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Nurse researchers often have to choose between doing research that informs nursing practice and fulfilling the requirements of an academic career

Is nursing research relevant to practice?

RESEARCH CHALLENGES: PART 1 OF 2

In this article...

- The gap between research and practice
- Dilemmas faced by nurse academics in their research choices
- How nursing has become research-driven and data-greedy

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In response to a claim that the nursing profession has let itself down on research, part one of this two-part article explores the challenges faced by nurse academics. Adopting a provocative stance, I question the usefulness of research as it is currently conducted and argue that the interests of universities and journal publishers can steer nurse academics away from the research projects that might be of greatest benefit to practitioners and patients. I contend that the nursing profession is complicit in supporting a system within which producing research data has become an end in itself, without much regard for theory-building and practice improvement. In part two, I explain how nursing can re-establish itself as a research-based – as opposed to a research-led – profession.

Nursing research has risen greatly in prominence over the past decade. It is recognised as being vital to the development of the profession, and more and more nurses are encouraged to become involved in clinical trials and other research projects. Research findings form the foundation of evidence-based practice and there are more nursing journals than ever before, mostly filled with empirical research projects.

Yet Janet Davies, Royal College of Nursing chief executive and general

secretary, recently said at a congress for senior nurses that research “is an area where we have, as a profession, let ourselves down” (Merrifield, 2016). At that conference, Davies echoed a number of sentiments I had recently expressed at the RCN research conference in Edinburgh. However, my point was not that the nursing profession had let itself down, but rather that nurse academics did not always feel able to act in the best interests of patients and practitioners.

I use the term ‘nurse academics’ to refer to qualified nurses employed in the university sector, usually as lecturers and researchers. Most of them are still registered as nurses and do their best to uphold the values, ethos and aspirations of the nursing profession. However, they also have a contractual obligation towards an employer with values and aspirations that sometimes conflict with those of nursing. Hence, nurse academics may sometimes be conflicted about how to act and what choices to make. In some cases, they may feel under pressure to choose a course of action that is not necessarily in the best interests of nursing and nurses.

Contractual requirements

The first and most direct cause of conflict is the university itself. To gain promotion and, in some cases, simply to keep their jobs, nurse academics must sign up to the missions and goals of the universities that employ them. Universities are usually thought of primarily as places of education, but they often consider research to be their most important mission. Many nurse academics are therefore expected, and sometimes contractually obliged, to secure external funding for research

5 discussion points

1 The nursing research agenda has become separated from the needs of nursing practice

2 Nurse academics can feel pressured to choose research projects based on how these fulfil universities’ needs for recognition and funding

3 Commercial pressures can drive journal publishers to favour articles that have a high academic impact, rather than a high clinical impact

4 The demand for more and more empirical evidence can result in an overload of data at the expense of knowledge and understanding

5 We need a coordinated programme of joined-up scholarship driven by the needs of patients and practitioners



More and more nurses are being encouraged to take part in clinical trials

projects and publish the findings in top academic journals. Many research grants are for specific projects identified by funding bodies, so nurse academics often feel compelled to do research they have not chosen and have little interest in. In some cases, they spend far more time writing grant applications than actually doing research. When their grant applications are successful, researchers often jump from one unrelated project to another, driven by a contractual requirement to bring in funding to their university, rather than being free to undertake sustained programmes of research, scholarship and practice development that might have long-term practical benefits.

Research-based or research-led?

While this might meet the demands of universities regarding research grants and publications, it does little for the development of the science and art of nursing. Ideally, researchers should be working alongside practitioners to develop a deeper understanding of nursing and answer specific questions about practice. However, more often than not, the research agenda is set by university mission statements and enforced by academic administrators with little understanding of, or interest in, patient outcomes and practice development. Rather than being a research-based profession, there is a danger that nursing is becoming research led.

Academic nurse researchers might well have the best interests of their profession at heart, but they are ultimately answerable to their employers, who judge them less on their contribution to nursing knowledge and practice than on the size of their research grants and the journals in which their work is published.

The impact factor game

If we could be sure that the research published in top academic journals was also the work that made the greatest contribution to nursing practice, there would be no conflict of interest for nurse academics. However, nursing journals are not neutral, interest-free media for the unbiased transmission of knowledge and information. They actively shape the discourse they disseminate by selecting what they publish. Most journals are commercial endeavours that need to make a profit, and editors may be under pressure to accept certain papers and discourage or reject others for reasons that may have little to do with their contribution to the discipline.

One of the most important metrics for judging the academic quality of a journal

is its impact factor. This has nothing to do with its impact on practice: it is a calculation based on the average number of times that papers in the journal are cited in other papers. In other words, it is a rough measure of the influence of the journal on the wider research community. More importantly for the publishing companies, a high impact factor attracts prestigious authors and increases sales in the form of subscriptions and downloads.

In the quest to raise impact factors, some editors and publishers will deliberately select papers based predominantly on the likelihood of them being cited, rather than on their relevance or usefulness. The editor of one of the major UK-based academic nursing journals refers to this as the "impact factor game", explaining that "publishers monitor citations carefully and editorial boards and journal management teams debate and decide on what kinds of papers to encourage, and which to discourage or discontinue. Some publishers may exert pressure on the editorial team to improve or at least maintain the

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impact factor of the journals and to select articles that will contribute to the two-year citation window" (Watson et al, 2013). Researchers are therefore aware that, to have their work accepted by top academic journals, they need to write papers likely to be read and cited by other researchers rather than by practitioners.

An end in itself

Some papers may attract the attention of other authors for the wrong reasons, but being highly cited has become an end in itself, and is widely considered in academic circles to be a good thing regardless of why. The editor quoted above claims that "whether the citation reflects on the work in a positive or a negative light is immaterial; someone who has published and 'got it wrong' has achieved a great deal more than someone who is right but has never published" (Watson et al, 2016).

The measure of what a paper has achieved has little to do with the usefulness of its content to nurses, or even with the extent to which its findings are accurate.

Academic versus clinical impact

Nurse academics are confronted with a dilemma. They are expected by their employers, and sometimes bound by their contracts, to publish their work in journals with high impact factors. However,

journal editors who play the 'impact factor game' will often select papers based on criteria that might have little or nothing to do with good nursing scholarship or impact on practice. As nurses, academics know they have a duty to publish in journals with a high clinical impact – that is, journals read and acted on by managers and practitioners. As university employees, they often feel obliged to publish in journals with a high academic impact – that is, journals read mostly by other academics.

Evidence-based practice

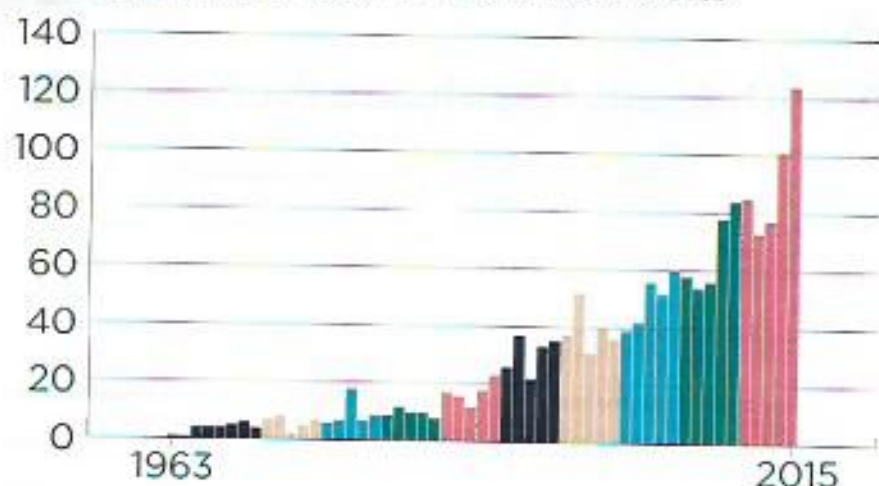
I now wish to suggest that the nursing profession is itself complicit in supporting a research-led discipline driven by interests and concerns that have little to do with nursing practice. Over the past 20 years, evidence-based practice has emerged as the driving force in nursing and has been enthusiastically adopted by managers, policy-makers and practitioners, to such an extent that any intervention not based on 'best evidence' from research is nowadays looked upon with suspicion.

The call from the profession is for ever more data to feed evidence-based decisions, and nurse academics have generally been happy to oblige by providing more outcome studies, quasi-experiments and randomised controlled trials. We have now reached a point where researchers are not even waiting for the profession to identify what research is needed. Driven by the need to publish, many are conducting studies wherever they can identify gaps in literature, on the assumption that practitioners and policy-makers will pick and choose whatever they need from the growing mass of data.

Interpreting data

Let us take a straightforward example: the effects of music on stress, anxiety and pain. A search of the PubMed database using the terms 'music' and 'nurs*' identified 1,628 papers dating back as far as the 1940s. Fig 1 shows the annual number of publications in the past 50 years. As we can see, there has been a steady increase over the years, from fewer than five papers in 1965 to more than 120 in 2015. Not all of these are research reports; a systematic review of the effects of music intervention in peri-operative settings identified 42 RCTs conducted between 1995 and 2006 (Nilsson, 2008). Of these, approximately half demonstrated some kind of positive

FIG 1. NUMBER OF PUBLICATIONS FOUND ON PUBMED WITH THE SEARCH TERMS 'MUSIC' AND 'NURS'



effect, although the author noted that the quality of the studies was extremely varied. She concluded that "the effects of music on pain and stress for surgical patients is not well understood... Further research and research of higher quality is needed" (Nilsson, 2008). Somewhat confusingly, four further RCTs or quasi-experimental studies published since this systematic review suggest that:

- Listening to music makes no significant difference to the perception of pain (Allred et al, 2010);
- It leads to a decrease in pain in the first 24 hours after an operation (Sen et al, 2010);
- It makes no difference during the first 24 hours but makes a significant one on day two (Vaajoki et al, 2012);
- Further research needs to be undertaken (Özer et al, 2013).

Music interventions could potentially play a significant role in the care of peri-operative patients; the topic has benefitted from a great deal of attention from researchers; and we have an abundance of 'evidence' from RCTs. Yet that evidence is so contradictory and confusing that no firm recommendations for practice can be made, and the only thing researchers can agree on is that further research is required. How can it be that we have so much data and yet so little understanding?

What works and why?

We can see from the above example that more data does not necessarily result in better practice. In fact, fewer studies that built on one another, rather than attempting to answer the same question, might have helped to cut through some of the confusion surrounding this topic.

What we need is a coordinated programme of joined-up scholarship driven

by the needs of patients and practitioners, in which conceptual and theoretical understanding is developed, tested and refined through carefully targeted research projects and detailed critical analysis. It is not enough to know whether or not music is beneficial in peri-operative care. As with most complex nursing interventions, there is no straightforward answer to such a question. To decide whether, when and how to embark on this or any new practice intervention, it is vital that we understand the social, psychological, physiological, ethical and other mechanisms at play. As well as knowing what works, we need to understand why it works.

Unfortunately, the academic rewards for conducting research-based empirical studies are much greater than for scholarly theory-building and conceptual work, for which external funding is rarely available and which academic journals are less likely to publish. As a result, nursing is awash with research findings, but there is little understanding of what to do with them. We have an excess of information, rather than less knowledge and hardly any wisdom.

Conclusion

Nurse academics are mostly employed by institutions whose reputation and finances depend on large grants and prestigious publications, and where research is regarded as supremely important. Doing research has become an end in itself, detached from theory-building and other scholarly activities. The most promising university researchers are accorded star status and exempted from less prestigious academic activities, such as teaching and administration. Driven by contractual requirements to publish in top academic journals, nurse academics are undertaking research projects without reference to the

needs of theorists and practitioners, resulting in the accumulation of more or less random – and often contradictory – data that is of little practical use.

In my view, this is detrimental not only to practice, but also to the development of nursing as an academic discipline. It might be unfair to suggest that nursing has 'let itself down' on research, but it is true that many researchers are being forced to choose between furthering their academic careers and acting in the best interests of the nursing profession. **NT**

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