Final research report: ERG2021-06: Exploring GP medical educator and trainee perceptions of benefits, challenges and enablers to on-line and face-to-face teaching and learning in vocational GP training

Aims and objectives

The aim was to explore and understand the experiences of Medical Educators (MEs) and General Practice registrars (GPRs), with online (OL) and face-to-face (FTF) teaching and learning in the changing GP vocational training environment, in order to support the development of effective and appropriate blended educational modalities by Regional Training Organisations (RTOs).

Research Questions:

1. What are the perceived benefits, challenges, and enablers to the delivery of FTF and OL teaching?
2. What are the perceived benefits, challenges, and enablers to learning via FTF and OL teaching?
3. How do reported perceptions differ according to contextual variables?

Method

A qualitative approach utilizing both online focus group discussions (FGDs) (Stage 1) and online semi-structured interviews (SSIs) (Stage 2) was adopted to explore the experiences of OL and FTF teaching and learning in RTO education sessions before and during the pandemic, amongst MEs and first year GPRs and in Queensland. Participants were recruited via email invitation to all eligible participants in Queensland, and purposively sampled to ensure a mix of geographic locations. Findings from the FGDs informed the question guide for the SSIs, to support a more in-depth exploration of key themes and topics. Analysis of the focus group and interview data was undertaken sequentially using the Framework method.[1]

Results

A total of 23 participants (GPRs=15; MEs=8) attended 5 focus groups, and 22 participants (GPRs=11; MEs=11) completed a semi-structured interview. The majority of participants had little or no experience of OL teaching/learning prior to the pandemic, with the exception of those in remote and rural locations for whom OL education was the norm. Analysis of focus group and interview data identified similar dominant themes from both MEs and GPRs.

With OL education, MEs and GPRs emphasised the challenges and enablers more often than they did with FTF education. Both participant groups identified many common challenges to OL education, dominated by the themes of learning engagement and content delivery, followed by difficulties with social connection, technology, time and space, then learning safety. Geographically remote GPRs already familiar with OL education were less likely to describe challenges with OL delivery and more likely to describe benefits of FTF delivery, than their rural/regional or urban counterparts. This group of registrars who experience OL education from the start, clearly described the strategies used by MEs to establish and maintain social connection with OL delivery; their experiences of OL education were somewhat different to their counterparts in other geographical areas. MEs providing education to remote areas were more likely to emphasise the challenges of OL delivery and the benefits of FTF delivery. MEs noted that formal training in OL delivery was largely absent, compared to that offered for FTF education. Their skills were predominantly learned on the job with support from peers.

Multiple strategies were suggested by participants to improve OL delivery of vocational GP education including having an initial FTF meeting, icebreaker activities at the beginning of each session, moderator and/or technical support at every session, the flipped classroom approach, smaller group sizes (e.g., 4-6 registrars), breakout rooms and development of ME skills and technology.

With FTF education, participants mostly commented on the benefits of FTF teaching and learning, and occasionally the enablers, with far less mention of any challenges. The overwhelming benefits of FTF education sessions identified by both GPRs and MEs were social connection and learning engagement. GPRs further reported benefits in relation to unplanned learning, time and space, then content delivery, while MEs reported benefits in terms of content delivery, pastoral care/assessment, learning safety, and communication.

Whilst FTF was predominantly preferred by both participant groups, there was a sense that if a group had met face-to-face first, they could continue some of their learning journey online. It was acknowledged that didactic content-laden topics were more suitable for online delivery, unlike practical or procedural skills. Some sessions were considered not suited to OL delivery, such as ethics, communication, and mental health skills, because of the need for learners to feel safe, to gain the required level of GP expertise expected.

Discussion

The rapid pivot to OLL with the global Covid-19 pandemic, gave an opportunity to explore the different modalities of education from the perspective of MEs and GPRs. A literature review found there was a paucity of research in this unique space of general practitioner (GP) vocational training. Some unique features of GP vocational training include the sudden relative isolation from peers (as opposed to hospital-based vocational training), the need for rapid new knowledge and skills, and the very "human" nature of the role of general practitioners providing continuing holistic, person-centred care, founded on ethical and socially responsible practice,[2] requiring more than fact-based knowledge. In response, the approach to GP vocational training has traditionally relied upon small group FTF learning, peer-to-peer learning, and mentorship to develop GP knowledge and expertise. Indeed, FTF learning appears necessary for MEs to provide pastoral care, learning safety, and to set up functional peer support groups and social learning.

OL and FTF education both have unique characteristics, which make each more suited to some settings and content/topics and less to others. Registrars who expected their training to involve OL delivery from the start were naturally more positive to OL strategies. Pre-existing organisational systems used to deliver education OL, to overcome the tyranny of distance in vast rural and remote areas of Queensland, were beneficial in supporting the immediate pivoting to wider OL education implementation.

Our research findings from participants spread across urban to remote settings suggest it would be highly challenging to deliver GP vocational training solely online without at least some FTF contact. All participants, particularly those already familiar with OL education, stressed the importance of at least one prior face-to-face contact with their hub learning group peers to enable the establishment of a community of practice peer group for registrars. For MEs, this initial FTF contact allowed for effective communication and relationship-building with the registrars, and assessment of registrars' needs, to enable ongoing effective mentoring.

Implications

The rapid pivot to online delivery of education in 2020 due to the Covid-19 pandemic, certainly provided an opportunity to continue educational activities given FTF education was largely not possible. OL and FTF education both have unique characteristics, which make each more suited to some settings and less to others. The authors propose that understanding the benefits, challenges and enablers of each method will support the development of a functional blended model, to use each to its best advantage. However, as we move forward into business as usual, we have the opportunity to take the learnings from this study, regarding the benefits and challenges of OL and FTF education, to develop a more robust and well-suited GP vocational training program that could potentially use the best of both modes of educational delivery, tailored to suit the variety of training locations.

Future research

Our research has identified a number of strategies suggested for improving the delivery of OL education in GP vocational training. Future opportunities exist for developing programs based on these suggestions and evaluating the outcomes of them using a Kirkpatrick model. There is also a call to develop training to support MEs build their skills and confidence in online delivery.

1. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC medical research methodology. 2013;13(1):117.
2. RACGP-educational-framework. In: Practitioners. TRACoG, (ed.). *RACGP educational framework*. RACGP East Melbourne, Vic: RACGP2021.