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Practice nurses and research

The Fremantle Primary Prevention study

Background

The Primary Health Care Research Evaluation and Development strategy provides financial support for the development of early to mid career researchers through its Research Capacity Building Initiative and Research Development Program. Practice nurses can provide valuable contributions to research practices undertaking research projects.

Objective

This article documents the experiences of three practice nurses involved in an independently funded cardiovascular research project and how the experience helped to enhance their role in their general practice.

Discussion

The combination of general practitioner and practice nurse working together is an important component of primary care research. The development of research skills is an exciting option for practice nurses wishing to expand and develop their careers.

■ **The role of practice nurses (PNs) as essential members of Australian general practice teams continues to evolve and develop.¹ To date, the primary focus has been activities such as immunisation, wound management, chronic disease management, care plans, and health assessments for the elderly. More recently, additional Australian Government funding covering specific Medicare items has expanded the PN role. The Primary Health Care Research Evaluation and Development (PHCRED) strategy, through its Research Development Program (RDP) and Research Capacity Building Initiatives, offers PNs the opportunity to gain skills and experience in primary care research.²**

As part of its Primary Care Research Program, Notre Dame Fremantle PHCRED places a high emphasis on encouraging and supporting clinical practices undertaking primary care research. The Fremantle Primary Prevention study (FPPS) is a general practice based research project into risk factor modification for cardiovascular disease. Practice nurses from each of the three general practices involved in the research project (Mandurah, Greenwood and Mosman Park) were awarded RDP fellowships for their contribution to the study.

The study recruited 400 men and women aged 40–80 years from each of the three practices (1200 in total). Recruited patients were randomised to either an intensive arm with 3 monthly PN and/or general practitioner follow up, or to a regular treatment arm with their usual practice attendances and a final follow up consultation after 12 months.

The role of PN researchers in the study

Practice nurses provided the essential coordinating role between individual patients, the medical practice and the study investigators. Critical research roles undertaken by the PNs included:

- identifying suitable target patients for the study
- assisting with randomisation

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- providing logistical support for data collection
- contributing to assessing and recording clinical information on modifiable risk factors
- ensuring data sets on individual patients are complete
- following up on missing data
- providing ongoing supportive counselling to participants
- timely, efficient information transfer to the study research officer.

Initial learning curve

The FPPS was the first major research experience for all three PNs, and the early phase of the study proved to be especially difficult as each attempted to integrate research demands with practice work.

Practice nurse #1 (PN1) reported that personal reading and research into cardiovascular risk factors resulted in greater confidence and knowledge when talking to patients about the study. This was particularly useful explaining the rationale behind setting specific targets such as the global risk score. By encouraging patients to modify specific risk factors being targeted, PN1 could point to the impact such improvements would have on their global risk score at subsequent visits and on their overall cardiovascular health in the long term.

Similarly, PN2 reported having to devise marketing skills to help with recruitment and to encourage practice doctors to become involved. Her initial difficulties were compounded by an already busy workload and limited physical practice space. These demands meant that at times recruitment had to be deferred and a more opportune time negotiated for the patient to return and complete the process.

The initial targeting and recruitment of 400 patients also proved difficult for PN3. Her larger practice meant that she had to reorganise her work schedule to accommodate peak demand times and still allow dedicated time for undertaking research activities. Independent research funding provided 1 day per week of nurse contribution to the study. For PN3, the practice arranged a dedicated day for research work, whereas in the other two practices, the PNs contributed to the study alongside their normal work.

Effect on other practice staff

All three PNs commented on the additional workload placed on reception staff, especially in the early phase of the study. The situation became more acute during busy periods when the study was relegated to secondary importance.

Not all GPs were as interested in the study as the key doctors and PN. Potential recruits were often overlooked in such circumstances.

Busy practice workloads placed extra pressure on recruitment.

The timeframe of 3 monthly follow up visits for the intensive arm had less relevance for some, often younger, patients. The added duty of reminder calls inevitably increased the PNs' workload.

Effects of participation

Over time, the study was viewed as an asset to the practice, and most staff felt empowered by being part of the process. Practice nurse #1 felt that the research process worked better in the small to medium sized practice where there was still an element of personal recognition and where patients generally attended their 'own' doctor.

The PNs provided a valuable role in being able to recognise patients attending the practice for other reasons and opportunistically enquiring about their progress in the study, how they were coping with reaching target goals and providing encouragement. Positive effects are summarised in *Table 1*, negative effects in *Table 2*.

Discussion

Practice nurses in clinical research practices receive practical, hands-on experience – a process widely regarded as the best means to enhance proficiency (and interest) in the research process.³ The PNs involved in the FPPS were enthusiastic about this aspect of their research experience.

The successful promotion and development of research practices depends on the motivation of key personnel.⁴ The GP-PN axis is the main driving force behind the research agenda. Their complementary roles can highlight the relevance of primary care research and be sufficient inducement for practices to be involved in research.^{5,6}

Major obstacles for PNs in research practices include ever increasing workloads, lack of support from medical colleagues and competing demands on their time.⁷ Compensation for time spent on research activities is usually nonexistent; inadequate funding is a constant barrier.⁵ The fact that research does not usually generate income can be a significant disincentive to some practices. Some GP comments about lack of time may be veiled references to lack of payment.⁸ This study sought to address these obstacles by providing some independent funding for PN contributions.

The absence of research infrastructure⁸ in most practices may call for some ingenuity on the part of PNs and GPs. An important strategy for primary care research is to produce key data in areas of relevance to the practice and to feed this evidence back to patient management.⁹ A sound, evidence based approach can be a powerful motivating factor to achieve change.

Table 1. Positive effects for PNs and practices

- Research project was seen as highly relevant to the practices
- Independent research funding allowed practices to employ PNs for equivalent of 1 day per week on research (\$13 000 per practice)
- RDP fellowships awarded to PNs involved in research project (\$6000 each)
- Hands-on research skills training and professional development provided
- Mini primary care research network developed between the three practices (PNs compared experiences and strategies)
- Encouraged collegiality between practices through attendances at Notre Dame PHCRED clinical research meetings and attendances at and presentations to national and state PHCRED conferences
- Gained better understanding of individual patient's health and social circumstances
- Preventive medicine and evidence based medicine became part of every day practice
- Encouraged reflective approach to primary care and adherence to best practice guidelines

Table 2. Negative effects of research participation

- Busy practice workloads meant research was often deferred
- Research is not income generating
 - GPs and practice managers may view research as costing the practice money
- Not all GPs and PNs have the same interest in research
 - a few carry most of the load
- Reception staff and practice manager received no additional funding despite contributing to the study
- Physical capacity of practices can be stretched if consulting room used for research purposes

5. Askew DA, Clavarino AM, Glasziou PP, Del Mar CB. General practice research: attitudes and involvement of Queensland general practitioners. *Med J Aust* 2002;177:74–7.
6. Salmon P, Peters S, Rogers A, et al. Peering through the barriers in GPs' explanations for declining to participate in research: the role of professional autonomy and the economy of time. *Fam Pract* 2007;24:269–75.
7. Davies J, Heyman B, Bryar R, et al. The research potential of practice nurses. *Health Soc Care Community* 2002;10:370–81.
8. Nutting PA. Practice-based research networks: building the infrastructure of primary care research. *J Fam Pract* 1996;42:199–203.
9. Zwar NA, Weller DP, McCloughan L, Traynor VJ. Supporting research in primary care: are practice-based research networks the missing link? *Med J Aust* 2006;185:110–3.

The coordinating role of the PNs in the FPPS was essential to helping the study achieve its goals. Patients readily accept PNs fulfilling such a role. It is a role that deserves promotion as a key element of research capacity building in primary care. The next logical step is for PNs to become involved in data analysis and dissemination of findings.

Conflict of interest: none declared.

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References

1. Walker L. Practice nurses – working smarter in general practice. *Aust Fam Physician* 2006;35:20–2.
2. Australian Government Department of Health and Ageing. Primary Health Care Research, Evaluation and Development Strategy: Phase 2 (2006–2009) strategic plan, December 2005. Available at www.phcris.org.au/phcred/strategic_plan.php [Accessed September 2007].
3. Hiramaneek N, Bridges-Webb C. How to undertake research in general practice: tips for the novice researcher. *Aust Fam Physician* 2004;33:766–8.
4. de Wit NJ, Quartero AO, Zuithoff AP, Numans ME. Participation and successful patient recruitment in primary care. *J Fam Pract* 2001;50:976.