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Research papers

Subjective experiences of general practitioners undertaking continuing medical education in mental health: a qualitative study of motivation and process of change

Louise M McCall PhD GradDipClinEpi BA SRN
Senior lecturer, Department of General Practice

David M Clarke PhD MPM MBBS FRANZCP FRACGP
Associate Professor, Department of Psychological Medicine

Glenn Rowley PhD MA BSc
Associate Professor, Faculty of Education

Monash University, Victoria, Australia

ABSTRACT

Aim To examine factors contributing to general practitioners' (GPs') motivation for change during a year-long course.
Design Semi-structured interviews were conducted on a stratified purposeful sample of six GPs, six months after they completed the course.
Participants and setting Six GPs from both urban and rural general practice in Australia.
Results Four themes emerged fment by pursuing additional continuing medical education and some also became involved in teaching.
Conclusion Quantitative data alone are insufficient to describe change in clinical practice. Future studies should include both quantitative data, for hypothesis testing, and qualitative data to explore and illuminate the subtleties and intricacies of changing behaviour.

Keywords: change, continuing medical education, motivation

Introduction

Learning involves change. It is concerned with the acquisition of habits, knowledge, and attitudes. It enables the individual to make both personal and social adjustments. Since the concept of change is inherent in the concept of learning, any change in behaviour implies that learning is taking place or has taken place.[1]

The aim of continuing medical education (CME) is to intervene in those areas of medical practice that can be improved upon.[2] The process is affected by doctors' prevailing beliefs and attitudes and by the content and design of the course, as well as external forces such as time, practice structure, patient expectations, standards of practice and financial disincentives.[3] Although CME can do little to change the latter it should seek to encourage reflection upon belief and attitude.

There are no systematic reviews explicitly exploring the impact of CME on change in doctors' attitude. However, there is evidence from systematic reviews that CME is associated with changes in doctor knowledge and skills and in some cases patients health outcome.[4–10] Although these four

domains (knowledge, attitude, skills and patient outcome) seem closely related, change in one of these areas (for example knowledge) is not necessarily associated with change in any other area (for example patient health).

The aim of this qualitative study was to illuminate the findings of a previously conducted quantitative evaluation of a year-long CME activity.[11] The evaluation demonstrated that general practitioners' (GPs') knowledge of depression and anxiety improved immediately after completing the course and was further improved six months after completion. GPs' attitude about their comfort and competency in the detection and treatment of depression and anxiety improved significantly six months post-course. However they failed to identify 51% of 'probable cases'. There was no effect of the course on overall prescribing habits, non-drug management or referral.

The intent here was to explore, through interview, GPs' views about their learning process including their motivations for learning, the results of their learning, and their views about aspects of the course that influenced their learning relevant to the detection and management of anxiety and depression.

Methods

The course

The Graduate Certificate in General Practice Psychiatry (GCGPP) has been described in detail elsewhere.[12] In brief, it is a 42-week course (10 hours per week), conducted by distance education. Subjects studied include:

- introduction to general practice psychiatry
- depression and other mood disorders
- anxiety
- drugs and alcohol
- stress management
- introduction to psychotherapy
- introduction to family therapy.

Sampling and recruitment

In 1999, the year of the evaluation, 35 candidates completed the course and 14 participated in the quantitative study previously reported.[11] Consistent with the methods and aims of qualitative research, purposive sampling was used to recruit participants with a diversity of subject experience.[13] Results of pre- and post-course knowledge and attitude questionnaires and a clinical audit were taken into consideration and some GPs selected with substantial positive changes and others with negative changes. Sex and location (rural/metropolitan) were also considered, in order to give a range of perspectives. There is evidence that female GPs have different practice patterns from males, with females doing more counselling and having longer consultations.[14–17] Changes in attitude and practice may also have been influenced by location. Rural and remote practitioners experience more difficulty in accessing specialist referrals for their patients as the mental health services tend to be centred around metropolitan areas.[18] Table 1 summarises the criteria and data used to select each GP for interview. A list of eight GPs was developed, in the first instance, to be interviewed as necessary until no new information was elicited. From this list, six GPs were interviewed by telephone by the first author. All of the interviews were conducted with the GP in their surgery, scheduled at the beginning of a clinical session, either in the morning or afternoon before they saw patients. Each interview lasted approximately 30 minutes.

The sample

The participants were located in four of the eight states and territories of Australia. The demographic characteristics of the selected GPs are compared to those of the 35 students enrolled in the course in Table 2. The interviewed GPs were similar to the 35 students in type and location of practice, average number of sessions worked per week, number of patients seen per session and postgraduate qualifications. The GPs interviewed differed from the student cohort in sex mix, mean age and years in general practice. Males were over-represented and the interviewed sample was slightly older and had been in general practice longer than the average of the student body. Interviewed GPs were perhaps keener than the average student, as all went on to enrol in the second year of the course (Master of General Practice Psychiatry). This was not known to the researchers at the time of sampling.

Interview schedule

The semi-structured interview schedule was developed with advice from a specialist qualitative researcher. The opening question, 'Briefly tell me about your practice', was used to get the study participants talking about a non-threatening topic with which they were familiar.

The participants were then asked, 'Why did you enrol in the course?' to ascertain their motivation

Table 1 Results of stratification

Doctor	Sex of GP	Practice location	Change in knowledge	Change in GP attitude towards confidence and competence	Change in GP attitude towards professional burden	GP change in the detection of patients suffering significant emotional distress	GP change in diagnosis of mental illness	GP change in drug management of mental illness	GP change in counselling patients with mental illness	GP change in the use of stress management for patients with mental illness	GP change in patient referral to psychologist
A	Female	Urban	+	+	No change	+	+	+	–	–	–
B	Male	Rural	+	+	–	+	+	+	+	+	+
C	Male	Rural	+	+	–	–	–	+		+	+
D	Male	Urban	–	–	–	+	–	+	+	+	+
E	Male	Urban	–	–	–	–	–	+	No change	–	+
F	Female	Urban	+	No change	+	–	–	+	+	–	–

+ Positive change; – Negative change

Table 2 Demographic details of interview participants and student cohort

Demographic variable	GPs interviewed (n = 6)	Students of 1999 (n = 35)
Sex		
Male	4	18
Female	2	17
Age (years)		
Mean	45.2	42.0
Range	35–57	29–65
Mean number of years since medical graduation	22	17
Mean number of years as a GP	15	13
Place of practice		
Urban	4	22
Rural	2	13
Type of practice		
Solo	1	7
2–4 GPs	3	16
5+ GPs	2	12
Mean number of sessions worked per week	10	10
Mean number of patients seen per session	17	15
Postgraduate qualifications		
FRACGP	1	12
Dip Obs	1	8
Other	3	15

for undertaking the course. Responses to this question were also compared with data gathered from enrolment forms at the beginning of the course.

In order to explore change in clinical practice, it was important to understand the students' feelings and attitudes towards patients presenting to them with depression and anxiety before the course. Students were therefore asked 'Before you did the course, what was it like when someone with depression or anxiety presented to you at your practice?'. This was followed by 'Has your practice changed?' and 'What is it like for you now when someone with depression or anxiety comes to see you?'.

To explore perceptions of influences on change, students were asked 'Why do you or don't you feel differently?' and 'What was it about the course, if it was the course, that makes you feel differently?'.

During the early interviews the GPs raised concepts which were explored in more depth in subsequent interviews as the depth analysis proceeded and the thematic structure developed. The core questions were not altered, however the prompts used led to the later interviews being richer.

Data analysis

Interviews were audiotaped and transcribed verbatim. Copies of interview transcripts were sent to the participants for verification of content. All participants agreed with the interview content and no alterations were received.

Data collection and analysis was guided by grounded theory methodology as described by Strauss and Corbin.[19] This method involves open coding with discrete parts being labelled and categorised according to themes, each being analysed in detail.[19] Coding of data was hand processed and entered on a word processor, and undertaken while further data collection was being carried out.

The first two interviews were examined, after which a provisional thematic structure was developed. Subsequent interviews were examined in turn for similarities and differences with consequent changes to the thematic structure and content. Interviews were conducted until there was no further elaboration of the themes. Data were checked by comparing and contrasting data, within

and across the interviews. Codes and concepts were checked to ensure they were mutually exclusive. These steps increased the validity and reliability of the analysis.

After analysis, the results were compared with relevant literature to further enrich understanding of the themes developed.

Ethics approval

Ethics approval was obtained from the Monash University Standing Committee on Ethics in Research on Humans.

Results and interpretation

The data revealed four themes:

- professional development
- increased knowledge, confidence and competence regarding depression and anxiety in general practice
- personal insight and development
- course structure and content.

These were linked to the GPs' motivations for learning, the results of their learning and their views about aspects of the course that influenced their learning relevant to the detection and management of anxiety and depression.

Quotes from the interviews are presented to illustrate each theme. The letter preceding each quote identifies the student interviewed. For example 'A' represents the first doctor interviewed.

Professional development

The theme of professional development highlighted student motivation for enrolment into the course and arose mostly in relation to the question, 'Why did you enrol in the course?'.

Research has indicated that GPs are not detecting cases of depression and anxiety.[20–23] GPs interviewed were aware of the gap between the level of non-recognition and unmet need, and their capacity to recognise, diagnose and manage patients suffering these conditions in their practices. However, they acknowledged deficiencies in their clinical skills and in the knowledge required to recognise such patients.

> B: You knew it was there, but you didn't really know how to approach the matter, how best to approach, and how to guide the patient, and how to treat the patient. For one thing, sometimes I missed the recognition of depression altogether, and if I did know there was depression I didn't know how to approach it. I wasn't so confident.

They also recognised deficiencies in management skills.

> D: I do lots of counselling here and I needed to upgrade my skills.

This lack of knowledge and confidence in the form of the recognised unmet need was highlighted by their perception of barriers to access and a lack of mental health services.

> C: And then up here there's even more to it because you don't have any back-up system.

One GP was seeking a career change to medical education, looking for respite from her current practice, and viewed this course as an avenue to facilitate this change.

> A: I don't plan to stay in my own general practice for ever, and I guess I've realised over the years that having a special interest like this … To be more involved on the educational side of things is good.

The interview data, pertaining to this theme, were 'triangulated' with the quantitative data collected from 35 students at the beginning of the course. The students had been asked to document their reasons for wanting to participate in the course on the application for admission form. The results of these are summarised in Table 3. Primary reasons the 35 GPs being enrolled on this course were related to professional concerns – improving patient care and increasing knowledge.

Table 3 Student reasons for enrolling in the course

Reason	Response *n* (%)
Improve patient care	13 (92.9)
Improve knowledge	12 (85.7)
CME/PA purposes	7 (50.0)
Alter clinical practice	5 (35.7)
Pursue academic/teaching role	5 (35.7)
Self-development	4 (28.6)
Other	3 (21.4)

Increased knowledge, confidence and competence regarding depression and anxiety in general practice

This theme was developed in response to the interview questions 'Before you did the course, what was it like when someone with depression or anxiety presented to you, at your practice?', 'Has your practice changed?' and 'What is it like for you now when someone with depression or anxiety comes to see you?'.

GPs' attitudes and sense of understanding towards their difficult or 'heart sink' patients changed with the course. 'Heart sink' is a term used by doctors to describe patients they find difficult to manage and for whom often they do not know what to do. These patients usually have large medical records, as they present frequently with non-specific symptoms, undergo numerous tests and referrals to allied health professionals that do not result in definitive diagnoses, and cause frustration for the treating doctor.

> D: I don't feel 'heart sink' whenever they come in, 'here we go again!'. A lot of that has disappeared because I've become more structured in my approach to it. And that has helped a lot.

After completing the course the GPs felt more comfortable with, and less frustrated dealing with patients suffering emotional disorders. This gave them more confidence to explore emotional distress rather than confining the consultation to physical problems. The GPs experienced an increased understanding about the impact of illness on a patient's life.

> B: Besides the physical things that I used to treat before, I might look at how this is affecting them psychologically and go into that a bit in depth … It gives me more or less an all-round approach to a patient.

Their improved ability to reflect on the impact of illness on a person's life also influenced detection and diagnosis. They became more willing to explore issues pertaining to somatisation as a presentation of mental illness.

> E: I think that an individual who comes back several times with, say, abdominal pains which don't fit any of the parameters very well, you'd begin to form a relationship and start asking questions about how life has treated this individual. You start to often pull out underlying anxiety or depressive disorders from complaints which initially don't have anything to do with it.

The GPs reported feeling more confident in their awareness of risk factors and their endeavour to document these to assist patients change.

> C: I try and note any major events that have happened in people's lives. I keep a record of that together with their clinical diagnoses so I am more aware of any of those risks coming up.

Enhanced knowledge and understanding of risk factors, patient presentation and the impact of illness of the patient's wellbeing increased the GPs' confidence in diagnosis.

> A: I tend to be more definite with the diagnosis. Not just depression and anxiety but more definite about the kind of anxiety disorder or things to do with the depression rather than just an overall term.

All GPs expressed increased confidence in their ability to manage patients with depression and anxiety disorders.

> B: Certainly in my own mind I have improved a lot in tackling these with a bit more confidence than I had … Well, I feel a lot more secure now that I know how I can handle this, what to expect and so on, what is the natural progression of the illness … I'm able to approach and plan some kind of an outline for treatment, which I couldn't do before … I've got a shelf full of psychiatric things for patients to go and read about it and come back and discuss that openly with me.

This GP attributed his increased confidence, in part, to enhanced knowledge about the conditions. This resulted in attention to patient education and empowerment of the patient.

The GPs also felt more confident in specific aspects of management, particularly pharmacotherapy management.

> F: I am more discriminative in selection of drugs as I have increased knowledge of the side effects and [am] now not afraid to change drugs if necessary.

They felt more confident in their ability to initiate drug therapy as they perceived that the patients believed in the GP's ability to care for them.

> E: … they [the patients] believe you. It's true. It may sound strange to you, … nowadays I can say to somebody, 'Now I want you to take this [selective serotonin reuptake inhibitor] SSRI and I want you to do a bit of thinking about the way you are running various aspects of your life, and I want you back here in a week. I promise you that when you come through the door when I say "How much better do you feel?", you'll say "I'm 60% better"'. And people will take that view because they will be reassured of that. They feel confidence in you, that you know what you are doing, and invariably they do, when they come back and you say 'Well how are you?', they say 'I'm better than that, I'm 70%'.

After completing the course most GPs viewed depression and anxiety disorders as chronic conditions. This change in attitude, as a result of processing knowledge, impacted on the way they educated their patients about their medication.

> B: They are looking at long-term things. I have to hammer that home to most of these patients … Most of these are chronic cases and medication has to be long term to help them.

In addition to altering the GPs' pharmacotherapy patient education, the course has changed aspects of non-pharmacotherapy treatment and prevention.

> C: Like I say, I see especially anxiety and depression more as a chronic illness now which needs to be managed by regular follow up, and curative as well as preventative care as much as a lot of other things … I am certainly aware that most of those people with the long-term disorders … I don't expect any quick fixes … It changed my attitude. I'm using more counselling and I persevere much longer. I take them as they come.

Several GPs said that understanding the chronic illness model enabled them to cope with patient relapse.

> C: I'm prepared for people to fail, if you like, or temporarily fail, and I talk to people about this. It's not an all-or-nothing thing, I'm a lot more flexible about that now. I won't give up on people just because they've lapsed once or twice … before I might have just lost interest when they have gone back to their previous behaviours, now I would say that that is just part of the illness and just keep working.

This GP changed his attitude towards the patient suffering a depression or anxiety disorder and became prepared to discuss relapse and associated patient-related factors. He appears more tolerant and no longer 'blames the patient for failure'. However this quotation does not illustrate insight into other factors, including doctor-related aspects such as inadequate drug therapy, which may have contributed to the relapse. He indicates that this change in attitude had a positive effect on the management of these conditions and he is more tolerant and prepared to persevere with them.

Personal insight and development

This theme primarily related to the questions 'What is it like for you now when someone with depression or anxiety comes to see you?' and 'Why do you or don't you feel differently?'.

Four GPs commented that the course not only helped them professionally, but in their personal lives too, for example:

> B: This course has really given me an insight into my own life, my family life, through the family therapy. It has been an eye-opener.

> D: … I was getting burn-out. I think that's another reason for being more cautious in how I approach things. I was getting tired of dealing with all of this stuff.

These comments are in contrast to the primary motivating force for enrolment in the course – professional development. It is obvious that the students reflected on their personal life as well as their patients and practice.

GPs indicated that they were more aware of their professional limitations, which has resulted in change in their communication with their patients and altered referral patterns.

> D: I am much more aware that there are certain things that I don't feel that I'm experienced enough in. And also I think it is very helpful because it taught me the value of bringing into play other, say, paramedical resources that we have available to us … I'm more aware of, yes, my own boundaries, and the limitations that you need to apply when you are dealing with people in these situations who are desperate for something to happen for them … Instead of saying 'No, look, we're getting somewhere but it's so slow we're hardly making any movement, and if you had a different approach to it' … and frequently they come back and say 'Well that was great, and now I want to talk about these other things with you'. So there is a separation of their problems, which actually makes them clearer for them. It makes them feel they are more in charge of what is taking place, and therefore you can get ahead … Now I refer when I can feel a brick wall ahead of me.

> F: I now admit to a patient when I am frustrated, I'm not afraid to say that any more. This is interesting as the patient is often not frustrated and feels they are improving … I feel more empowered to acknowledge my limitations and will refer if necessary, when a patient needs help outside my abilities.

GPs commented that they now spend more time with patients, which they feel is not economically viable. This causes a dilemma for some GPs who feel compromised by their concern for their patients and the viability of their business.

> B: I have to do the best I can because I can't get help here. Seeing the patients, talking to them. It takes up a lot of my time for which I do not get paid. It is goodwill and for the sake of my patients I do this. Financially it's a disaster … What kills me is the time that it takes in doing these things, and we GPs aren't paid for that, not unless you make all of them a long consultation and have the luxury of spending half an hour, 45 minutes each patient … I bulk bill.

Patients with depression and anxiety disorders in general practice are often complex and their management may involve components of non-pharmacological therapies that are time consuming. This issue, combined with the current fee-for-service funding system, imposes constraints on GPs who are often small-business owners. This is more problematic in those areas where there are limited mental health resources available for patients.

Two GPs indicated they were actively involved in delivering education to their peers.

> A: I've just run a [cognitive behavioural therapy (CBT)] workshop this weekend, all day Saturday and Sunday morning … organised by the local division.

> B: I've been a facilitator, a moderator, even a speaker at a psychiatric meeting, I've had equal billing, would you believe, with another psychiatrist … nobody was game to talk to the psychiatrist and ask questions, and

> I had to ask him questions and bring out some things that I know from my knowledge from the course that I could ask and for the education of those present – there were about 20 doctors present … I'm doing more of the evening 'dos'.

One doctor expressed surprise that he was performing on par with a 'specialist', drawing on the knowledge he gained, and in doing so, facilitating the learning of his peers.

These GPs were motivated to continue learning and all expressed interest in continuing education in the area of general practice psychiatry.

> A. Yes [I'm] officially enrolled in the Masters of GP Psychiatry.

Other GPs have supplemented their clinical skills by participating in short courses.

> F: I have done more on CBT through the division since. This course was over 6 weeks for one night per week and this was very helpful.

These quotes highlight that the GPs intended to continue to learn using a variety of formats, both tertiary institution-based recognised award courses conducted by distance education, and professional development face-to-face short courses in clinical skills. The clinical skill area is difficult to teach via a distance programme so the GCGPP included skill development as a component of the weekend residential programme. Counselling and psychotherapy require clinical supervision and were beyond the scope of this course.

All the GPs interviewed were 'lifelong learners' participating in a variety of courses. Although CME is a mandatory requirement for vocational registration in Australia, the data indicate that these GPs were motivated by intrinsic factors such as their perceived need to improve their skills, and enjoyment derived from learning, rather than the extrinsic mandatory pressure.

Course structure and content

This theme directly related to the question 'What was it about the course, if it was the course, that made you feel differently?'. Some students felt that participation in a tertiary course provided motivation and structure for pursuing their learning agenda.

> C: I have to subscribe to a course like that because I just don't have the discipline to otherwise keep a regular learning up like that.

Furthermore, the content structure provided a useful framework.

> A: I think it's more to do with the formality or the structure of it (the course).

They also benefited from learning from a course designed specifically for general practice:

> F: Appropriate to general practice as deals with specific issues in depression and anxiety that we see daily … Because of the time limits of general practice the course provided a framework to work in.

A variety of learning modes were highlighted as impacting on the GPs' learning. There was unanimous support for the relevance of case-based learning. GPs found the cases reassuring and enjoyable.

> B: I thought the cases were genuine. There was nothing in there that I hadn't come across before as an experienced GP, but it just sharpened my knowledge … and it's fun to read and it gives me confidence I think.

The cases were designed to engage the GP by promoting reflection on their own patients and their management. The cases were context based and therefore non-threatening to the GP.

> F: Case presentations were helpful as they broke complicated patients into steps which makes you realise you don't have to do it all at once. This puts [the case] into specific steps that are manageable.

The cases provided a relevant framework for the management of patients and reiterated that chronic management can be planned and conducted in general practice, although there are 'no quick fixes'.

The GPs found the interactive learning at the weekend workshops reassuring as they learned from their peers as well as their course authors. The face-to-face encounters also promoted social interaction, assisting those students who had felt isolated.

> A: The weekends were great … because it's coming together, being a little bit unsure about where you're at and then coming together and I guess it's some reassurance. But it's always better to learn in person. I just find them really inspiring.

> D: I suppose it was being exposed to the new ideas and the different approaches that people take to some of their circumstances. Saying 'Well, there is another way of approaching these things rather than your standard. If you're getting stuck, try something else'.

> F: Role-play very helpful, even being the patient is important.

The residential workshop fostered interactive peer learning and provided some students with a 'sense of belonging'.

Interaction with the course material enhanced understanding as the students made the experience personally relevant.

> A: I should also say, the stress management module, we all loved that because we're actually doing it … Doing it yourself. Really understanding it.

> D: People discussing things on the tapes was interesting … you can actually hear people discussing things. It is so much easier to take it in rather than reading it all the time.

This multifaceted intervention appeared to engage the learners.

The students felt respected and enjoyed being treated as adults rather than 'undergraduate' students.

> A: I think it's essential to be treated as individuals and as adults in this sort of thing because you're asking us for our own opinions and thinking. And there's a feeling of respect there for what we've got to offer. There's an assumption of having a knowledge base and experience as well … And not having to … I may have been asked for reasons [when requesting extensions], but they didn't have to be good enough.

> C: I thought it was really good in that all the instructors were extremely helpful. I wouldn't have any problem even now. If I got stuck with something I'd just get the thing out and see who I can ring up … I am sure that wouldn't be a problem. And just generally how supportive all the lecturers were. It wasn't a 'you' and 'us' thing. It feels like it was a genuine team effort and I really appreciated that.

They appreciated that teaching was learner centred and flexible, and that teachers were approachable. There was also a mutual respect for each other's knowledge. The GPs recognised that they built on their previous knowledge and experience. All these aspects were identified as important in maintaining motivation to learn.

The GPs highlighted the importance of reflection as a valuable learning tool, although acknowledging that this was challenging.

> A: Initially I had to push myself and I didn't really like it [the journal]. But I can see it's actually essential to make you think, and actually write something down or typing it out forces you to think in detail about it. While I would be doing it I'd actually be … things would be coming to me that I wouldn't necessarily have thought. Like just thinking about a patient in more depth.

Students highlighted the impact of recall of various aspects of course material as influential on their learning.

> E: I think the great thing about this course is you can read a bit even when you are out doing calls or visiting people … You read the salient points, read a paper or consider a case, and then for the rest of the day while you are wandering around you can reflect on it, come back and jot down some points.

External critique by the course markers was viewed favourably and in contrast to 'internal review' this was not perceived as confronting.

> B: I'm amazed that they read every word that I wrote. Some of it was so much nonsense. But I am amazed that every sentence was read and marked and commented on.

> F: The doctor's review takes your blinkers off to our current practice, but [is] not confronting.

The journal was used to facilitate learning; thus formative evaluation was vital for students studying via distance mode. It is interesting that despite the idea that 'assessment drives learning' there was no mention of essays and other summative assessments as impacting on these students' learning experience.[24]

Students can feel isolated at times and this is particularly relevant to those studying via distance education. The students indicated that the teleconferences and weekend workshops were useful in overcoming isolation.

> A: I'll welcome them [the teleconferences] in future. Basically just as a contact, interesting to hear how other people are going, interesting to hear the voices of the course people and the teachers. Not necessarily helpful educationally, but it gives you some support … I guess that was the other good thing about the weekend … to meet the course authors.

> D: The teleconferences were quite good. I enjoyed them. They are a good way of talking about things … They made me feel less isolated. That's the big thing.

The teleconferences were identified as reducing social isolation rather than being of primary educational importance. However, the course was not just about transfer of knowledge and facts, it was also designed to facilitate communication, maintain student motivation, facilitate learning and promote change.

Discussion

Professional development

The importance of this theme, and the underlying concepts, is supported by the work of Fox who identified that doctors are generally motivated to participate in CME by wanting to improve their delivery of healthcare to patients.[25] Piterman found that GPs learn best when they are challenged by problems that they relate to.[26] These motivating factors are fundamental to the theory of 'androgogy', which was the theoretical foundation of the course.[27] Andragogy values the learner's life experiences and the need to be self-directed.[27] It draws the learner into a commitment to learn by responding to the learner's needs, and involves the learner in directing the content and process.

Despite the evidence that primary care physicians fail to detect mental illness, GPs were aware of its existence in their practice.[20–23] They enrolled in this course as they perceived that they lacked knowledge and skills to appropriately manage patients presenting with mental illness. Thus they spontaneously identified some of the doctor-related barriers to the management of depression and anxiety disorders as outlined in the literature. These include inadequate knowledge, insufficient training, and attitudes.[28–35]

Ross and coworkers found that GPs with a negative view of mental illness were less willing to be actively involved in the treatment of depression.[36] The GPs interviewed were motivated to improve their knowledge, attitude and skills. They made a substantial financial commitment to undertake this course and they felt they could positively influence patient outcomes once equipped with the necessary tools. This finding resonates with the conclusion of Main and coworkers that clinicians who are comfortable treating patients with depression are more likely to view depression as an important primary care problem.[33]

Increased knowledge, confidence and competence regarding depression and anxiety in general practice

A review of the literature on change in doctors' knowledge of mental illness reveals several successful studies.[27,37–40] However, there is a paucity of literature on the impact of CME on doctors' attitudes towards mental illness.[11,41] Therefore it was refreshing that the interview data identified that the GPs felt they had increased confidence and this was attributed to enhanced knowledge about depression and anxiety. Their new understanding of somatisation had also impacted on their confidence to probe the psychosocial aspects of the person's life even if they came with physical illness presentations. Recognising 'heart sink' patients resulted in reduced frustration.

The results show that the management of mental illness was more structured as the GPs treated aspects they felt confident with and referred to other services to complement their treatment. The doctors felt more satisfied with this approach.

Enhanced confidence reportedly resulted in changes to patient management including drug therapy and the use of management plans. Improved knowledge of drug therapy enabled the GPs to talk to patients about the benefits of taking medication, and they were no longer reluctant to change medication if warranted. The GPs, now understanding depression and anxiety disorders as chronic relapsing conditions, reinforced this idea in their patient management and education.

GPs also indicated noticeable changes in the doctor–patient relationship. They thought their patients were more confident in them as clinicians and in their ability to improve patient outcomes. Therefore they were willing to empower their patients by providing literature and forums for discussion to increase their understanding of these conditions.

The interview data indicate that a change in knowledge and understanding by the learner resulted in changed behaviour. This combined two ideas from Novak and Gowin that learning can result in change to behaviour or can result in change in understanding or meaning to the learner.[42] One cannot attribute change solely to an educational programme as this does not work in isolation. There are many variables that contribute or prevent change. The current study illustrated that doctors' knowledge and attitudes towards patients and diseases influenced their clinical behaviour, management and referral. It is interesting that none of the GPs interviewed commented that the course affirmed their current practice and knowledge.

Personal insight and development

This theme emerged unexpectedly as the interview questions focused on practice-based change and the underlying reasons. Personal insights and the burden and frustration of dealing with depression and anxiety disorders in general practice were identified while doing the course, rather than a reason for entering the course. This is in contrast to the findings of Piterman and colleagues whose students identified professional 'burn-out' as a reason for enrolling in courses.[43] This highlights for us that helping patients with emotional problems may impact on doctors personally, as the care involves a mixture of personal and professional skill. Michael Balint has emphasised this point in his book *The Doctor, his Patient and the Illness*.[44]

Personal insight also resulted in change in the way some GPs manage their patients with depression and anxiety. They recognised their limitations as professionals, acknowledged that they 'cannot fix everything' and strove to empower their patients and work in partnership with them. However, depression and anxiety disorders are chronic and require time and energy to manage. This led to conflict for the doctor who questions the capacity to be the caring clinician while maintaining the financial viability of his/her business in a prohibitive healthcare system.

Course structure and content

The data illustrate that these GPs typify the adult learner as described by Knowles and Muir Gray.[45,46] The GPs appreciated 'andragogy' as a framework of ideas for teaching adults as they welcomed being identified as knowledgeable and experienced GPs and that the course built on this principally via reflection on their experience.[45] Tailoring the course content around the clinical setting significantly impacted on learning. Not only was the course perceived as clinically relevant, but the learning environment was also familiar and non-threatening.

The GPs identified 'learning by doing' in the form of role-play and listening to the audiotape discussions which covered issues of practice organisation, patient presentations and the role of the GP, as important.[47] Reflection on these discussions continued up to eight months after completion of the course.

Elements of pragmatic learning have been illustrated here. The doctors claim to have changed their practice as the course provided them with structured approaches to detection and management of conditions within the GP context. They also illustrate the 'activist learner' enjoying interaction with peers and other health professionals and engaging in case discussions at weekend workshops.

The GPs identified aspects of adult teaching, particularly experiential learning, that assisted their learning.[47] The relevance of the course content in meeting their learning needs was noted as important in sustaining interest and motivation.

The students expressed feeling threatened by self-reflection rather than fearing peer review. It is not surprising that these medical graduates, familiar with examination and external review in their undergraduate medical training perceived self-reflection as a challenge. The 'journal' was one method of reflective learning and despite the initial negativity, the students attributed this as having significant impact on learning and change.

Piterman and colleagues found that reflective learning resulted in students reporting change in their clinical practice and decision making.[43] Of note was the patient-centred approach, and increased awareness of the doctor–patient relationship in influencing patient outcomes, and hence the students' own role in influencing patient outcomes.[43] These findings are supported here.

The students valued the attributes of the learner-centred teachers, particularly their patience in taking the time to read and comment on all the work submitted, notably the journals. This was important for students studying at a distance, as this was the primary contact with their teachers. The feedback was a vital component to reinforcement of learning, therefore it had to be regular.

The course materials were familiar to the GPs. They were comfortable using printed materials, video and audiotapes, rather than other forms of delivery, possibly less familiar, such as web-based courses. The students continued to refer to their course manuals and maximise their learning by reading and reflecting on articles throughout their working day.

It is evident from a review of the current literature about the effectiveness of CME that no single activity promotes substantial change. The most effective methods include learning linked to practice, interactive sessions, and multifaceted interventions. The students identified all of these attributes as important. Audit and printed material are noted in the literature as less effective strategies.[48] The noticeable lack of data about these two components of this programme corroborates this.

Limitations of the study

A study is thought to have ecological validity if carried out in the subject's natural environment, 'using suitable methods to take into consideration the context of the research questions and subjects'.[49] All interviews took place via the telephone with the GPs in their clinics. GPs are comfortable discussing complex issues using the telephone as this is a natural mode of communication in their daily working environment. Logistical reasons prevented personal meetings for the participants located in interstate and rural settings. The local (Melbourne) participants were given the choice of face-to-face interviews. One GP preferred the telephone option, as this was perceived as less intrusive in their practice schedule and another did not have a preference, so the researcher chose the telephone interview to ensure continuity of data collection method. However, telephone interviews are limiting compared to personal interactions, as the researcher relies solely on the spoken word, being unable to observe body language or the environment, factors that may bias the results.

All participants were intending to pursue the Master of General Practice Psychiatry. This may have biased the results, as compared with the other students, they may have been more motivated and satisfied with the course and had more insight into their learning needs or there may have been other factors that were not explored. However, the researcher only became aware of their plans to continue education in this field when they were interviewed. This sample may have represented extreme case sampling, which may detract from more representative attitudes.[13] This becomes problematic when saturation of themes is not reached, which was not the case here.

The qualitative results identify changes in clinical practice and behaviour that were not detected in the quantitative study.[11] These discrepancies could be related to the timing of the qualitative and quantitative collection of data. The post-course audit (quantitative data) was completed at the end of the course and the qualitative data were collected six months later. Over this time the GPs may have consolidated their learning. If the audit data and interviews had been collected simultaneously, the quantitative results may have been more aligned with the qualitative ones.

Conclusion

In the companion quantitative evaluation we demonstrated that a one-year CME course in general practice psychiatry is associated with sustained increase in knowledge and attitude, although there was little measurable change in clinical behaviour and patient outcome.[11] This qualitative evaluation adds depth to this by highlighting GP commitment to their own professional development and their strong perception of increased knowledge, confidence and competence in regard to the management of patients with depression and anxiety. Furthermore, the development of greater insight into a range of personal issues occurred as a result of the course – something not measured in the quantitative evaluation. Importantly this study also affirmed the value of adult learning principles in postgraduate education, which participants perceived to be effective and to lead to a desire to continue learning. Of particular importance were adult learning principles, interactive peer learning and reflection on practice.

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CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Louise McCall, Department of General Practice, Monash University, 867 Centre Road, East Bentleigh, Victoria 3165, Australia. Tel: +61 3 9579 3188; fax: +61 3 9570 1382; email: louise.mccall@med.monash.edu.au

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