

DO WE NEED MORE TRAINING FOR INTERDISCIPLINARY AND INTERPROFESSIONAL COLLABORATION PRIOR TO IMPLEMENTING ANY PRIMARY CARE RESEARCH ACTION?

CHRISTOS LIONIS^{E-F}
ELENA PETELOS^{E-F}

Clinic of Social and Family Medicine, University of Crete, Heraklion, Greece

A – study design, **B** – data collection, **C** – statistical analysis, **D** – interpretation of data, **E** – manuscript preparation, **F** – literature review, **G** – sourcing of funding

ABSTRACT

There has been a continuously increasing focus and discussion on interdisciplinary collaboration in primary care, across various settings and in different forums, during the past few years. Interprofessional and interdisciplinary collaboration should be a cornerstone of daily practice and context-relevant research. We considered it important for this manuscript to attempt to address some of the key issues linked to the recognised need for competence-based training, focusing on interdisciplinary and interprofessional collaboration, so as to promote and enhance context-relevant research in primary care. This article provides a general introduction and an overview of this topic, along with some key concepts and operational definitions. These key definitions and their interrelated nature are examined in detail, including those of practice-based research network, patient-centred primary care research, and interdisciplinary partnership for research. Furthermore, this paper outlines the reasons for the strong focus on composition and the development of strategies to enhance the research capacity of interdisciplinary partnerships throughout training. Workforce training, retention and academic collaboration are considered, with a particular focus on primary care, and existing interprofessional relationships and perceptions thereof. Organizational aspects influencing relationships and practice are considered along with their contribution in terms of practice, research and discourse. Finally, conclusions and recommendations, formed under the prism of rapidly changing population needs, person-centred values and the imperative need of bringing innovation to the patient in an effective and efficient manner, are presented for further discussion.

KEYWORDS: interprofessional, interdisciplinary, collaboration, primary care research

INTRODUCTION

Interprofessional primary care teams bring benefits both at patient and system levels. Most importantly, they are of high value to patients with complex care needs and represent an opportunity to improve collaboration and performance independently of the context in which they operate [1]. A key aspect for promoting and fostering such collaboration is identifying key topics through practice-based research, as well as utilizing research output to further inform research priorities and support the generation of high quality evidence for sound decision-making.

Over a decade ago, efforts in Canada took the form of an initiative for “Enhancing Interdisciplinary Collaboration in Primary Health Care” (EICP) with the aim “to create the conditions for healthcare providers to work together in the most effective and efficient

way, so they can produce the best health outcomes for their patients and clients” [2]. Along the lines of this Canadian initiative to deliver research regarding best practice focused on outcomes, many other efforts have been noted across the globe. For example, practice-based research networks (PBRNs) exist in both the United Kingdom (UK) and the United States (USA), with primary care PBRNs defined as “Practice-based research networks composed primarily of primary care clinicians that focus their research and development activities on issues relevant to the primary care of patients” [3].

More recently, we have witnessed emerging efforts to link PBRNs to clinical and translational efforts, though the Clinical and Translational Science Awards (CTSA), expanding the opportunities to engage the community in the work of academic centres [4].

Examining the body of literature on research performed at general practice and primary healthcare (PHC) levels, it is clear that there are many successful stories to guide best practice, particularly in selected settings across Europe (e.g. the Netherlands, Scandinavia, and the UK), Australia, Canada, and the USA. However, despite the reported achievements, even under well-developed networks and well-supported settings such as those in the UK, additional steps need to be taken. These include the need to bridge the gap between academic and service communities, research-active practitioners and their less active peers, and to ensure stronger ties and better understanding around general practice research, in order to bring innovative approaches and therapy delivery to patients [5].

Focusing on PHC, “retaining and extending collaboration between academics and clinicians and between research-active general practitioners (GPs) and the wider practicing community” is a key step. This extending collaboration in primary care research between GPs and other primary care practitioners (PCPs) is typically absent and is more visible in settings where the concept, dynamics and values of interprofessional partnership and integrated primary care have not translated into health policy [6]. At the same time, the health needs of the population point towards a direction where more generalist skills and competences are needed. However, such training is lagging behind, with a severe lack of guidelines addressing multiple generalist and specialist competences.

The changing patterns of health and illness, with augmented chronic care needs and multimorbid patients representing the most rapidly increasing population in our ageing societies, highlight a strong need for combining social and healthcare services. Furthermore, these changes justify the need to expand professional competences and empower professionals by facilitating skill development, effective collaboration and efficient practice, despite organizational challenges they may encounter in terms of streamlining interprofessional collaboration.

These challenges and opportunities to improve the agility, adaptability and to ‘upgrade’ the competences of healthcare teams are recognised across the entire health workforce, including from professionals in public health. The European Public Health Association has recently released a statement on workforce emphasizing the fact that systems are lagging behind in terms of new professional competences and are falling short of adequate service provision matching the current population needs by prioritising and placing inordinate emphasis on specialisation, while generalist competences are lacking. Additionally, there is a lack of research on successful health workforce policies and innovation in leadership [7].

Current relationships between different professions in primary care and perceptions thereof need to be considered too, as teams have to overcome medical dominance and challenges emerging from the lack of integration across professions.

THE NEED FOR MORE TRAINING FOR INTERPROFESSIONAL COLLABORATION IN PRIMARY CARE RESEARCH.

Practice-based research and networking is an important resource in assessing population health needs and improving quality of care. Accordingly, this concept and model has received significant attention in many countries. In Europe, application of the model has been limited, despite inclusion in the agenda of several WONCA networks, including that of the European Rural and Isolated Practitioners Association (EURIPA) [8]. In addition, despite the growing body of knowledge derived from RCTs designed either by GPs, nurse practitioners and clinical nurse specialists, interprofessional partnership in intervention studies in primary care is lacking. These partnerships are still of high priority and deserve more attention, with the participation of other professions to inform the research design and conduct, as well as to identify relevant topics, raise awareness on output, facilitate the uptake and translation of knowledge, and in effecting practice changes.

In addition, the current research focus is mostly disease-specific and fails to address issues of multimorbidity, goal-orientated care, patient-centredness and compassionate care in an integrated PHC context. By examining the conceptual basis of these terms, it follows that there is a need to develop training modules for interprofessional collaboration with the aim to design and implement research in PHC.

The term “integrated care” has received a lot of attention in the literature, and it is highly relevant to the term “patient-centred care”. For the term “integration”, we shall co-opt the definition of the World Health Organization (WHO): “[The] management and delivery of health services so that the client receive a continuum of preventive and curative services according to the needs over time and across different levels of the health system [...]” (WHO, 2008) [9]. The term ‘compassionate care’ also invites a partnership amongst physicians, patients and patients’ families. This requires a primary care provider who is well trained in empathy and effective communication, although there are concerns regarding the extent to which compassion can be taught. Such training is clearly lacking in many settings and in most countries, although a few examples do exist [10]. It has been reported that compassion as a feature of clinical care is decreasing [11] and that multidisciplinary research should explore the relationship between compassionate care and clinical effectiveness and quality. Multimorbidity pertains to the management of individuals with two or more health conditions simultaneously [12]. Multimorbidity is often a problem of aging and increasing frailty, although frailty is more of a clinical syndrome than a disease. Elderly people present an increased risk for poor health outcomes including falls, incident disability, hospitalization, and mortality [13–14]. Effective management of multimorbidity requires integrated

care and this becomes apparent when mental illness intersects with multimorbidity.

ENHANCING INTERDISCIPLINARY AND INTERPROFESSIONAL PARTNERSHIPS IN RESEARCH-WHAT DO WE NEED?

In 2001, the concept of 'research training' entered medical specialist training as a mandatory component of the Danish national regulatory body for doctors. A decade later, reporting indicated that equipping PHC providers, including GPs with skills pertaining to participatory design and to promoting overall collaboration with GP academics and clinicians was possible. However, an inherent generic barrier within academic settings was also highlighted, i.e., the lack of regulation [15].

It is clear that interdisciplinary teams are dynamic and not static and they include many professionals with a composition that varies in terms of the setting and the context of the primary care system, as well as the specific purpose that the partnership serves. The interdisciplinary collaboration in Primary Health Care in Canada provides a snapshot of the range of professions comprising such teams, with an emphasis on community-based teams, teams serving hospices or remote communities and nurse/physicians teams [16]. Regarding the latter group, the collaboration of both practitioners with psychiatrists, behavioural intervention specialists, educators, speech therapists, psychologists, case managers, and paid caregivers has been reported in certain privileged settings, including in Australia. However, such extensive collaboration is not the case in many PHC settings, where the primary care team is restricted to a small number of staff, including one GP and one nurse.

Another issue that deserves some additional attention is the content, structure and methods of the training programme. Efforts to increase the interdisciplinary focus in PHC research by developing and implementing training programs have been undertaken in some countries and examining one such well-developed programme highlights core aspects that should be considered in PHC, the Transdisciplinary Understanding and Training on Research- Primary Health Care (TUTOR-PHC) [17]. Two key questions guided the design and implementation of this training program: "what challenges exist in training excellent and productive PHC researchers?" and "what training is being done in the area of interdisciplinary PHC"? Both are critical since the core disciplines in PHC vary significantly among different countries and settings, while the second question has been addressed, in part, through several MSc programmes available across countries. The second option of the second question merits much interest since it highlights the importance of meeting the needs of PCPs who participate in translating clinical findings and questions in research hypotheses and programmes.

It has led certain institutions to develop disease-specific programs where interprofessional partnership has been approached. Certainly, it is not the case for settings where both primary care research and interprofessional collaboration is still underdeveloped [18].

Thus, it is challenging to discuss both the content and the structure of interprofessional training in PHC and its structure and methods. Major public health problems on a local population level offer another chance to explore the possibility to integrate public health into primary care. This principle is supported by several international organisations, including the WHO. Fields where primary care research still seek clinical effectiveness and recognition, including home and nursing care and in clinical entities such as frailty and ageing healthcare, represent excellent areas where the training for interprofessional collaboration in PHC could be attempted.

CONCLUSION

Considering the ageing population of Europe and the need for maximising synergies of public and primary care, workforce training needs need to encompass interprofessional collaboration, research conduct and expertise on population-based medicine. Such efforts will benefit from strong community links, with participatory efforts extending well beyond the clinician-patient interaction, to the PHC team-citizen interaction. Academic centres have a unique role to play in both research and practice by establishing living labs encompassing practice-based networks. Within their remit should be the provision of appropriate training to address the current misalignment of perceptions of PHC teams in a structured and context-relevant manner. Furthermore, training should facilitate interprofessional collaboration and context-relevant research and knowledge translation. Key modalities to guide and drive such training and overall efforts should include the management of chronic disease in the context of a collaborative team, public health tools such as screening, promotion and prevention programmes, and, of course, primary care research methodology. Efforts to generate appropriate syllabi to modernise the curriculum of formal undergraduate and postgraduate education to the direction of interprofessional education and with emphasis on communication aspects, collaboration, generalist skills, and chronic care management would go a long way towards bridging current gaps. Progress towards managing current societal needs and the needs and expectations of patients with chronic illness relies on the development of interprofessional guidelines. These should be developed not only for the primary care team, but for PHC teams collaborating with specialists in the care of multimorbid and chronic patients at community and system levels, including monitoring of cancer survivors and caring for those in remission.

REFERENCES

1. Mulvale G, Embrett M, Razavi SD. 'Gearing Up' to improve interprofessional collaboration in primary care: a systematic review and conceptual framework. *BMC Fam Pract* 2016; 17: 83.
2. Sharp M. Enhancing interdisciplinary collaboration in primary health care. *Can J Diet Pract Res* 2006 Autumn; Suppl: 4–8.
3. Mold JW, Pasternak A, McCaulay A, Manca D, Rubin G, Westfall J, Beasley J, Hickner J, Fagnan LJ, Handley M, Haddy R, Hankey T. Practice-Based Research Subcommittee of North American Primary Care Research Group Committee on Advancing Science of Family Medicine. Definitions of common terms relevant to primary care research. *Ann Fam Med* 2008 Nov-Dec; 6(6): 570–571.
4. Fagnan LJ, Davis M, Deyo RA, Werner JJ, Stange KC. Linking practice-based research networks and Clinical and Translational Science Awards: new opportunities for community engagement by academic health centers. *Acad Med* 2010 Mar; 85(3): 476–483.
5. The Academy of Medical Sciences. Research in general practice: bringing innovation into patient care. London: The Academy of Medical Sciences [online] 2009 [cit. 20.03.2018]. Available from URL: <https://acmedsci.ac.uk/file-download/34770-Research.pdf>.
6. Tsiachristas A, Lionis C, Yfantopoulos J. Bridging knowledge to develop an action plan for integrated care for chronic diseases in Greece. *Int J Integr Care* 2015 Oct 22; 15: e040.
7. Consultation for the next EU Research and Innovation Programme Statement on behalf of the European Public Health Association (EUPHA) section 'Health Workforce Research', March 5, 2018 [online] [cit. 20.03.2018]. Available from URL: https://eupha.org/repository/advocacy/EU_Consultation_2018-HWR_statement_for_circulation.pdf.
8. Klemenc-Ketis Z, Kurpas D, Tsiligianni I, Petrazzuoli F, Jacquet JP, Buono N, Lopez-Abuin J, Lionis C. Is a practice-based rural research network feasible in Europe? *Eur J Gen Pract* 2015; 21(3): 203–209.
9. Waddington C, Egger D; WHO Working Group on Service Delivery. Integrated Health Care Services: What and Why? Technical Brief No. 1. Geneva: WHO, 2008 [online] [cit. 20.03.2018]. Available from URL: http://www.who.int/healthsystems/technical_brief_final.pdf.
10. Lionis C, Shea S, Markaki A. Introducing and implementing a compassionate care elective for medical students in Crete. *Journal of Holistic Healthcare* 2011; 8: 38–41.
11. Shea S, Wynyard R, Lionis C. Introduction. In: Shea S, Wynyard R, Lionis C, ed. *Providing compassionate healthcare: challenges in policy and practice*. Abingdon and New York: Routledge; 1–6.
12. Mercer SW, Zhou Y, Humphris GM, McConnachie A, Bakhshi A, Bikker A, Higgins M, Little P, Fitzpatrick B, Watt GCM. Multimorbidity and Socioeconomic Deprivation in Primary Care Consultations. *Ann Fam Med* 2018; 16(2): 127–131.
13. Ensrud K, Ewing S, Cawthon P, Fink H, Taylor B, Cauley J, et al. A comparison of frailty Index for the prediction of falls, disability, fractures, and mortality in older men. *J Am Geriatr Soc* 2009; 57: 492–498.
14. Gill TM, Gahbauer EA, Allore HG, Han L. Transitions between frailty states among community-living older persons. *Arch Intern Med* 2006; 166: 418–423.
15. Tulinius C, Nielsen AB, Hansen LJ, Hermann C, Vlasova L, Dalsted R. Increasing the general level of academic capacity in general practice: introducing mandatory research training for general practitioner trainees through a participatory research process. *Qual Prim Care* 2012; 20(1): 57–67.
16. Nolte J, Tremblay M. Enhancing Interdisciplinary Collaboration in Primary Health Care in Canada. EICP: Enhancing Interdisciplinary Collaboration in Primary Health Care Initiative [online] 2005 [cit. 20.03.2018]. Available from URL: www.eicp.ca/en/resources/pdfs/Enhancing-InterdisciplinaryCollaboration-in-Primary-Health-Care-in-Canada.pdf.
17. Stewart M, Reid G, Brown JB, Burge F, Dicenso A, Watt S, McWilliam C, Beaulieu MD, Meredith L. Development and implementation of training for interdisciplinary research in primary health care. *Acad Med* 2010 Jun; 85(6): 974–979.
18. Lionis C, Symvoulakis C, Markaki A, Vardavas C, Papadakaki M, Daniilidou N, Souliotis K, Kyriopoulos J. Integrated primary health care in Greece, a missing issue in the current health policy agenda: a systematic review. *International Journal of Integrated Care* 2009; 9: e88.

Word count: 1907

• Tables: –

• Figures: –

• References: 18

Sources of funding:

The research was funded by the authors.

Conflicts of interests:

The authors report that there were no conflicts of interest.

Cite this article as:

Lionis C, Petelos E.

Do we need more training for interdisciplinary and interprofessional collaboration prior to implementing any primary care research action?

MSP 2018; 12, 1: 21–24.

Correspondence address:

Prof. Christos Lionis

School of Medicine, University of Crete, Greece

Voutes Heraklion Crete, PO Box 2208, Zip Code 71003

phone: +302810394621

e-mail: lionis@galinos.med.uoc.gr

Received: 21.03.2018

Reviewed: 28.03.2018

Accepted: 28.03.2018