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Editorial:

Qualitative or Quantitative? Developing and evaluating complex interventions: time to end the paradigm wars.

In recent decades, development of research capacity to accompany academic development in nursing has been punctuated by "paradigm wars", mirroring those of the social sciences, with proponents of differing epistemological and ontological positions advocating particular approaches to research. Although some have declared the paradigm wards to be over (Bryman, 2006) hostility has not ceased on all fronts and many still act as if they are members of opposing armies, eyeing the former enemies with suspicion and all too ready to take offence. To a large extent the 'war' has boiled down to a 'simple' conflict between the practitioners of qualitative and quantitative research and has taken the form of arguments concerning the relative merits of differing approaches based on differing perspectives on epistemology and ontology .

Philosophical discourse is surely an important scholarly activity. Understanding the nature of knowledge and how we come to acquire it is surely a fascinating activity. Perhaps though, it is time that we recognised that "science" and "philosophy", while inextricably linked, are not the same thing. The Nobel prize winning physicist Richard Feynman is quoted as saying "*Philosophy of science is as useful to scientists as ornithology is to birds" (Wkipaedia Contributors, 2012)*. The point is contentious, and subject to a rebuttal that ornithology *would* be useful to birds if they could understand it, but the stronger point made by this quote is the simple recognition that the two activities (in this case being a bird and being an ornithologist, being a scientist and being a philosopher of science) are not the same.

In the past, nursing scholarship has sought to demonstrate its academic credentials by contributing considerable efforts to debate and discourse on research paradigms. It has also, at times, spent considerable effort in distancing itself from 'medicine' by attempting to define unique areas of study and concepts uniquely amenable to nursing science. One example of this might be the nursing model movement of the 1980s and 90s, which sought to professionalise nursing by distancing nursing work from the work of doctors, creating several competing 'nursing' models in opposition to the (singular) 'medical' model, but which possibly hampered the development of inter-professional working. Another, more contentious example, could be the nursing diagnosis movement, which has developed an alternative set of concepts and diagnoses to those of the doctors but with few discernible benefits for patients and which appears to have no credibility outside the profession and little enough within it.

In so doing nursing's scholarly capacity, which is often limited and poorly funded, has been wasted, opportunities to link to researchers in other disciplines diminished and effort that could have been applied to advancing the knowledge base for patient care and health policy has been directed elsewhere. Over recent years this journal has attempted to shift the focus so that the core of

nursing scholarship is the generation of knowledge that can be applied to the benefit of recipients of health services. We have supported calls for an end to introspective research that does not build progressively on what is already known and fails to move toward solutions to the problems confronting nurses and their clients. We have expressed this through the publication of a number of editorials which have criticised the current 'state of the art' (Hallberg, 2009, Rahm Hallberg, 2006) and through a gradual evolution of our editorial selection policy, leading to our recently revised 'aims and scope' (Griffiths and Norman, 2011).

As part of this strategy we have begun publishing an occasional series – classic methods papers - in which we reprint seminal papers, generally drawn from other disciplines, which articulate methods and approaches useful for nursing research (Norman, 2010). We believe that excellent research should be based on the strongest methods. The sources for such methods should be the most authoritative, irrespective of which discipline they were originally published in. Just as the search for uniquely 'nursing' phenomena and constructs is unproductive, so is the search for unique 'nursing' research methods (Griffiths and Bridges, 2010). Rather there are things that are of particular interest to nursing, to which nurses can and should contribute to understanding and there are research methods that are relevant to addressing the research questions that arise. Nurses and nursing research is certainly able to contribute to the development of research methods although the reality is that few, if any, of the methods generally used in nursing research were originally developed in that arena (Griffiths and Bridges, 2010).

So far in this series we have included papers examining statistical techniques for reliability assessment (Griffiths and Murrells, 2010) and approaches to measuring quality (Manias, 2011). In this issue we offer another paper in this series - "Developing and evaluating complex interventions: the new Medical Research Council (MRC) guidance", which was originally published in the British Medical Journal, by Peter Craig and colleagues (insert citation to IJNS-D-12-00078), which the authors have introduced with a specially commissioned commentary (Craig and Petticrew XXXX insert citation to IJNS-D-12-00646).

This framework has previously been promoted as a means to finally end the paradigm wars for nursing, or, more modestly, provide a pathway to relief for those that seek it (Richards and Borglin, 2011). The guidance provides a framework that clearly establishes the important place of quantitative analytical studies, including randomised controlled trials (Richards and Hamers, 2009), but also requires that studies are relevant and meaningful by outlining steps that must be taken to recognise and incorporate the complexity of human interactions in the development of intervention, the design of evaluations and in the reporting of studies (Möhler et al., 2012). Studies which do not embrace such complexity have little value in the complex world of practice. The MRC framework also clearly demonstrates the usefulness of qualitative studies are also challenged though, because the framework makes it clear that in isolation and with no clear link to a pathway for action, they too have little value for a practice discipline. While the two are not generally linked, the same critique and challenge would also apply to quantitative surveys which are also qualitative in the sense that they primarily seek to describe.

So, as part of our mission to advocate "nursing research" as an important topic for health services research and to ensure "nurse researchers" are fully recognised (and competent) as health services researchers with a particular interest in nursing(Griffiths and Norman, 2011), we are pleased to give our readers an opportunity to further consider the *Medical* Research Council's guidance on developing and evaluating complex interventions, and the accompanying commentary, by republishing it here. As the authors acknowledge in their accompanying commentary, this is not the last word and further adaptation will no doubt occur. Hopefully nursing researchers can contribute to that constructively to debate by engaging with their fellow health services researchers with a common interest in complex interventions. Perhaps the paradigm wars will not end here, we are not the first to call for their and will not be the last, but the end is surely now in sight.

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