



University of HUDDERSFIELD

University of Huddersfield Repository

Topping, Annie and McMahon, Ann

Board Editorial

Original Citation

Topping, Annie and McMahon, Ann (2012) Board Editorial. *Journal of Research in Nursing*, 17 (6). pp. 513-515. ISSN 1744-9871

This version is available at <http://eprints.hud.ac.uk/id/eprint/15818/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Board editorial

Annie Topping

Professor of Nursing and Director of the Centre for Health & Social Care Research,
University of Huddersfield, UK

Ann McMahon

Editor in Chief, Journal of Research in Nursing

Over 50 years ago the United Kingdom Prime Minister at that time, Harold Wilson, spoke of ‘the white heat of the technological revolution’ (Goodman, 1995). He was talking about how science and technology would drive economic and social growth; a pressing concern at that time as many countries were still emerging from the aftermath of a world war. Since then the pace of technological advance has been breathtaking. The current global economic situation has left many countries experiencing desperate austerity measures. Again technological innovation is being inexorably linked with the road to economic recovery. Technology in healthcare can be both a driving force for change but also a drain on finite resources. So what, you are probably asking, has this to do with nursing practice, nursing research and the nursing contribution to health and social care policy?

The 24-hour nature of nursing work involves the use of instruments, devices, tools, IT and machines to help monitor responses, record data, facilitate patients and carers to engage in self-care, maximise independence and cope with health and ill health. Technology is equally widespread in nursing education, research and the management of resources. Nursing and technology are intertwined yet the closeness of that relationship often goes unnoticed. Over a decade ago Sandelowski (2000) suggested that nurses appear, at most, as a footnote in the history of medical technology (2000). That view was recently reinforced in a Dutch survey where few nurse informants spontaneously mentioned their involvement in technology; more positively, over half indicated they would be willing to participate in technology implementation (De Veer et al., 2011). One of the possible explanations for this invisible interdependence may be a consequence of the pragmatic imperative for *getting the job done* and in order to do that nurses quietly assimilate technology.

However, for some, technology is apposite to the beliefs and values associated with care and caring. For others, refusing to engage provides some form of badge of honour. An unquestioning dependence on what *the computer says* has the potential to be detrimental to patient care. Knowing when *not* to use technology would seem as important as mining its potential. The speed of change and growth in new technologies fills many with profound feelings of hopefulness. For others that hope is moderated by fears about the effect on

Corresponding author:

Annie Topping, Centre for Health & Social Research, University of Huddersfield, Queensgate, Huddersfield HD1 3DH, UK
Email: A.e.topping@hud.ac.uk

patient care, the potential to distance nurse from patients and also the unforeseen effects on safety and sometimes workloads. Technology has the potential to reap savings in terms of time, costs, efficiencies and real improvements to patient outcomes (Dowding et al., 2011). It can also disrupt routine and established practice to the extent that it contributes to a state of cumulative unreasonableness, where a succession of individual, eminently sensible, changes collectively create an excessive demand on users. We would argue, therefore, that it is imperative that we as nurses develop a critical position in relation to technology in healthcare and make a visible and vocal contribution to the debate.

The rationale for this focus edition was, in part, an attempt to reveal that invisibility and challenge the notion that nursing research and practice is both insular and elitist. Consequently *JRN* has attempted to purposefully contribute to this debate, so, for the first time in the history of this journal, we issued a call for papers. We had no idea what response the call would receive and are really pleased to offer what we hope is a useful contribution.

We begin with a guest editorial from a nurse leader in innovation who calls for the development of strategic nursing leadership in innovation. We include papers that illustrate where nurses are capitalising on the therapeutic and scholarly potential of world wide web technologies as well as where they argue that these resources are underutilised within our professions. In the first two linked papers, Sheeran et al. *shape* web technologies in order to improve care delivery and the patient experience. In the third paper Kirk et al. *interrogate* the web using Google analytics, also with improved patient care and patient experience as their ultimate goal.

The two linked papers by Sheeran et al. from the Peter MacCullam Cancer Centre in Melbourne, Australia illustrate how a rigorous developmental approach can remain person-centred. This interdisciplinary research team piloted and tested with a range of 'end users' including patients, families, carers and clinical staff the design and response to a social networking platform. The 'take home' message underscores the importance of connectivity between and across systems. If IT systems don't 'talk', then the technology, however user-friendly, has reduced utility.

Kirk and colleagues are known for their international contribution to genetics research in nursing. The field of genetics is indeed an emerging technology and these researchers are actively securing the nursing voice in these developments. They recognise the necessity for nurses to develop knowledge and skills in genetics-genomics if they are to provide appropriate, patient centred care. Utilising Google analytics as an evaluations strategy they sought to evaluate the impact of their web-based educational resource – *Telling Stories*.

In the fourth paper, White and colleagues offer insight into the possible risks of technological implementation in specific healthcare settings. Hitherto, the focus of risk with mobile technology has been on interference with other technologies and the possible threats to patient confidentiality. This team undertook an extensive review of the literature related to infection risks followed by a laboratory-based analysis of micro-organisms cultured from mobile devices used by students undertaking clinical placements in operating departments. They found microbial contamination present although the relative risk from onward transmission from device to patient remains as yet unclear.

In the final paper in this edition, Haigh and Costa propose a slow burn response by nurse researchers to some technologies such as participatory media. They offer a rallying call to researchers to embrace participatory media and become digital residents rather than temporary visitors. Failure to do so, they argue, will leave nurse researchers behind.

This collection of papers combines the how-to knowledge of development, the benefits of knowledge mining, consideration of risk and burden on patients and, lastly, grasp of the opportunities afforded by technology. As a portfolio they capture the intensity, energy and activity inherent in white heat that is beginning to glow around technological innovation in nursing.

We acknowledge that this edition might simply offer a toe in the ocean of technological innovation and a mere taster of the level of engagement nurses have with technology. We hope, however, that it will stimulate further debate.

JRN would welcome papers that make a contribution to this policy imperative and yet seemingly under-represented area in the nursing literature.

References

- De Veer AJE, Fleuran MAH, Behhema N and Francke AL (2011) Successful implementation of new technologies in nursing care: A questionnaire survey of nurse-users. *Medical Informatics & Decision Making* 11(67) Available at: <http://www.biomedcentral.com/1472-6947/11/67> (accessed 19 September 2012).
- Dowding DW, Turley M and Garrido T (2012) The impact of an electronic health record on nurse sensitive patient outcomes: An interrupted time series analysis. *Journal of the American Medical Informatics Association*. 19(4): 615–620.
- Goodman G (1995) Obituary: Harold Wilson leading Labour beyond pipedreams. *The Guardian* 25 May 1995. Available at: <http://www.guardian.co.uk/politics/1995/may/25/obituaries/print> (accessed 19 September 2012).
- Sandelowski M (2000) *Devices and Desires: Gender, technology and American nursing*. Chapel Hill, USA: University of North Carolina Press.