Attitudes towards peer review of teaching in medical education

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Abstract

Introduction: Peer review of teaching is an important evaluation and development activity. Its use is well documented within US tertiary institutions but less common in the UK and Australia. While some research into prevalence, outcomes and opinions of peer review within medical education exists, documented implementation is uncommon. This topic is particularly underresearched within a rural and regional education context. This research sought opinions on peer review of teaching among medical educators and intended to ascertain levels of experience with, and ease of access to, peer review programmes across city, rural and international locations.

Methods: A purposefully designed questionnaire, seeking views and experiences of peer review of teaching, was sent to medical educators at the University of Melbourne (metropolitan-based Melbourne Medical School educators at multiple metropolitan hospitals; educators based at multiple Rural Clinical School campuses in regional Victoria) and the University of Manchester (based at Manchester Royal Infirmary). Information regarding teaching experience and qualifications, as well as previous experience with peer review, was also sought.

Results: Only 10.4% of respondents had a formal teaching qualification at postgraduate or masters level; 29.2% had previous experience of formal peer review. Respondents who reported teaching more hours per week were more likely to agree that formal peer review programmes would be beneficial to teaching development (r = 0.12; p = 0.05) and were also more likely to have the time to take part (r = 0.14; p = 0.02). The overall attitude towards peer review was favourable; 87.7% of respondents stated they would take part in a programme, and 90.6% were of the view that peer review improved teaching practice. There were no statistically-significant differences in opinions towards peer review across the three locations.

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Conclusions: This study shows there is a significant unmet interest among medical educators for peer review of teaching, and it suggests this is particularly prevalent among rural and regional-based medical educators. Further, data suggests a voluntary and informative form of peer review is more likely to be embraced as an opportunity for professional development.

Keywords: peer review; faculty development; professional development; medical education.

Introduction

Peer review of medical education is now increasingly used as an important teaching evaluation method (Kell & Annetts, 2009), which recognises that teaching is a skill to be developed over time (Lowry, 1993). Importantly, peer review provides educators with feedback beyond that which is routinely collected from students. Student feedback can be perceived to be inconsistent, and a reflection of an educator's popularity (Appling, Naumann, & Berk, 2001), whereas peer review of teaching adds an important dimension—fellow educators who review teaching, and provide feedback, can potentially substantiate or refute the feedback received from those whom the educator is teaching.

Several models of peer review exist (Gosling, 2002), for example, an evaluation model in which a senior faculty member observes a junior member for quality assurance purposes, a developmental model in which the observer is an educationalist seeking to enhance quality and a collaborative peer review model in which a colleague observes a peer teaching. These models are all more commonly described as being implemented in North American tertiary teaching institutions than in the UK or Australia.

Whilst peer review is a well-established method of quality control in general education teacher training and practice, it is not currently conventional in medical education, where teaching quality is essential to ensure the development of excellent clinicians. Martsolf et al. (1999) argued that teaching should be perceived in universities as a scholarly endeavour and promoted to a similar prestige level as research, yet most teaching clinicians still have little or no teacher training (Khan, Khan, Dasgupta, & Ahmed, 2013). Other authors add that for teaching performance to be rewarded, it should be subject to a peer review process (Berk, Naumann, & Appling, 2004). Evaluation of teaching in the form of peer review can be seen as an indication that an institution is committed to educator development and improvement (Jahangiri, Mucciolo, Choi, & Speilman, 2008).

There are many well-reported negative attitudes towards peer review as well as several positive attitudes, as summarised in Table 1. A number of authors has found summative peer-review schemes to be less acceptable to teaching staff than formative programmes (Fedor, Bettenhousen, & Davis, 1999; McEvoy & Buller, 1987; Schultz & Latif, 2006). Possible reasons for this aversion to summative schemes are the poor inter-rater reliability for teaching sessions and perceived reviewer bias towards or against individual teachers, which makes a valid assessment difficult. On the other hand, voluntary, formative peer-review programmes, which focus more on evaluation and development, are perceived as less threatening than the compulsory programmes that may be hard to implement (Schwellnus & Carnahan, 2014). This could be related to voluntary programmes being seen as more to do with staff development and less for administrative or personnel purposes (Marstolf et al., 1999).

Table 1
Summary of Positive and Negative Attitudes Regarding Peer Review of Teaching, From the Literature

Positives	Negatives				
Use of feedback for formative developmental purposes, rather than summative evaluation ^{9–11}	Perceived reviewer bias and questions related to programme validity ^{7, 9, 11–12, 14, 21–22}				
• Feelings of staff ownership and control ^{6, 9–10, 14}	Time required to take part and fears of a				
• Sharing a trusting, collegial relationship of equals ^{12, 16–18}	greater workload ^{7, 9, 13–14, 17, 23}				
• Previous positive experiences of peer review ^{9, 19}	 Fear, anxiety and distrust related to perceptions of judgement and critique^{10, 13–15, 23–24} 				
 Perceptions of reviewer leniency^{11, 17} 	Promotes conflict and supports negative				
Training for reviewers and for giving	team dynamics ^{8, 19}				
constructive feedback ⁹	Perceived lack of value of the programme and				
Adequate and long-term administrative support, including funding and time allocations 18 20.	impacts ^{7, 9, 22, 24}				
including funding and time allocation ^{6, 18, 20}	Raises questions regarding the experience level of				
 Voluntary participation^{6, 18} 	the reviewer ^{8, 10–11, 14}				
	 Lack of training provided for reviewers and required level of pedagogical expertise^{9, 15} 				
	• Inadequate evaluation tools ^{7,9}				
	Having a previous negative experience of peer review ^{1, 19}				

Australian studies of peer review are rare in the health professional education literature. One study of a peer-review programme for nurses and midwives found a high degree of acceptability, with 78% of participants finding the process to be collegial and 61% of participants finding the programme supportive (Bennett, Parker, & Smigiel, 2012). Adshead, White and Stephenson (2006) reported 69% of respondents to their survey thought a peer review of teaching programme in general practice would be beneficial and would improve student education. In that same study, less than half (45%) of respondents said they would take part in a peer review of teaching programme, with 62% giving a negative response, saying they would feel under scrutiny and ill at ease being observed. This study reveals the paradox of peer review of teaching—many educators feel it would be useful but do not, themselves, wish to take part. Reasons such as fear and distrust related to perceptions of judgement and critique are commonly reported in the literature as why many are reluctant to engage in peer review (Chism, 2007; Iqbal, 2014; Jahangiri et al., 2008; McEvoy & Buller, 1987; Schultz & Latif, 2006).

Despite the dearth of scholarly discourse on peer review in health professional education in Australia and the UK in general, peer review of medical education in rural and regional settings is particularly underrepresented in the literature. For educators who are away from major cities, there is potentially a feeling of professional isolation which peer review, possibly linked with mentoring programmes, could conceivably help to relieve. An additional factor with regard to regional hospitals is that senior medical staff

are, in the main, involved in teaching by necessity rather than choice, as there are fewer colleagues to undertake the teaching compared to metropolitan settings. Furthermore, geographically-dispersed teaching faculties may have fewer opportunities to attend formal educator development activities compared to their metropolitan counterparts. For that reason, a flexible peer-review programme is one option for professional development in teaching, which can be easily implemented across multiple sites within the same establishment.

Many of the examples of peer review of teaching in the literature are from the nursing profession (Appling et al., 2001; Bennett et al., 2012; Berk et al., 2004; Costello, Pateman, Pusey, & Longshaw, 2001; Martsolf et al., 1999). Others detail the experience of dentists (Jahangiri et al., 2008) and psychologists (Cederblom & Lounsbury, 1980; McEvoy & Buller, 1987), and only a minority are from the medical disciplines (Adshead et al., 2006; Curnock, Bowie, Pope, & McKay, 2012; Khan et al., 2013). One can only speculate on the extent to which the findings from other health professions might be transferrable to medicine.

Reviewing the available literature, we identified the paucity of studies from the medical profession and also the fact that most studies are from a single centre. Studies are needed that demonstrate attitudes towards peer review that transcend national and geographical settings, that explore and compare opinions and needs among metropolitan and regional samples and that are, therefore, more likely to be indicative of the needs and views of many medical educators in westernised countries. Once these needs are acknowledged, they can be properly met, and informed institutions can aim to further encourage and provide relevant professional development to medical educators and promote the continuing improvement of teaching, which in turn provides medical students with the best possible educational experience.

This paper reports on a comparison of perceptions of medical educator peer review across two high-profile and well-established universities in two different countries. To our knowledge, this is the first paper to compare attitudes between medical educators of medical schools in two countries, with an additional comparison between metropolitan and regional/rural medical educators. Participants in this study came from Manchester University's School of Medicine and Melbourne University's medical school. Manchester offers an undergraduate medical degree, whilst Melbourne recently changed to offer a postgraduate MD masters-level medical degree.

In this study, we compare attitudes towards peer review between medical educators working at:

- Manchester Royal Infirmary (Metropolitan Manchester, UK)
- Melbourne's metropolitan clinical schools (Metropolitan Melbourne, Australia)
- Melbourne's rural clinical school (Rural and Regional Victoria, Australia).

Compared to metropolitan clinical schools, the Melbourne's rural clinical school teaches across multiple sites over a widely-dispersed geographical area of several thousand square kilometres.

The opportunity for medical educators to take part in any medical educator development is likely to differ between these three comparative locations. Manchester has had a Master

of Medical Education programme for over 5 years; the first graduates from Melbourne's Master of Clinical Education programme graduated in 2015, and for regional and rural educators of the University of Melbourne Rural Clinical School, a considerable distance would have to be traversed in order to take part in one of Melbourne's graduate medical education programmes. Opportunities for medical education continuing professional development differ across the three locations (metropolitan Manchester, metropolitan Melbourne, rural and regional Victoria) of this study.

Methods

Ethical approval

In Australia, ethical approval for the study was granted by the University of Melbourne's Rural Health Academic Centre Human Ethics Advisory Group. In the UK, the University of Manchester's Manager of Research, Ethics, Governance and Integrity decided that as the study questionnaire was anonymous and the questions were not personal, confidential or sensitive, a formal ethical review of the study was unnecessary.

Questionnaire design

The questionnaire utilised in this study was informed by current literature and designed by two of the researchers involved in this study (CW and JW). The questions were devised to solicit a range of opinions and attitudes towards peer review of teaching comparable against key demographic indicators. In order to foster participation rates, the questionnaire was just over two pages in length and took 5–10 minutes to complete. Questionnaire items asked about teaching experience, including the number of years spent teaching medical students, the amount of time spent teaching on a weekly basis as well as respondents' level of teaching qualification and medical specialty.

Respondents were asked about their previous experiences with formalised or informal peer review of teaching programmes, including whether they were current or past participants or if they had given or received feedback from their peers. In addition, respondents were able to indicate if they thought peer review of teaching improved teaching practice and their likelihood of taking part if a formal programme was available. Each of the items focusing on previous experience of peer review of teaching and opinions related to its validity incorporated both closed and open-ended responses. In this way, respondents were given the opportunity to describe their thoughts, opinions and experiences in their own terms. The final set of 13 Likert-scale items (Figure 1) was designed to gain information on respondents' approaches and attitudes to different aspects of peer review of teaching.

Study methodology

The questionnaire was sent to all medical educators at Manchester Royal Infirmary (University of Manchester) and the University of Melbourne who had taught medical students within 12 months of the survey date. Reminder emails were sent 2 and 4 weeks after the initial survey was sent out. Medical educators at the University of Manchester were all metropolitan based. The University of Melbourne sample was

For each of the following statements, respondents were asked whether they agreed or disagreed using the 5-point scale

		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
a.	I would take part in a peer-review programme if time for participation was not a problem	1	2	3	4	5
b.	My colleagues are unlikely to offer constructive feedback on my teaching	1	2	3	4	5
C.	I would like to offer advice on teaching performance to my colleagues	1	2	3	4	5
d.	A peer review of teaching programme would be unsuited to the culture of my workplace	1	2	3	4	5
e.	I would like feedback on my teaching from my peers	1	2	3	4	5
f.	I am too busy to take part in a peer review of teaching programme	1	2	3	4	5
g.	Increased teacher training would be beneficial for my teaching	1	2	3	4	5
h.	If feedback was part of my overall performance review, I would not take part in a peer review of teaching programme	1	2	3	4	5
i.	I would find peer review of my teaching unhelpful	1	2	3	4	5
j.	A formal peer review of teaching programme is valuable	1	2	3	4	5
k.	I would only take part in peer review of teaching if the feedback was kept between the reviewer and the reviewee	1	2	3	4	5
I.	A formal peer review of teaching programme would improve our overall teaching programme	1	2	3	4	5
m.	I would be interested to be involved in developing a peer review of teaching programme for my workplace	1	2	3	4	5

Figure 1. 13-item Likert-scale question: Attitudes towards peer review.

split into metropolitan Melbourne-based medical educators and rural clinical school (RCS) educators. The RCS has multiple sites across Victoria in both regional and rural locations; RCS educators were dispersed among these rural and regional sites. For the purpose of this study, regional refers to the larger towns that make up the main sites of RCS with an estimated population of between 60,000 and 120,000 people (Australian Bureau of Statistics, 2016). The RCS also has educators based in towns with much smaller populations; these are classed as rural for the purpose of this research.

Statistical methods

De-identified survey data was entered into SPSS 22 (IBM) for analysis, and open-ended questionnaire responses were coded according to consistent and emergent themes. Frequencies and percentages were detailed for demographic information. For betweengroup comparisons, a series of Chi-square and Kruskal-Wallis tests were performed. Pearson's product–moment correlation coefficients were performed to demonstrate linear correlations between two variables. Statistical significance was determined by a *p* value of < 0.05.

Results

The overall response rate was 30.0% (n = 310). Table 2 delineates the characteristics of the respondents, compared across the three locations. Table 3 shows the areas that respondents indicated teaching in. Across the age groups, it was found that the UK had significantly younger respondents to the survey than in Australia (χ 2 = 43.94; p < 0.001).

Table 2
Respondent Characteristics Across Locations

	Manc	hester	Melb	ourne	Regi	ional	To	tal
Variables	N	%	N	%	N	%	N	%
Gender					,			
Male	108	34.8	35	11.3	31	10.0	174	56.1
Female	89	28.7	27	8.7	20	6.5	136	43.9
Total	197	63.5	62	20	51	16.5	310	100
Age (in Years)								
25–34	25	8.1	3	1	2	0.7	30	9.7
35–44	65	20.9	16	5.2	9	2.9	90	29
45–54	73	23.5	17	5.4	12	3.9	102	32.9
55–64	30	9.7	13	4.2	18	5.8	61	19.7
65+	4	1.3	13	4.2	10	3.2	27	8.7
Total	197	63.5	62	20	51	16.5	310	100

The majority of respondents (n = 227, 73.2%) reported teaching for less than 5 hours per week, with 10 (3.2%) teaching only on an opportunistic, *ad hoc* basis. Only 12 (3.9%) respondents reported teaching more than 10 hours per week. A higher proportion of Australian rural educators taught more than 5 hours per week than those in Manchester or Melbourne; this finding was statistically significant ($\chi^2 = 24.66$; p = 0.006).

In terms of years spent teaching medical students, there were no significant differences across campuses. Over half the respondents (n = 186, 60.0%) reported having taught medical students for 12 years or more. Out of these 186 respondents, only 53 (28.5%) had participated in formal peer review. Few (n = 55, 17.7%) reported teaching for between 4–7 years and only 30 (9.6%) reported teaching for less than 3 years. Of all the respondents, 75 (24.2%) reported having attended some teacher training sessions, with 32 (10.4%) respondents having undertaken formal teaching qualifications at a postgraduate or masters level. Only 81 (26.1%) of respondents had some experience of formal peer review of teaching, while 160 (51.6%) had received informal feedback on their teaching. There was a negative correlation between number of years teaching medical students and participation in formal peer review (r = -0.110; p = .068), suggesting early career medical educators are more like to engage in peer review and professional development.

Table 3
Responses to the Question "In Which Area/Speciality Do You Teach?"

Area/Speciality	N	% of Respondents
General medicine	68	19.5%
General surgery	33	9.5%
Paediatrics/neonatal	29	8.3%
Gynaecology/obstetrics/maternity/women's health	26	7.5%
Clinical skills/medical education/communication skills/problem-based learning/undergrad/foundation	25	7.2%
Anaesthetics	17	4.9%
Renal/nephrology/urology	17	4.9%
General practice/primary care	16	4.6%
Emergency medicine	14	4.0%
Psychiatry/child and adolescent psychiatry/mental health/CAMHS	12	3.4%
Other**	91	26.1%

Note: Some participants recorded more than one response to this question. In these cases, the first two responses were recorded. Percentages represent the results of all three locations combined.

A set of Likert-scale questions, comprised of 13 items rated on a 5-point scale, was used to determine respondents' opinions and attitudes towards peer review. After reversing responses to negatively-worded questions, the items were combined to form a reliable scale. One neutrally-worded item was removed from the scale to improve internal reliability. The overall internal reliability of the scale was tested using Cronbach's alpha, which gave a reliability score of 0.854, suggesting good internal consistency reliability. The total score, based on responses to the 12 items, was used to indicate individuals' overall opinion of peer review of teaching. Table 4 outlines the overall attitudes towards peer review, rated from strongly negative to strongly positive, across the three locations.

Table 4
Overall Attitude Towards Peer Review Across Locations

	Manchester		Melbourne		Regional		Total	
Overall Attitude	N	%	N	%	N	%	N	%
Strongly negative	1	0.4	0	0.0	0	0.0	1	0.4
Somewhat negative	10	3.6	3	1.1	4	1.5	17	6.4
Neutral	3	1.1	0	0.0	0	0.0	3	1.1
Somewhat positive	95	34.5	34	12.4	30	10.9	159	57.8
Strongly positive	57	20.7	22	8	16	5.8	95	34.5
Total	166	60.3	59	21.5	50	18.2	275	100

Note: Only those responses that answered all 13 items are included—a total of 35 (Manchester, 31; Melbourne, 3; Regional, 1); incomplete responses were omitted.

^{** &}quot;Other" relates to a further 25 specialities in which the number of educators only ranged from 1 to 7 and were, therefore, condensed to a single category for ease of reference.

Considering overall attitude to peer review, only one respondent (0.3%) was strongly negative, whereas 159 (51.2%) were somewhat positive, and 95 (30.6%) were strongly positive regarding peer review of teaching. If a peer review of teaching programme was to be available, 242 (78.1%) of respondents said they would take part. When asked whether they thought peer review of teaching improved teaching practice, 241 (77.7%) of respondents answered in the affirmative.

Correlations were run on data gathered from the Likert-scale questions concerning opinions and attitudes towards peer review to determine relationships across a number of variables. There was a statistically-significant positive correlation between age and the number of years teaching medical students (r = 0.56; p < 0.001), confirming that older respondents had more years of teaching experience. Statistically-significant negative correlations suggest older respondents, who have taught for more years, believed that increased teacher training would be less likely to benefit their teaching (r = -0.22; p < 0.001), and that those respondents would be less interested in developing a peer-review programme for their workplace (r = -0.13; p = 0.03). If feedback of teaching was part of an overall review, older respondents, who have taught for more years, were less likely to want to be part of a peer-review programme (r = -0.13; p = 0.03).

Those respondents who had taught medical students for more years were less likely to agree that increased teacher training would be beneficial for their teaching (r= -0.23; p < 0.001). Those respondents who reported a greater number of hours teaching per week indicated they were more likely to have time to take part in a peer review of teaching programme (r = 0.14; p = 0.02) and were more likely to agree that a formal peer review of teaching programme would be valuable (r = 0.12; p = 0.05) than those teachers who taught fewer hours. There were no significant differences in the responses between respondents in the three locations.

Previous participation in a formal peer review of teaching programme did not significantly predict whether respondents thought teaching quality was improved by participation in such a programme ($\chi^2 = 1.87$, p = 0.17).

Table 5
Most Common Responses to the Question "Why Was Peer Review of Teaching a Positive Experience?"

Why was peer review a		hester 160)			Rural/Regional Victoria (n = 20)	
positive experience?	N	%	N	%	N	%
Useful/good experience	39	18.0%	6	15.8%	5	16.1%
Insightful and constructive feedback and advice	40	18.4%	5	13.2%	6	19.4%
Good procedure/confirmation of good practice	16	7.4%	6	15.8%	2	6.5%
Self-reflection and improvement	11	5.1%	3	7.9%	10	32.3%

Note: Total of 103 missing responses across all locations

Table 6
Most Common Responses to the Question "Why Does Peer Review of Teaching Improve Teaching Practice?"

Why does peer review of teaching improve teaching practice?		Manchester (n = 162)		ourne : 37)	Rural/Regional Victoria (n = 27)	
improve teaching practice?	N	%	N	%	N	%
Is good because it highlights bad habits/weaknesses	22	9.0%	2	3.6%	3	7.9%
Helps to see different perspective/ exchange of ideas and techniques	22	9.0%	1	1.8%	4	10.5%
Helps improve teaching quality/ improve practice/ development of style	27	11.0%	3	5.4%	3	7.9%
Self-reflection/self-awareness/ self-improvement	22	9.0%	6	10.7%	3	7.9%
Useful/good idea/ important/helpful/ positive experience	14	5.7%	4	7.1%	4	10.5%

Note: Total of 84 missing responses from across locations

Tables 5 shows the most common responses to the question "Why was peer review of teaching a positive experience?" Table 6 shows the most common responses to the question "Why does peer review of teaching improve teaching practice?"

Discussion

This paper highlights several important issues. The first of these is the willingness to participate in a peer review of teaching programme if one existed and the strong belief that peer review of teaching improves teacher performance; these views were shared by respondents surveyed at all three locations. The majority of educators responding to the survey had received some informal feedback on their teaching. That the majority held such a strong wish to take part in peer review, despite fewer than 30% having participated in a formal peer-review process, demonstrates a significant unmet need. This finding reflects previous literature that is largely based on studies of nursing education (Berk et al., 2004; Costello et al., 2001.)

The evolution of medical education as a speciality on its own is still a relatively new phenomenon. Many general and specialist trainee programmes now incorporate some sessions on teaching. Further, younger doctors who are earlier in their career indicated that they felt they were more likely to benefit from a peer review of teaching programme compared to their older colleagues. Perhaps this reflects more junior doctors being introduced to medical education concepts as part of their learning. The growing evidence base around medical education training is another potential factor as to why peer review and other such forms of professional development are being better received and more sought after.

Given that 78.1% of respondents would take part in peer review if it were available, and only 26.1% of respondents had undertaken formally-implemented peer review suggests

that there is not easy access to peer review of medical education outside of undertaking a formal medical education qualification. This seems to be the situation in all three of the sites we surveyed. Both Manchester and Melbourne are well-established medical schools, and yet they do not have readily available peer-review programmes for any medical educators who wish to take part. It is possible that a similar situation exists in other medical schools in Australia and the UK.

It is also a concern that more senior doctors did not feel they had much to gain from a peer review of teaching programme and that they were only more likely to take part if it were necessary for professional development review. It is less likely that this group of doctors were exposed to medical education concepts during their own medical training. As many senior doctors still teach medical students (28.4% of respondents were over 55 years of age), there is still a need for these doctors to receive some training in medical education.

A further finding was that those educators who delivered the most teaching hours per week indicated that they were more likely to have time to take part in a peer review of teaching programme and consider such a programme to be valuable. Time constraints are noted as a negative factor in a peer review of teaching programme—it is of interest that those who spend more time teaching feel they could find time to take part in peer review. Perhaps this reflects that those who do more education recognise the need to make sure their teaching is of maximal value.

Perhaps unsurprisingly, fairly similar findings were demonstrated when educators were asked what they think the positive aspects of peer review are and how peer review improves teaching (see Tables 5 and 6). The link between these two questions is important; the idea behind peer review of teaching is not simply that educators are confirmed as good, rather peer review can, and should, be a method of teaching improvement (Fedor et al., 1999). These responses also highlight the two-way nature of peer review—self-reflection and self-improvement were common responses supplied to both the above-mentioned questions. This suggests that reviewers also experienced valuable professional development opportunities and are also likely to benefit from the process.

Limitations

Recruitment for this study was problematic, owing to the geographically-dispersed nature of a very large number of potential participants. Recruitment did not take place face-to-face; invitations were sent by email to educators by 10 clinical school managers (nine across University of Melbourne campuses; one in University of Manchester). We, therefore, cannot be sure that every educator was invited to complete the survey. The relatively small sample size means that few statistically-significant differences were found between the groups at the three locations. Had there been more respondents, perhaps more significant differences may have been found. Further, the topic of the questionnaire may have been interpreted by some possible respondents as potentially threatening and sensitive, which may also have affected the response rate.

Future research

There are some areas that may have been worth expanding. In particular, the two-way nature of peer review that has been suggested in the results is something that could be explored further. As a subject of future study, this could provide additional support in favour of formally-implemented peer-review programmes.

The main purpose of this research was to compare attitudes towards peer review across locations; therefore, much of the analysis was focused on ascertaining these attitudes and establishing those specific comparisons. However, there are other key comparisons that could be made from this kind of data, for example, a comparison of attitudes towards peer review between those who have experience in peer review and those who don't would be beneficial and something to consider for future study.

Further research investigating the relationships between levels of teaching experience, participation in peer review and attitudes towards peer review could also be useful in understanding the changing perspectives concerning peer review.

Future studies could also acquire richer data through a specific qualitative approach—open-ended questionnaires, focus groups or semi-structured interviews. Such approaches could gather detailed information about the style of peer-review programmes respondents have been involved in and how these have specifically aided their professional development. An exploration of changes in behaviours post peer review and feedback sessions could also help to ascertain the professional development benefits of such undertakings and, thus, promote and encourage the uptake of continuing professional development among medical educators.

Despite these limitations, we believe this study raises important issues that are common to medical educators in two countries across three locations. As with previous literature (Bennett et al., 2012), this study demonstrated peer-review programmes are acceptable in healthcare settings.

Conclusion

This study found that for medical educators across two countries and three different settings, there is a perceived need for, and a willingness to partake in, peer review of teaching programmes. This study also supports previous research findings (Marstolf et al., 1999) that demonstrate a voluntary programme of peer review rather than a compulsory or punitive process is more likely to be embraced as an opportunity for staff development. These findings were consistent across the three locations (metropolitan Manchester, metropolitan Melbourne and rural/regional Victoria), and irrespective of location, medical educators generally believe peer review can improve teaching practice, and they would be willing to take part. In view of these findings, the University of Melbourne's Rural Clinical School is developing a peer review of teaching programme with the aim of having half of all medical education delivered by teachers who are enrolled in a voluntary peer review of teaching programme by the end of 2016, the outcomes of which will be subject to further study.

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