Building research capacity in General Practitioners and Practice Nurses: Reflections on an initiative in nutrition

Introduction

Chronic diseases including obesity, type 2 diabetes, and cardiovascular disease represent a significant public health challenge for international primary health care systems.\(^1\) The progression of many chronic diseases are influenced by lifestyle behaviours, such as diet, which has created an emerging priority for primary care services to facilitate healthy lifestyle behaviours of patients.\(^2\) The World Health Organization has previously recommended that medical and health professionals should take an active role in promoting healthy dietary behaviours to patients in order to facilitate improvements at a public health level.\(^2\)

‘Nutrition care’ refers to any practice conducted by a health professional to support a patient to improve their dietary behaviours and subsequent biomarkers of chronic disease.\(^3\) Nutrition care may include any aspect of nutrition assessment, nutrition advice, nutrition counselling, as well as referral to other nutrition-focused health professionals and relevant services.\(^3\) Many primary health professionals, including General Practitioners (GPs) and Practice Nurses (PNs), provide nutrition care to patients, but this is generally considered to occur less frequently than clinically indicated.\(^4\) These professionals report considerable challenges in providing nutrition care, such as lack of time, knowledge and low self-efficacy.\(^5,\!6\) As a result, there is opportunity to enhance the nutrition care provided by GPs and PNs in order to facilitate improvements in chronic disease outcomes at a public health level.\(^7\)

Participation in research and utilisation of research are important means of providing quality and effective health care.\(^8\) These activities provide health professionals with an
opportunity to identify and address gaps in literature, make contributions to their specialty, and develop research and critical thinking skills. These increased skills of GPs and PNs may enhance the nutrition care provided to patients.

Health professional involvement in research can be classified on a spectrum from non-participant (or ‘user’ of evidence-based medicine), through to participants and leaders in the academic sphere. Health professionals should be supported to achieve the highest level possible for the level in which they work, using strategies such as up-skilling, mentorship and support as well as encouraging a culture which promotes research contributions.

The aim of this paper is to describe an innovative approach to research capacity building for GPs and PNs related to nutrition.

The Nutrition Study Group

The Nutrition Study Group was formed in 2015 in Australia, led by a multidisciplinary team of academic researchers. The purpose of the Nutrition Study Group was to support GPs and PNs to transition from non-participants (or ‘users’ of evidence-based medicine) to participants and then potentially leaders. In order to achieve this, the Nutrition Study Group first aimed to establish connections with local GPs and PNs to promote greater involvement in nutrition research in primary health care. Information about the commencement of the Study Group was disseminated via an excerpt in an online newsletter sent to all GPs and PNs within one local health service region in Australia (potential reach of approximately 100 general practice clinics). Potential participants were asked to also share the information with other potential participants across the country. Approximately 25 GPs and PNs from across Australia initially expressed interest in joining the Nutrition Study Group and this size has been sustained since commencement. Quarterly meetings have occurred to undertake activities tailored to pre-identified requests of the GPs and PNs involved, and the current directions of the academic research team. Face-to-face meetings
were held separately for GPs and PNs to facilitate relevant and targeted discussions; whereas online meetings were held together to share knowledge more broadly. Educational sessions involving critical review of papers relevant to nutrition care and evidence-based nutrition guidelines were provided, which were recorded and disseminated to all GPs and PNs in the local region.

The initial meetings of the Nutrition Study Group have encompassed vibrant, passionate discussions about nutrition and research, and therefore appear to be an effective mechanism of encouraging GPs and PNs to discuss research and identify the level of research engagement they wish to have. Some of the participants of the Nutrition Study Group expressed they wish to become more actively involved in research through a collaborative research project. As a result, the academic research team facilitated the design and implementation of a local project to sustain a focus on research capacity building, and concurrently support improvements to nutrition care.

**The NELICO Initiative**

The GPs and PNs in the Nutrition Study Group are currently planning to pilot test a research project to evaluate whether a nutrition education and leadership program is effective at improving the nutrition knowledge, skills and attitudes of GPs and PNs. The program is called NELICO (Nutrition Education and Leadership for Improved Clinical Outcomes) and was first developed at the University of Cambridge, UK. NELICO has been successfully used to improve nutrition care provided by doctors in UK hospital settings. Despite the research concept already confirmed, the Australian NELICO project was uniquely designed with input from the Nutrition Study Group participants through guided discussions at meetings. The discussions allowed the project to be designed in a way so that (i) Nutrition Study Group participants will increase their skills in the research process; (ii) participating
GPs and PNs will improve their nutrition knowledge, skills and attitudes; and (iii) fellow GPs and PNs will also benefit through peer-led nutrition education and awareness events in the workplace. The project will commence in 2016 through an initial local pilot of 10 practices, before a multi-site trial to evaluate effectiveness using outcome measures (such as change in practice, change in patients’ health outcomes) and process measures (such as acceptability and uptake by GPs and PNs).

**Implications for Practice**

Research capacity building for primary health care has significant benefits for both practitioners and health care systems. First, the Nutrition Study Group allows participants to increase their research skills which subsequently increases the value placed on research, and is likely to enhance the care provided to patients. Second, the Nutrition Study Group allows participants to co-create research projects by providing feedback on the purpose, design and implementation of research; all essential components of knowledge translation. Third, the Nutrition Study Group allows participants to feel connected to local research projects, which aids in early interest and increased uptake. Overall, these benefits highlight the importance of research capacity building activities such as the Nutrition Study Group.

A number of barriers can prevent health professionals from becoming actively engaged in research. Fee-for-service based models, difficulty in finding appropriate supervisors and insufficient time are commonly reported reasons for a lack of engagement in primary care research. Strategies to overcome these barriers include a greater focus on evidence-based medicine in medical schools, emphasis on evidence-based medicine in the training curriculum for general practitioners, and the availability of grants for clinicians to pursue research projects. Additional opportunities to disseminate research findings and collaborate with researchers, particularly once training is complete, are needed to encourage an ongoing culture of research contribution and effective use of evidence-based medicine.
In keeping with the multidisciplinary nature of general practice, research involving multiple health professions is required. The multidisciplinary facilitators of the Nutrition Study Group provides the opportunity to augment the skills of the investigating team to create high quality research which is readily applicable to the clinical setting. It also provides the opportunity to develop partnerships to increase research utility and communication on multiple challenges in healthcare. Addressing lifestyle-related chronic disease requires the input of multiple members of the allied health team, with advice related to diet being of particular importance. Establishing connections between nutrition researchers and those working in the primary care setting allows for greater educational opportunities and increased awareness of the role of nutrition in managing and preventing chronic disease.

**Conclusion**

Participation and utilisation of research are important in providing high-quality health care. Despite in its infancy, the Nutrition Study Group appears to be an effective means of disseminating information, and facilitating partnerships and engagement between clinicians and researchers. The Nutrition Study Group allows the importance of evidence-based care to be emphasised, facilitates involvement in research projects, and assists researchers in developing projects with increased local uptake. These implications to practice further enhance the use of nutrition research in primary care, and encourage improved nutrition care in general practice.
**Competing Interests:** None declared.

**Acknowledgements:** LB is funded through the National Health and Medical Research Council as an Early Career Research Fellow. The authors thank the Gold Coast Primary Network for their initial financial support in launching the Nutrition Study Group for General Practitioners and Practice Nurses. The authors also thank the participants of the Nutrition Study Groups for their enthusiasm and commitment to the NELICO project.
References


