

Evaluation of workshop-based peer review training to support pharmacist professional development

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Abstract

Introduction: A 'Foundation Level Pharmacy Practice Development Programme' was pioneered by two hospitals in Singapore. Feedback and supervision skills were provided to pharmacists involved in the programme implementation.

Method: A three day small-group workshop was conducted by a qualified and experienced peer review evaluator with a background in pharmacist training. Various delivery methods were used to educate attendees on a number of topics, including clinical supervision and provision of effective feedback. To evaluate the workshop a pre- and post-workshop survey was completed by each attendee to explore self-perceived improvements in confidence, knowledge and skills.

Results: Attendee's responses demonstrated a significant improvement in skills, confidence and knowledge as a result of participation in the workshop.

Discussion: Workshop participants perceived positive changes in their confidence, knowledge and skills in areas relating to peer review processes. Further evaluation is warranted to investigate the success of the programme and to identify future training needs.

Keywords: *Peer Review, Professional Development, Feedback, Foundation Level Pharmacist*

Introduction

Peer review is a relatively new concept within some healthcare disciplines, despite its longstanding acceptance as a method for evaluating workplace performance by the medical profession (Hall, 1999; Southgate, 2001). The use of direct observational methods, guided by a competency framework and coupled with tailored and effective feedback has been demonstrated to improve pharmacist performance (Antoniou, 2005; Coombes, 2010). In line with the principles of adult learning, the peer review process remains applicable to all staff irrespective of their experience, however may be considered particularly useful for more junior members of staff (e.g. those in the first three-five or 'Foundation' years of practice). Essential to the effectiveness of peer review programme is specific training and an understanding of the philosophy of the process.

Objective

A 'Foundation Level Pharmacy Practice Development Programme' was pioneered by two new hospitals in Singapore. A competency framework for foundation level pharmacists was developed and used as the spine of a rotational programme, supported by a clinical team structure and a syllabus to guide workplace-based experiential learning. In order to implement this

programme, specific training was required for those involved in the provision of the 'Foundation Level Development Framework'. The aim of the workshop was to train a group of hospital pharmacists in Singapore to utilise effective supervision and feedback skills in this newly implemented peer review process for pharmacists. The workshop was evaluated to assess the perceived usefulness of the training by attendees.

Methods

A three day small-group workshop was conducted by a suitably qualified and experienced peer review evaluator with a background in pharmacist training. The workshop included sessions on clinical supervision, supervisory and learning styles, the role of reflection (in particular self-reflection) in adult learning, how to evaluate in the clinical working environment, clinical teaching, delivering effective feedback and challenges of supervision. Various peer review tools were introduced and explained to assist in the practical application of educational content in the clinical setting.

Workshop content was delivered using multiple delivery methods including didactic information provision, role play, group discussion and pre-recorded audio-visual scenarios to demonstrate key learning points and skills. The workshop also focused on identifying a sustainability

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strategy by facilitating discussions regarding the re-accreditation of evaluators, train the trainer models and future training needs to ensure sustainability of the programme. Completion of the workshop was an integral component of a training strategy which utilised a 'train the trainer' format. Prior to the workshop, attendees completed an initial supervised workplace-based review with an experienced evaluator.

The workshop was attended by 14 pharmacists, who had been identified as potential peer review evaluators. To evaluate the workshop a pre- and post-workshop survey was completed by each attendee with the aim of identifying self-perceived improvements in areas such as confidence, knowledge and skills. Permission was gained from attendees for their responses to be collected and analysed. Attendees were asked to rate their level of agreement with several statements using a four or five point Likert scale. Scores of ≥ 3 were considered to demonstrate agreement. Responses were analysed using Pearson chi-squared test or Fisher's Exact Test.

On completion of the workshop attendees were asked to identify what sessions they found most useful, sessions that could be improved and the strongest take-home message from the workshop.

Results

Attendee's responses demonstrated an overwhelming perception of improvement in skills, confidence and knowledge as a result of participation in the workshop (Table I). An improvement in numerical agreement was noted for 13 of the 14 statements, with the fourteenth statement maintaining 100% agreement. Statistically significant differences were demonstrated for understanding of, and confidence in performing, peer review ($p < 0.001$); answering questions regarding the

process ($p < 0.001$); readiness to be an evaluator ($p < 0.001$); application of peer review to improve professional practice ($p = 0.039$); and confidence in using the mini-clinical evaluation exercise (Mini-CEX) framework ($p = 0.005$).

On completion of the workshop 100% of attendees reported they were motivated to conduct peer review in their workplace. All attendees reported that peer review would allow for more effective professional development of pharmacists. Although 84.6% of attendees reported agreement they had adequate feedback skills necessary following the workshop, free text comments indicated that they felt that their skills required further development. There was a trend to increased agreement around the knowledge required to be an effective evaluator and of understanding how different learning styles may impact peer review.

Attendees identified that the most useful workshop sessions included the discussion of different learning and teaching styles, pre-recorded examples to demonstrate effective and ineffective observation and feedback, and the opportunity to practice their new skills in a safe environment. Whilst practice in the workshop was helpful, attendees stated they would have liked more practical sessions. Attendees consistently reported that the strongest single message from the workshop was that effective feedback, which allowed both parties to provide constructive and positive input, was the key to successful peer review.

Respondents expressed satisfaction regarding the enthusiasm and motivation of the facilitator and the effective use of videos enhanced their learning experience. All attendees rated the workshop a positive experience that was delivered in an interactive and effective format.

Table I: Pre-post workshop survey results

Statement	Agreement (%)		P value
	Pre	Post	
Rate your perception of how ready you are to be an evaluator [#]	30.8	92.3	<0.001*
I have the knowledge to be an effective peer review evaluator	53.8	92.3	0.073
I have adequate feedback skills to successfully undertake peer review in the workplace	46.2	84.6	0.097
I have the appropriate communication skills to successfully undertake peer review in the workplace	69.2	100	0.096
I understand how peer review may be applied to improve professional practice	61.5	100	0.039*
I am confident in performing peer review to support my colleagues	23.1	100	<0.001*
I understand the different learning styles 'learners' may have and how that may impact peer review	53.8	92.3	0.073
I understand the steps involved in the peer review process	23.1	100	<0.001*
I am confident in using the Foundation Level Competency Framework as a peer review tool	53.8	92.3	0.073
I am confident in using the Mini-CEX framework as a peer review tool	30.8	84.6	0.005*
I think that peer review will help provide an effective structure for the professional development of pharmacists	100	100	n/a
I understand how peer review might help pharmacists deliver better patient care	84.6	100	0.48
I am motivated to conduct peer review evaluations in the workplace	84.6	100	0.48
I feel confident to answer questions from peers regarding the peer review process (including peer review tools)	30.8	100	<0.001*

* = $p < 0.05$

[#] Statement was assessed using a five point Likert scale. All other statements used a four point Likert scale. Scores of ≥ 3 demonstrated agreement.

Discussion

Establishment of an effective peer review programme requires provision of essential training of staff involved in the implementation of the programme. We have shown that a three day workshop may make a positive contribution to such training.

As a quality assurance process and self-evaluation exercise, the workshop facilitator sought to assess participant perceptions regarding the usefulness of the training methods. This was achieved by the collection of participant feedback using a structured survey. The survey results demonstrate that participation and completion of the workshop enabled attendees to significantly improve in their self-reported confidence, knowledge and skills in a number of areas relating to peer review processes. This illustrates that the presentation skills and varied teaching methods used by the facilitator along with the content included in the workshop were effective at communicating the knowledge and skills necessary to be able to conduct peer review in the workplace. Of particular note, attendees responded with a significant increase in confidence in their ability to answer questions from peers regarding the peer review process. This increase in self confidence is critical as with any practice change there will be anxiety and uncertainty amongst all levels of staff. As such, the ability of the evaluators to alleviate this anxiety and clearly explain the processes and goals of the programme will be essential in ensuring the success of the change. Critical to the consolidation of the newly acquired skills is to practise these skills as soon as practical in the workplace.

A limitation of this study is that the results are reflective of feedback obtained immediately after completion of the training, and are therefore not reflective of any sustained improvement in knowledge or skills. This is a limitation of the study and the results would be validated by conducting a repeat survey of attendees in the future to identify whether the self-perceived improvements were maintained.

The results demonstrate that the workshop effectively conveyed the concept of peer review, building on previous work in the region (Rutter, 2012). Whilst a small sample size, feedback from this workshop demonstrates that small-group training can be influential in changing perceptions regarding the process of peer review and its application to professional development. Further evaluation would be warranted in the future to investigate the success of the programme and to identify future training needs.

The workshop trained attendees in the process and associated tools regarding peer review. Potentially the demonstrated attitudinal improvements in confidence are a more important achievement with respect to the ongoing success of the professional development programme. It is recognised that these results represent short term, self-reported improvements and as such periodic surveying would be worthwhile to assess whether these improvements have been maintained.

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