Interprofessional bedside teaching: setting up a novel teaching programme

ABSTRACT

Background: An ageing population and health-care advances mean that patients have increasingly complex medical health and social needs, requiring a multidisciplinary team. However, despite working as an interprofessional team, team members still largely train in professional silos. Furthermore health-care professionals report a poor understanding of the skills of colleagues from different professions. This article describes the set up and outcomes of a novel interprofessional bedside teaching programme.

Methods: An in-centre interprofessional teacher training course was established to facilitate interprofessional bedside teaching, along with supported ward-based sessions to apply the skills.

Results: Three in-centre courses and five workplace sessions have run, with forty-five and twenty-eight interprofessional participants respectively. Statistically significant improvements in confidence facilitating interprofessional teaching were seen, with participants more likely to teach at the bedside and involve the multidisciplinary team.

Conclusions: This article shows evidence of a teaching programme which improves the confidence of the multidisciplinary team in facilitating interprofessional bedside teaching.

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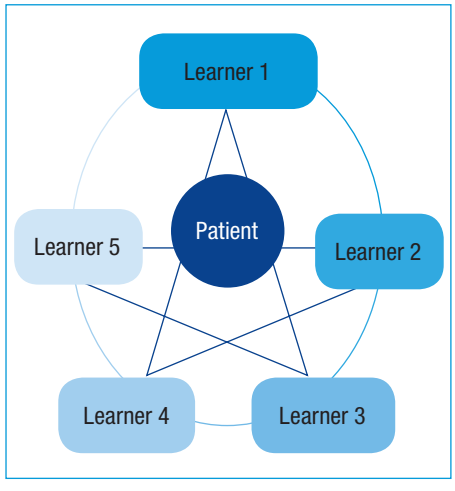
Bedside teaching is a well-established method of teaching, dating back from the time of Hippocrates, the father of bedside medicine, who advocated putting the patient rather than the disease at the centre of the learning (Porter, 1997). William Osler, an eminent clinical teacher of modern medicine, stated 'no teaching should be done without a patient for text, and the best is that taught by the patient himself' (Bean, 1954).

Bedside teaching can provide relevant contextualized learning which focuses on the patient, giving learners an opportunity to develop their clinical reasoning (Bowen, 2006). Patients themselves may benefit through improved therapeutic relationships and receiving education about their condition (Aldeen and Gisondi, 2006). Despite this being an ancient method of teaching, it is well suited to learning to manage patients with multiple complex health and social needs, as the focus is on the patient and not on one disease in isolation. To meet the needs of increasingly more complex patients, health-care professionals have become more specialized. However, with the increasing number of health-care needs of individual patients, one specialist is rarely able to manage these requirements and this necessitates an interprofessional team approach (Mariano, 1989). Despite needing to work together health-care professionals are still largely being trained in their professional silos (Hall and Weaver, 2001). Health-care professionals report a limited understanding of what other professionals in the multidisciplinary team do, and the resources available to them, leading to under-referral or inappropriate referrals (O'Daniel and Rosenstein, 2008).

The authors propose a novel teaching programme, interprofessional bedside teaching, to facilitate patient-centred holistic learning and provide a forum where individuals can learn about the skill sets of other members of the multidisciplinary team. This is based on a 'patient-centred learning model' (*Figure 1*) where the patient is at the centre of the learning. Information is shared in a multidirectional way, from patient to health-care staff, health-care staff to patient and between the different interprofessional learners. This encourages participants to share their knowledge within the learning circle. As the focus is the patient, the learning is relevant to all.

This programme was designed to increase the confidence of the interprofessional team in facilitating bedside teaching. Ramani (2003) found that those who feel more confident teaching are more likely to teach.

Figure 1. Patient-centred learning model.



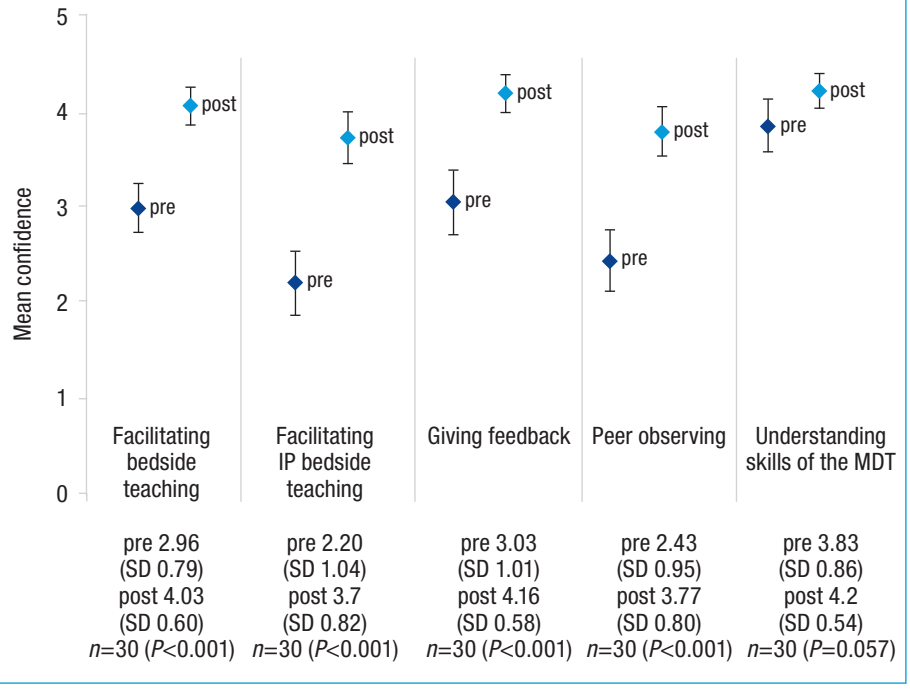
Methods

A half-day interactive workshop for the interprofessional team entitled 'Teach the bedside teachers' was developed and run by an interprofessional educational faculty at King's College Hospital postgraduate department of medical education. The course was based on sound pedagogic principles and the material reviewed by directors of the stakeholder groups; medical education director, director of nursing, of pharmacy, the chief of allied therapies and a patient governor. The course covered the Cox structure for a bedside session, which breaks down the session into three phases: before the bedside, at the bedside and after the bedside; facilitating interprofessional teaching, giving feedback using Pendleton's model and peer observation. It concluded with participants facilitating their own interprofessional 'micro-teach'. They received feedback and were peer observed by the learning group. Faculty members then provided overall feedback.

Three courses were run, the first a pilot study. The course was evaluated through anonymous pre- and post-questionnaires using a five-point Likert scale to measure the participant's perceived confidence in facilitating aspects of the interprofessional bedside teaching session. The Wilcoxon signed rank coefficient was used to determine statistical significance. The questionnaire included free text questions: 'What did you like about the course?', 'What did you dislike about the course?' and 'Will the course change your attitude towards clinical teaching?' for qualitative analysis.

Alongside this, regular supported interprofessional bedside teaching sessions have been run on a general medical ward at King's College Hospital. In these sessions, an interprofessional team of learners reviewed a patient with complex health and social needs. The learning has focused on the patient, with a forum created to hear the patient's experience of the illness, and involve the patient in learning discussions. These sessions have been initially facilitated by the educational faculty with participants from the Teach the bedside teacher's course taking an increasingly more active role in facilitating the session. This has provided an opportunity for participants to apply their learning from the in-centre course with educational faculty present to give feedback. Five sessions have taken place and been evaluated using anonymous post-session questionnaires to gather qualitative data.

Figure 2. Mean confidence pre (dark blue) and post (light blue) after 'Teach the bedside teachers' King's College Hospital's interprofessional (IP) teaching course. MDT = multidisciplinary team; SD = standard deviation.



Results

A total of 45 individuals have attended the Teach the bedside teachers interprofessional bedside teachers' course. The first session of 13 individuals was run as a pilot and 32 individuals were involved in the subsequent evaluation. There was a 94% completion rate for questionnaires. The 32 participants included nine (28%) doctors (foundation year to consultant grades), 17 (53%) nurses (junior to nurse specialists), five (16%) allied professional groups (including physiotherapist, occupational therapist and speech and language therapist), and one (3%) pharmacist. Of these 32 individuals, nine (28.4%) had previous teacher training experience, but none had specific bedside or interprofessional teacher training. Those who had former teacher training were delivering more teaching, mean 7.67 bedside teaching sessions a year, compared to those without previous teacher training, mean of 6.54 bedside teaching sessions a year.

Following the course, a highly statistically significant increase was seen in mean confidence facilitating bedside teaching from 2.97 to 4.03 (P<0.001), interprofessional bedside teaching from 2.20 to 3.70 (P<0.001), giving feedback from 3.03 to 4.12 (P<0.001) and peer observing from 2.43 to 3.77 (P<0.001). The perceived benefit of this teaching in understanding the skill sets of colleagues from different professional backgrounds also increased from 3.83 to 4.2 (P=0.057) but this did not reach statistical significance (*Figure 2*).

Quotes drawn from themes from the in-centre post-course questionnaire in response to 'Will this course lead to any changes in the way you teach?' are shown in *Table 1*.

The workplace sessions have involved 28 participants (six doctors, four nurses, eight allied health care professionals and ten pharmacists) over five sessions – 25% of individuals have attended more than one session. Quotes from qualitative analysis 'What did you enjoy about the workplace sessions?' are shown in *Table 1*.

Discussion

This article presents evidence that this teaching programme increases the confidence of the whole interprofessional team to facilitate bedside teaching, interprofessional teaching, giving feedback and peer observation. The authors have not demonstrated that it leads to more bedside teaching occurring. However, from the pre-course questionnaires in this cohort those with previous clinical teaching training were performing more teaching sessions. Participants reported that it would change their teaching practice,

KEY POINTS

- Patients have complex health and social care needs requiring a multidisciplinary team. Despite working together the health-care team largely trains in professional silos.
- This interprofessional bedside teaching programme was established to promote interprofessional team learning, as learning together helps working together.
- The programme consisted of in-centre teacher training course and supported workplace sessions enabling participants of the course to facilitate interprofessional bedside teaching on the ward.
- This programme led to a statistically significant increase in participants' confidence to facilitate interprofessional teaching.
- Participants reported being more likely to teach at the bedside and involve the multidisciplinary team in their teaching following the programme.

Table 1. Quotes taken from qualitative analysis in post course questionnaire

'Will this course lead to any changes in the way you teach?' quotes from in-centre course	'Do more bedside teaching – [it is] good to have a model to structure my teaching'
	'Will involve different specialties and consider how I can make [the teaching] relevant to them'
	'Will encourage peer learning discussions, it's good to hear different perspectives'
	'Will be more confident facilitating a teaching session'
	'I will be more proactive to teach and involve the multidisciplinary team'
'What did you enjoy about the work-based teaching sessions?' quotes from ward-based supported sessions	'Getting to know [about] the roles and priorities of other multidisciplinary team members'
	'Great to hear from the patient, could understand [the] roles of different health-care professionals in the patient's care both in hospital and community'
	'Understanding the wider issue, allows holistic approach'
	'Rare insight to how other members of an multidisciplinary team approach a patient'
	'It was good to see how doctors address concerns and when they would ask a pharmacist for advice'
	'Patient focussed, interactive'

being more likely to choose to teach at the bedside and involve the interprofessional team. The World Health Organization (1988) states that interprofessional learning improves how interprofessional teams work together. McPherson et al (2001) showed that this leads to improved patient outcomes and cost effectiveness in a range of settings from primary care to acute hospital care and rehabilitation, as well as improving staff satisfaction (Curley et al, 1998).

There have been challenges to overcome. Bedside teaching is familiar to doctors, but is less practiced among other health-care professionals. These professionals teach in the presence of a patient, but tend to use a one-on-one apprenticeship style, with the focus being on direct observation of patient management. Careful explanation and reassurance was required to reassure the health-care team that the more traditional physician approach of bedside teaching is generally appreciated by patients who can mutually benefit. Despite this, the interprofessional representation on this programme was high. This was achieved by engaging the leads of the different professions within the health-care team by demonstrating this model and its proposed benefits, who then encouraged their staff to attend.

Running regular ward-based sessions has been more challenging. After consulting all stakeholders, an agreed time, session length and frequency was decided to minimize the impact on clinical duties (Tuesday afternoon fortnightly for 45 minutes). However, despite this, attendance was still poor. The problem arises from low staffing levels alongside high service demands, leaving little perceived time to attend teaching. This tension between operational performance and investment in training is not a challenge unique to this hospital, but is faced by most health-care professions in most acute hospital settings, and requires a trust-wide position statement to be taken.

This programme is in its infancy, yet certain individuals who attended this course and continue to attend the workplace sessions are showing promise in championing their own interprofessional bedside teaching sessions independently.

Conclusions

This article has shown evidence that this novel teaching programme has led to increased confidence among the interprofessional team in facilitating bedside teaching, interprofessional teaching, giving feedback and peer observing. This has the potential to lead to more interprofessional learning sessions taking place, thereby facilitating better interprofessional team working and holistic patient care. **BJHM**

The authors would like to thank Health Education England South London, and patient governor Fungisai Chirochangu. Conflict of interest: none.

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