

Working internationally: Crossing the boundaries of wound care

KEY WORDS

- ▶ Collaboration
- ▶ International
- ▶ Wound care

Wound care is an area of clinical practice and research that lends itself to international collaboration. With the growth of social media, video conferencing, Skype™, and other forms of virtual communication, it has never been easier for clinicians to communicate with one another and become immersed in collaborative research and the sharing of best practice. This article highlights areas where collaboration can take place effectively on an international scale. Such international partnerships can encourage the sharing of best practice, with new techniques being developed as a consequence. The authors share their experience of an effective collaboration between nurse academics based in the UK and Australia.

Wound care is an international area of nursing and medical expertise, and one where care intervention is truly inter-professional. Clinicians in all countries can collaborate with one another to improve patient care, ensuring that the patient's journey is based on the best available evidence and research. With the growth of social media, video conferencing, Skype™, and other forms of virtual communication, it has never been easier for clinicians to communicate with one another, and become immersed in collaborative research and the sharing of best practice. Here, the authors present an insight into an effective collaboration between nurse academics based at universities in the UK and Australia.

Why collaborate internationally?

Storr (2009) estimated that one in ten patients are harmed while receiving hospital care in developed countries, with a much higher rate in developing countries. Morbidity and mortality rates could be reduced by 50% by improved hospital patient safety in both developing and developed countries (World Health Organization [WHO], 2008). Indeed, the International Council of Nurses (ICN; 2012) states its mission as being to lead societies towards better health. Additionally, the ICN (2010) published an International Classification for Nursing Practice, aimed at:

- ▶ Establishing an international standard to facilitate description and comparison of nursing practice.
 - ▶ Serving as a unifying nursing language system for international nursing, based on latest terminology standards.
 - ▶ Representing nursing concepts used in local, regional, national and international practice, across specialties, languages, and cultures.
 - ▶ Generating information about nursing practice that will influence decision-making, education and policy in the areas of patient need, nursing interventions, health outcomes, and resource utilisation.
 - ▶ Facilitating the development of nursing data sets used in research to direct policy by describing and comparing nursing care of individuals, families and communities, worldwide.
 - ▶ Improving communication within the discipline of nursing and across other disciplines.
 - ▶ Encouraging nurses to reflect on their own practice and influence improvements in quality of care.
- Nurses (along with other clinicians) need to work together to develop best practice and guidance for patient care. However, the discussion surrounding working collaboratively is not limited to clinicians, with Weber (2007) arguing that universities should embrace international activities that would project openness in their processes, structures, activities, and results, thus influencing decision-making using international information.

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The Australian Research Council (ARC, 2011) has developed a strategy in response to the increasing globalisation of research and is committed to creating and enhancing international collaboration opportunities (ARC, 2013).

Australia's commitment to international working is evident in the average growth in collaborations – there have been 16400 additional collaborative outputs between 2000 and 2005 (Adams et al, 2007). This growth is also on a significantly greater volume of collaboration and is a substantial change.

In the UK, Adams et al (2007) identified that international research collaboration is a rapidly growing area and co-authorship is the most likely indicator of collaboration. They found the increase in the volume of collaborative articles in the 2000–2005 period varied from “30% for France, 50% for the UK, and over 100% for China.” The UK is most similar to the USA, Canada, and Australia, in having a well-developed research base in higher education and publishing approximately 60% of output in the fields of biomedicine and health.

There are distinct benefits in collaborating internationally in health research and its translation to clinical practice. Collaboration provides access to greater funding opportunities and greater access to resources, including ideas and human resources (in both the clinical and the academic setting). Importantly, the rapid spread of information from collaboratively authored articles facilitates a higher potential for dissemination of data, as well as translation of evidence into practice.

The importance of working internationally and collaboratively has been embraced by the wound care community with organisations including the European Wound Management Association, Australian Wound Management Association, and World Union of Wound Healing Societies – to name but a few – collaborating to develop best practice statements, position documents, guidance, and consensus documents to promote evidence-based practice in tissue viability, wound care, and leg ulcer care.

The international nature of wound research

The cost of wound care is significant, with Bennett et al (2004) estimating annual expenditure on pressure ulcer care being approximately 4% of the NHS budget. Posnett and Franks (2008) calculated

that 200000 people in the UK had a chronic wound with the estimated total cost of treatment being £2.3–3.1 billion per year. In the USA (Gordon et al, 2004; Hess, 2004; Driver et al, 2010) estimated that wounds cost the health service in excess of US\$50 billion per year. Fife et al (2012) undertook a 5-year retrospective audit of de-identified data from electronic health records originating from 59 hospital-based outpatient wound centres in 18 states across the USA. Their data revealed that flaps and grafts were the most expensive wound type, with a mean cost to heal per wound of US\$9358, diabetic foot ulcers were the most expensive type of chronic ulcer with an average cost per patient of US\$5391 and the average cost for pressure ulcers was US\$3349. In Australia, the cost of wound care to the health service has been estimated to be US\$2.6 billion a year with this being the second most frequently billed item in general practice (Wound Management Innovation Co-operative Research Centre, 2010).

The cost of managing wounds effectively is not only measured in financial terms, but can also be conceptualised as being significant in terms of patients' quality of life and care-giver burden.

The need to promote evidence-based practice in this area of care has been recognised by researchers, academics, and practitioners, with many publications being joint authored by specialists and key opinion leaders around the world. There is recognition of wound care being a specialist area of practice with tissue viability and wound, ostomy, continence nurse specialist/consultant roles existing in most developed countries.

The importance of promoting an interdisciplinary and cross-professional approach to wound management has been recognised by a number of organisations (Prowse and Upton, 2012). These include, but are not limited to: the Wound Management Innovation Cooperative Research Centre (WMI CRC), funded by the Australian Government's Cooperative Research Centre, The CRC aims to support research designed to improve wound care interventions, transfer of new knowledge, education, and training programmes that benefit wound management and ultimately to improve patient outcomes; The Welsh Wounds Network's mission includes the implementation of innovative practices and interventions based

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on high-quality research and promotion of the expertise in wound healing that is available within Wales to a wider audience; and lastly, the UK's Tissue Viability Society aims to provide expertise in wound management to all clinicians, to disseminate information, promote research, and increase awareness of all aspects of good clinical practice in wound prevention and management.

International collaborations are complex, but also crucial in answering questions in health care. Collaborations generally work better when strategies are in place to manage conflicts that can arise and a collaborative agreement/memorandum of understanding is created and signed. Cooperative goals must be developed within a framework of respecting diversity and culture, and establishing effective communication channels. Communication is key to the success of international research teams as strategies need to suit the different needs of the entire team.

Clinicians will adopt different roles – often dependent on their personality type and/or past experiences – within a research group. These roles include: brainstormer, implementer, judge, expert, encourager, tension-reliever, distracter, and blocker (Hogg M and Terry D, 2000). It is an advantage to have a good blend of these roles within the research team to maintain sustainable groups; that is, if the research team has too many of the same personality type involved on one topic, there may be a clash of beliefs and ideas, potentially causing friction and blocking progress.

The first point of any research collaboration is having an introduction to a potential collaborator. This can be facilitated in several ways: email introduction by a third party, at a professional conference, meeting visiting scholars, or through a mutual colleague. Additionally, faculties and some healthcare organisations offer financial support for research that is collaborative to facilitate research mobility for early career researchers, postgraduate students, and other researchers. This financial support may cover costs such as travel, resources, and dissemination (publication and conference). More frequently, funding bodies are focusing on internationalisation of research projects.

As Burton et al (1997) and Brna and Burton (1997) posit, within a collaborative state there can be processes that are cooperative (such as the

division of labour). However, it is also important during collaboration that each party maintains their viewpoint while working together to achieve a shared goal, rather than a shared conception of the topic under investigation.

Successful international collaboration

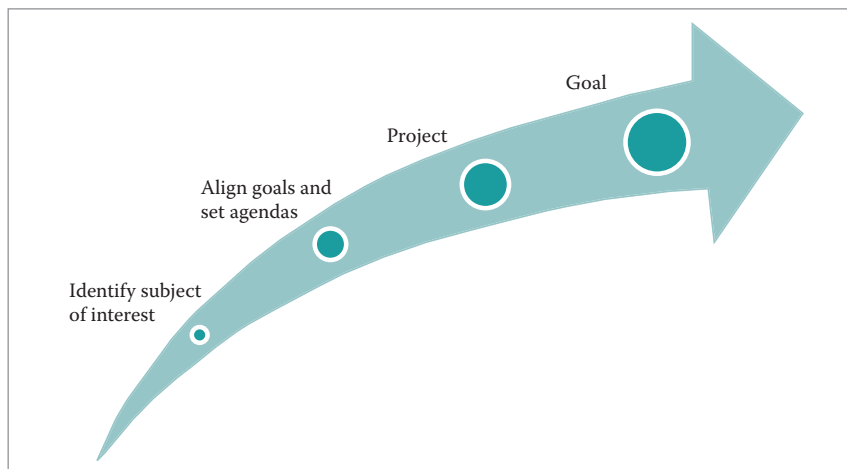
The authors of this article were introduced by email through a mutual colleague. Although from quite different specialities, the authors found common interests in patient-centred care and wound management. We have undertaken international research into a previously unreported area, that of resilience in patients with acute wounds. Despite being based at opposite ends of the world, with differences in time zones proving problematic, effective communication was maintained via email and Skype meetings.

It is important when developing international collaborations not to be deterred by distance, although it should be remembered that communication may take place outside of normal working hours and at weekends. Discussions need to be had regarding the healthcare priorities of each contributor's country to ensure that any protocols developed reflect the needs of all; there may be subtle differences that require consideration. For example, healthcare funding may be different in various countries, or interventions may be medically-led, rather than nurse-led.

Once communication channels have been developed, and are accessible and affordable for all collaborators, a strategic direction needs to be developed and agreed to (*Figure 1*). In the authors' case, potential areas for research and practice development were discussed. These included funding, building capacity, contribution to the profession, utilising the team expertise in the form of invited scholars to present lectures and/or seminars to industry and academic audiences, potential collaborative conference presentations, and scientific publications.

Mapping time lines and key result areas for the collaboration is a significant step in the partnership. From this point, agreements can be drawn up between the collaborating parties and signed. Collaborative agreements assist in ensuring transparency across a number of domains, such as intellectual property, financial responsibilities,

Figure 1. Model developed for the wound research collaboration.



confidentiality, use of brands, roles within the partnership, and cement a partnership based on goodwill and trust.

The following also need to be addressed during planning: scope and duration of the project; finance and management; communication and accountabilities; key tasks; publication and authorship; conflicts of interest; and governance and information security. Key projects are developed from the agreed plan and, for each project, a coordinator is assigned. The coordinating role for each stage of the collaboration may change between the partners and is generally determined by conception of the idea, role in funding applications (the principal researcher for some funding applications needs to be located in the country where the funding source comes from), experience in the area under investigation, and other considerations.

In this collaboration example between the UK and Australia, three stages for the research were identified. The first stage was to identify the gap in the evidence base, after which a pilot study was developed culminating in a larger-scale study. The larger-scale study is anticipated to be conducted in more than three countries, resulting in more networks being developed, and truly opening up the potential of nursing research on an international scale.

CONCLUSION

Wound care is an area of clinical practice and research that lends itself to international collaboration. Working in an international

partnership promotes equity of care for all patients. The development of these international partnerships encourages the sharing of best practice and the development of techniques, skills, and knowledge that advances safe and effective clinical interventions.



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