read right now’ pile – waiting for the day when they have enough time to do it justice. I did that. I picked it up and put it down several times; not because it is difficult to read, but because it is so rich – difficult to digest in one go.

As I got to grips with what it was saying, it dawned on me that the paper could be a guiding vision for emerging UK Health Networks, Federations and Local Health Communities clusters of general practices that serve populations of between 50 000 and 500 000, within policy-making authorities called clinical commissioning groups (CCGs). General practices within these areas are meant to lead collaborative improvements as well as evaluate them – development and research, or ‘R&D’. CCGs will find the paper useful to design improvement projects, evaluate them, and train the leadership teams to coordinate them.

Improvement projects

Table 1 in the paper provides a useful checklist of 24 factors that will cause CCG interventions to have different effects in different contexts. Some concern individuals, such as preferences and literacy. Others

are social, like family culture and community safety. Quality improvement teams can use this list to consider which factors they need to bring into view.

Evaluated service improvements

The section on page 264 (including Table 3) about research methods should be understood by everyone. It reminds us that de-contextualised research methods are a major reason for findings not being translated into practice; also, that research and evaluation must go beyond examining what is (or more strictly what was) true and also consider ‘emergence’ – new things that continually emerge as different factors affect each other. This requires methods that are ‘participatory, multi-level, and flexible, conducive to ongoing measurement from diverse data sources..., integrate quantitative and qualitative methods and generate ongoing learning ... contributing to a continuously learning health system’.

Leadership

The paper reminds us that the ‘multi-level nature of context factors in Multiple Chronic Conditions requires partnerships to generate, evaluate and apply the knowledge in diverse settings’. Table 4 (and Figure 2) provides a checklist that CCGs can use to identify partners (e.g. researchers, patients, policy-makers), domains of their engagement (e.g. formulating research questions, disseminating findings and translating findings into plain language), and steps for building and sustaining the partnerships.

This paper also has lessons for those whose job it is to support and monitor healthcare quality – Health Care Commission, Clinical Senates, Health & Wellbeing Boards and many others. They too need to engage with the dynamic, complex and context-dependent nature of most situations in primary care. They need to develop an approach to quality assurance that allows standards to be reflected on by local people and adapted to the local context (‘locally owned’). The paper reminds such groups of the ages-old truth that standards and evidence do not on their own inspire quality. Kolb’s Learning Cycle reminds us that standards and evidence need to be reflected upon and tested out in a real-life situation before learning and change can happen – it is called ‘local ownership’.⁶ These monitoring bodies should encourage CCGs and Health Networks to create environments in which standards are set and knowledge is generated within a framework of organisational learning and service co-design.

If CCGs and Health Networks act on the conclusions of this excellent paper, they will see the need to facilitate annual cycles of interorganisational im-

provements, within which external insights are combined with internal knowledge-generation, to allow people of different disciplines at all levels and places in the system to collaborate to improve health for all – at the same time building a rich network of interdisciplinary relationships for shared care. This would have the effect of replacing the traditional linear relationship between ‘R’ and ‘D’ with the more dynamic concept of ‘R&D systems’, in which research informs development and development informs research in on-going cycles of learning.

GOVERNANCE

This is a personal review of an already published paper, for which I take personal responsibility.

CONFLICT OF INTEREST

None.

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