The cutting edge of nursing research: strengthening evidence-based practice

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Inspired by Emeritus Professor Anne McMurray AM.

The new century has heralded dramatic changes in health care which have major implications for clinical practice. To respond to these changes, our research agendas will need to develop and adapt in tandem with the complexities of the workplace, the growth of technologies, rising patient acuity, evolving models of care, and the generational divide in the nursing workforce. The most consequential and impactful research will focus on the processes of quality care, and the ways in which health outcomes are shaped by environmental factors that modify health throughout the health illness trajectory and across the lifespan. An optimistic future will see our research agendas continue to inform clinical practice to ensure that the health care delivered is contextually responsive, appropriate, acceptable, cost-effective and underpinned by quality and safety. While the only constant in health care is change, it is timely to reflect on the aspects of clinical practice and research that have changed, and those which have remained the same.

What has not changed in practice?

The fundamentals of good nursing care: There is still a need for human qualities such as kindness, compassion, thoughtfulness, understanding, and skilled nurses who competently assist patients in managing the technical, procedural and treatment elements of their condition and care1,2. In the perioperative setting, nurses have a narrow window of opportunity to connect on an individual level with patients, who are already stressed as a result of their imminent surgery. In these situations, perioperative nurses have limited time to establish patients’ trust while obtaining information that is confidential and deeply personal but is also critical to providing safe care. While perioperative environments are dominated by medical technologies, the nurses who practise within these spaces are patient-focused and work towards achieving the best outcomes for patients.

The patient journey requires non-hierarchical, interdisciplinary collaboration and shared responsibility that edifies patient decision-making. Patients coming into hospitals are vulnerable and getting ‘sicker’ but, ironically, patient acuity continues to determine the extent to which collaboration and coordination of care occurs3. It seems that the greater the complexity in patient care — the greater the likelihood for error. As perioperative nurses, we are often called on to advocate for patients in a practical sense — to be their ‘eyes and ears’.

The disconnect between theory and practice: There is a persistent belief that nurses should be educated in hospitals, because they are still not ‘work-ready’ or ‘fit for purpose’ when they graduate. This ideology is driven by a political agenda that appears to be more interested in generating nursing numbers on a roster to meet shortages, and provide ‘training’ close to rural and regional areas to save money, rather than developing nurses who are critical thinkers4. Research evidence continues to be under-utilised in clinical practice. The adage, “that’s always been the way we do things around here” stifles innovation, creativity and critical thinking. Nursing students remain sceptical of research, likely because they have not had the opportunity to build a foundation of clinical experience upon which research can be incorporated and contextualised. In order to truly appreciate the value and potential of research in enriching practice, nurses need to develop strong clinical practice foundations that can inform, and be informed, by research.

Workforce sustainability in relation to staff shortages, skill mix, retention, and increasing time constraints in the clinical environment remain a reality in health care. Considerable international research evidence demonstrates the relationship between nurse staffing levels, adverse events, mortality and failure to rescue5. Persistent problems such as nurse turnover, workplace instability due to organisational restructuring, work intensification and complexity, a lack of teamwork, involuntary overtime, poor leadership, and the generational divide contribute to workforce instability. Young nurses find the work setting less consistent with personal values, react to loss of control, experience burnout more readily, and are less inclined to participate in knowledge sharing6.

What has changed in practice?

Nurses are ageing, with many working beyond their expected retirement dates. Work-life balance, access to flexible work options, safe staffing levels, self-rostering, overcoming the culture of bullying and ageism, and appropriate pay are becoming increasingly important to nurses. Yet nurse satisfaction is declining and many more nurses are opting to work part-time. Factors such as role conflict, social climate, and work control contribute to workplace bullying and incivility, despite health care organisations having ‘zero-tolerance’ policies to bullying behaviours. For new graduates, the effects of bullying can be paralysing as they transition to new professional roles. Our new graduates represent the future of perioperative nursing. We need to nurture and mentor them and hopefully they will stay ...

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Evolving models of care: Non-traditional, intrapreneurship, and entrepreneurship in nursing. Around 1% of nurses worldwide practise as independent practitioners in either extended or advanced practice roles. Historically, barriers to self-employment have been a lack of recognition, professional isolation, a lack of safety net, resistance or hostility from colleagues, a dearth of research to support role viability, and a lack of access to an education system that allows seamless progression to higher levels. We are entering a watershed period with the growing number of perioperative nurses undertaking further studies to perform these roles, which are defined by a holistic approach that encompasses the pre-, intra- and post-operative periods of care. These are exciting times for perioperative nurses, and we must celebrate the achievements of our colleagues who have had the courage to pursue such roles in the face of considerable professional and political opposition. As models of care continue to evolve, our clinical roles in perioperative nursing will inevitably change. This is a certainty. Rather than lamenting the loss of clinical roles and titles, we need to demonstrate the value that nurses add to this context — using a holistic approach to providing safe patient care. We must also embrace new and emergent roles and have a voice in the political fora that has the potential to influence and shape our professional future. If we remain complacent, a continued nursing presence in the perioperative environment is under threat.

What has not changed in research?

Fierce competition for research funding and gender bias: As government funds for research shrink, and the national priorities for research shift, nurse researchers are continually challenged to refocus, re-evaluate, and reframe their research questions and the programs of research they lead. Historically, being an early career researcher and a female has contributed to a lack of national competitive research funding allocated to women as researchers. Women continue to be under-represented in academia when it comes to promotion to the higher academic levels (that is, Professor). Clearly, to be successful in this competitive (and often cut-throat) environment, a woman has to be twice as good as any man ...

A lack of clarity around the most effective interventions: Although there are studies that have shown relationships between the nurse ‘dose’ (active ingredient and intensity) and adverse events such as patient falls, many questions remain. For example, the impact of specific interventions such as the use of walking frames or the implementation of falls risk assessment tools are not well studied.

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as falls, pressure ulcer incidence and MRSA infections, cause-and-effect relationships have yet to be proven. To date, no study has reported the combined effect of education, experience and skill mix on patient outcomes in perioperative settings. Yet these three variables collectively represent the concentration of nursing knowledge in a unit/department that could be applied to quality care. This type of research is begging to be undertaken in various perioperative environments (that is, public and private settings) as a way of demonstrating that nurses value-add and enhance patient care in this setting.

**What has changed in research?**

*Use of new and sophisticated research methods:* There has been a gradual shift in the focus of nursing research, with less focus inwards (nurse population), and more focus outwards (patient population). Methodological innovations in research focus and methods over the past 25 years indicate a growing maturity in research designs with an increasing number of studies focusing on practice issues and health services research. There has been a decline in theory development and testing, and theory-based studies. Qualitative studies have increased. Psychological variables (such as resilience, self-efficacy) and adult populations continue to be studied. In quantitative studies correlational, experimental and methodological studies (for example, tool/scale development) have increased. Descriptive and comparative studies have decreased. The use of sophisticated multivariate modelling techniques has increased. Longitudinal studies have remained stable over time. We are now in a paradigmatic shift towards translational research.

**Growth of translational research:** There has been a shift in emphasis from collecting research evidence, to using systematic review methods, through to developing evidence-based guidelines. Research knowledge is produced relatively quickly yet changes to practice are slow, which has led to the growing use of knowledge translation methods in research findings dissemination. Generating research evidence is important but if it is not being utilised in clinical practice and referred to in standards and clinical guidelines, then there are few, if any, benefits derived. Translational research is about creating, transferring and transforming knowledge from one social or organisational setting to another in ways that increase the accessibility and usability of the evidence derived through research findings. Knowledge translation facilitates accessibility, application and production of evidence. Collaborative research and dissemination provide local, contextually appropriate knowledge, which should be theory-based but locally translated. Importantly, organisational support for practice change is necessary.

**The future: What are the research priorities for nursing?**

What does the future hold? The only constant in clinical practice and research is change. While there are bound to be ongoing challenges, it is vital that clinicians and research come together as members of interdisciplinary teams on projects as the points of difference will enrich and inform the research that underpins safe patient care. I see future research endeavours focusing on the following areas:

**Person-focused care** — research that identifies strengths and protective factors in different patient populations. Investigate the ways in which patient outcomes are mediated by personal and nurse characteristics, and the context of the interventions.

**Decision making in health care** which includes investigating the impact of experience versus expertise, management versus leadership, and knowing that versus knowing how and why.

**Providing cost-effective and accessible health care** — extending randomised controlled trials to include parallel economic evaluations of clinical interventions. Cost benefit analyses would also include economic evaluation of nursing skills, expertise and experience will provide further evidence for the benefit of the nurse ‘dose’.

**Translational research** — moving research evidence from the bench to the bedside, and making it more accessible to end users (for example, nurses, doctors, health administrators and policy makers).

There are still many unanswered questions that warrant exploration in perioperative contexts. As perioperative clinicians, educators, managers and researchers, we must be prepared for, and embrace, the changes that lie ahead and recommit to evidence-based practice. Our patients depend on it.

**References**


**Dr Brigid M Gillespie**

**Senior Research Fellow**