Exploring factors related to the translation of collaborative research learning experiences into clinical practice: opportunities and tensions – short report

Abstract

Providing training opportunities to develop research skills for clinical staff has been prioritised in response to the need for improving the evidence base underpinning the delivery of care. By exploring the experiences of a number of former participants of a multidisciplinary postgraduate research course, this paper explores the factors which have enabled and impeded staff to translate their learnt research skills into clinical practice. Adopting an exploratory case study approach, 16 interviews with five cohorts of Masters by Research in Clinical Practice (MResCP) graduates were undertaken. The interviews explored graduates' course experiences and their subsequent attempts to undertake clinical research. Analysis of the data indicated that although participants valued their interactions with colleagues from different professions and felt they gained useful research skills/knowledge, upon returning to clinical practice, they encountered a number of barriers which restricted their ability to apply their research expertise. Professional isolation, issues of hierarchy and a lack of organisational support were key to limiting their ability to undertake clinical research. Further work is needed to explore in more depth how (i) these barriers can be overcome and (ii) how taught collaborative research skills can be more effectively translated into practice.

Keywords: Implementation, Collaboration, Postgraduate Development, Research Capacity, Interprofessional

Introduction and background

The demand for clinical staff to develop a more evidence-based approach in their practice has grown significantly over recent years (Barratt and Fulop, 2016). The development and implementation of this evidence is arguably more impactful if clinicians *collaborate* when undertaking research (Higgins et al, 2010), ultimately blurring the boundaries (and alleviating the inevitable tensions) which can be associated with a static interpretation of role.

The adoption of an interprofessional approach may help address the professional preconceptions which reside in clinical contexts, and by consulting the interprofessional knowledge base which has developed in healthcare research (Reeves, Lewin, Espin & Zwarenstein, 2010) it becomes possible to identify, and offer solutions to collaborative tensions.

This paper presents initial results from an on-going study exploring the experiences of Masters by Research in Clinical Practice (MResCP) graduates – both during the course, and afterwards as they attempt to implement their newly acquired research skills in clinical practice. The MResCP is an opportunity for nurses, midwives, pharmacists, and Allied Health Professionals to undertake a fully funded postgraduate course on a full time (one year) or part time (two year) basis. Based at Kingston University and St George's, University London (KUSG), the MResCP adopts a collaborative approach to education and development, with the aim to build research capacity for clinical practice in line with a Department of Health (2012) strategy for developing clinical academic researchers.

KUSG has delivered the MResCP course to five cohorts of students. The first two cohorts comprised ten students each, the third fifteen and the fourth and fifth, eighteen. This totalled a population of seventy-one from which we were able to draw our sample.

Methods

We adopted an exploratory case study approach (Yin 2003) to investigate MResCP graduates perceptions of their collaborative experiences on this course and also elicit their experiences of engagement in research after they completed the course when working in practice.

Data were gathered in the form of semi-structured telephone interviews. The participants comprised a purposive sample of MResCP graduates from the last five cohorts. The sample included a representative selection across professions, gender and clinical experience. Each participant undertook a telephone interview of approximately 30-40 minutes. Table 1 provides an outline of the participants' (n=16) profession, gender and length of time since graduation.

INSERT TABLE 1 HERE

A thematic analysis of the interview transcripts was undertaken. Using an inductive approach it became clear that issues surrounding collaboration featured heavily. Whilst

collaboration on the course was seen as positive and mobilising, the lack of collaborative engagement on a return to practice has dictated research participation.

Ethical considerations

The study was approved by Faculty of Health, Social Care and Education, Kingston University and St George's University London Research Ethics Committee. As with any investigation of verbatim dialogue there is the possibility that the speaker may be identified. As a result every effort has been made to include interview data which avoids mentioning specific individuals, locations or identifiable contexts.

Results

Data from the analysis is presented in two main sections – 'collaborative course experiences' and 'engagement in collaborative research'. Representative quotes from the interviews are offered to support our interpretations. Focusing on the collaborative experiences of graduates both on the course and in subsequent research contexts will offer an insight into the value which these practitioners place on interaction and its role within contemporary clinical research.

Collaborative course experiences

The benefits of collaboration were consistently identified in the participants' interviews. This related to formal opportunities for interaction during the course and also more informal/social opportunities for collaboration. It was also noted that collaboration during the course was helpful in breaking down professionally held preconceptions:

> "In many ways the professional differences between us didn't really matter very much, we were collaborating anyway as a team. I think as I said I learnt quite a bit more about the world view of the different professions, how they differ slightly, how they see things rather differently as a result of their background and education and so on, it suddenly made me think about how research can and should be done on a collaborative basis, I think far too often we can retreat into silos for that kind of work" (Physiotherapist 1).

Another interviewee echoed this, and identified the potential for self-development which collaborative working invoked:

> "I think it's a real strength of the course that you do get to mix with people in other disciplines, and you not only understand the different professions better

> but you understand a bit about where you're coming from" (Occupational therapist 1).

This professional interconnection was seen as particularly useful. The following extract articulates the benefits of being mutually supportive:

> 'We did work together, we did help each other out a lot just with lectures and seminars and projects there was a lot of collaborative working and it was a kind of nice supportive academic group in that respect" (Dietician)

Collaborative research engagement

Whilst the data provide an encouraging indication of the collaborative focus of the course, a number of complexities were encountered by the graduates when trying to translate their collaborative research skills into clinical practice.

Problems with engaging interprofessionally with research was noted by one interviewee who pointed out that traditional professional boundary protectionism could undermine such efforts:

> "I found actually there is there were a lot of people being conscious and protective of their own ground, and people not looking or kind of seeking out other possibilities [for interprofessional research] as much as they could … it's just a competitive world" (Speech and language therapist)

Interviewees also acknowledged the existence of an interprofessional research hierarchy which could undermine their efforts to collaborate with other professional groups:

> "I think I'm at a bit of a disadvantage because being a nurse I'm kind of seen as being at the bottom of the rung, and pushing forward kind of nursing in research, alongside other disciplines, I think is a challenge, because I think specifically nurses are far behind and undervalued" (Mental Health Nurse)

It was also noted that there was some perception linked to a lack of value placed on research from health professionals from outside of medicine:

> "I think in the medical profession this is a professional problem. I think the whole medical profession has an issue around 'non-medics' in research, and it's difficult to get them to look at the work and not at the status of the person who did it" (Occupational therapist 2).

In addition, it was stressed by many of the interviewees that when they returned to clinical practice after the course they had no time to implement their research skills due to a lack of managerial/organisational support:

> ''I mean the party line is that we're all in favour, but again it's a question of whether you know if I was to go to my boss and say effectively that I was going to spend 30% of my time doing research work, I think I would probably not get supported to do that. You know I might negotiate something along the lines of ten percent which would be half a day a week, but you'd have to design projects with very, very limited scope'' (Physiotherapist 2)

Discussion

Despite valuing their interprofessional research training experiences, many of the MResCP graduates encountered challenges related to cultures of professional isolation, rigid hierarchies and a lack of organisational support when returning to clinical practice. Although these issues are not new, this presents problems for implementation, as outlined in the work of Greenhalgh et al. (2005) who maps out the complex range of factors involved in implementation. In addition to Greenhalgh's model, the consultation of Wenger's (1998) Communities of Practice concept, in which learning is central to human identity, will enable an initial understanding of the dynamics behind moving from practice to education and then back into practice.

The problem of professional isolation is a significant one. It can lead directly to the generation of interprofessional tensions and insecurities which undermine efforts to collaborate and lead to *parallel* professional working. In addition, the reported hierarchical issues whereby medicine occupies the dominant clinical position has been well described in the interprofessional literature (e.g. Baker, Egan-Lee, Martimianakis & Reeves, 2011). It is clear that this hierarchy extends into the research domain.

A response to these challenges could be found in micro-collaborations. Those identified in the dialogue above give rise to bigger, perhaps more meaningful cross-cultural engagement. Whilst we may report collaborative interaction between a physio and a nurse, the recognition of this *by* the practitioners *within* an educational context, generates awareness in staff which will, in the first instance highlight hierarchical issues and in the second, contribute to challenging them.

A lack of organisational support was also referred to. Although this has been nationally recognised by the production of a key resource by the AUKUH Clinical Academic Roles

Development Group (2016), this also reveals a need for a more focussed and coherent facilitation of research practice in clinical contexts.

In summary, while the MResCP graduates felt they gained useful skills/knowledge for collaborative research, when they returned to their clinical positions they experienced a number of barriers which undermined efforts to translate their research abilities into practice. Findings from this study offer an initial account related to the opportunities and challenges of providing interprofessional clinical research training. Future work needs to explore in more depth the various factors identified above to develop an informed understanding of how clinical research skills can be more effectively translated into practice.

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Table 1:

Profession	**Gender**	**Time since graduation**
Dietician	Female	3 years
Nurse	Female	4 years
Nurse	Male	3 years
Nurse	Male	6 months
Nurse	Female	6 months
Occupational Therapist	Male	4 years
Occupational Therapist	Female	6 months
Physiotherapist	Male	4 years
Physiotherapist	Male	3 years
Physiotherapist	Female	2 years
Physiotherapist	Female	3 years
Physiotherapist	Female	2 years
Physiotherapist	Female	6 months
Physiotherapist	Female	6 months
Physiotherapist	Male	6 months
Speech and Language Therapist	Female	3 years