

A tale of two colleges: do specialist trainees receive adequate hospital-based training?

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Abstract

Background: Both medical and surgical trainees have a dual reliance on their specialist training college and their respective teaching hospitals to maintain standards in teaching and training. Although guidelines are in place for the administration of this teaching, hospital-based teaching has been minimally regulated. A review of trainee satisfaction with current levels of hospital-based training was performed, both to reflect the thoughts of trainees themselves and to highlight specific areas requiring improvement.

Methods: Sixty-four basic specialist trainees (44 surgical [BSTs] and 20 physician [BPTs]) from all of the major Melbourne metropolitan teaching hospitals completed an anonymous survey.

Results: Surgical trainees considered all areas of hospital-based training to be deficient, with overall dissatisfaction significantly greater for BSTs compared with BPTs ($P=0.046$). A requirement for increased hospital-based training was similarly greater for BSTs ($P=0.0072$).

Conclusion: The study confirms the need for a change in the regulation and administration of hospital-based teaching for surgical trainees.

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What is known about the topic?

There has been little study of the satisfaction of medical trainees in regard to hospital-based training.

What does this paper add?

This paper discusses the results of a survey of 64 surgical and medical trainees from all of the major Melbourne teaching hospitals about their satisfaction with hospital-based training. In comparison with the medical trainees, the surgical trainees were significantly less positive about their hospital-based training.

What are the implications for practitioners?

The study confirms the need for a change in the regulation and administration of hospital-based teaching for surgical trainees.

FOR THEIR TEACHING AND TRAINING, specialist medical and surgical trainees have a dual reliance on their specialist training college and their respective teaching hospitals to maintain standards in teaching and training. According to the current president of the Royal Australasian College of Surgeons (RACS), college-based teaching ensures that surgical trainees receive adequate and streamlined “competencies that make up a surgeon” and “the curricula and assessment processes that support it”.¹ Hospital teaching allows the competencies to be implemented into daily work practice. This dual teaching allows for the career advancement of trainees and guides them towards proficient practice in increasingly specialised fields.

The chairman of the Board of Specialist Surgical Training, RACS, recently reflected upon the RACS position to undertake radical changes to its mode of assessment and to improve hospital-based teaching: “The most important change in (post-graduate) training is a curricular change, that of increasing in-training assessment”.² There are guidelines in place for the administration of this

teaching, but there is little regulation and minimal enforcement of these guidelines. The president of the RACS has confirmed the need for change, with the college view that hospital “requirements for training positions are not met”.³ There are varying reasons for this, including a lack of funding and resources, changing patterns and pace of hospital-based care, conflict with the service needs of the hospital workforce and ultimately a lack of clear guidelines for these requirements. The responsibility for implementing guidelines may lie with the training college, higher postgraduate organisations or other bodies, but has not been defined.

The perceived inadequacies in hospital-based training, particularly for surgical trainees, led to the current study, which comprises an analysis of the views of current basic surgical trainees (BSTs) on the adequacy of surgical training from the respective teaching hospital. The training methods analysed included practical and skills courses, teaching courses and seminars, printed or electronic course materials, research opportunities and assessment. Replies from BSTs were then compared with replies from basic physician trainees (BPTs) to identify differences. This analysis is the first of its kind in the literature, and with the hypothesis that specific areas of training are inadequate, this study may highlight the areas where improved surgical training can be rapidly implemented.

Methods

A survey was compiled in discussion with BSTs, hospital teaching supervisors and surgeons and administrators at the RACS. Participants were recruited from seven major Melbourne metropolitan teaching hospitals and comprised 64 participants, of whom 44 were current BSTs (36 males and 8 females). Thirty-one of the recruited BSTs were in their first year of training and 13 were in their second year. Twenty BPTs (12 males and eight females) were also recruited for subsequent comparison. Fifteen of these were first-year trainees and five were second-year trainees. The participants were spread across the hospitals, with

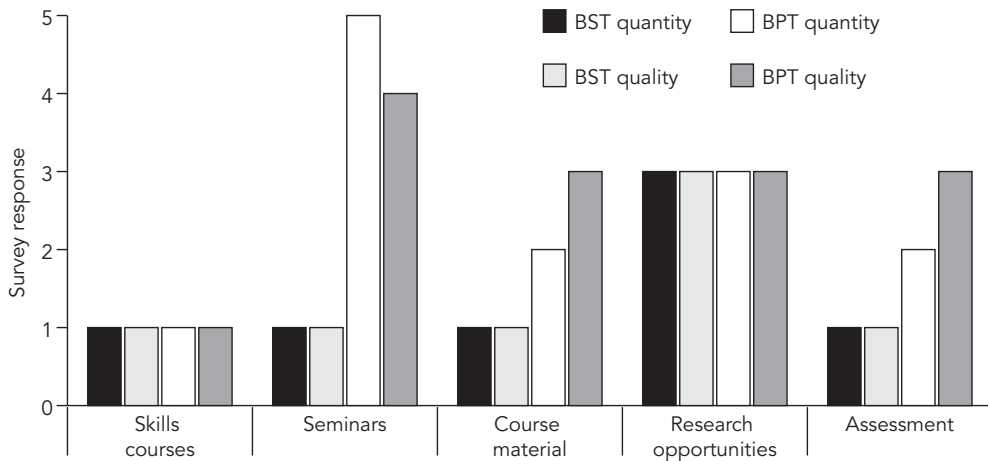
19, 16, nine, nine, five, four and three participants from each hospital. Trainees were recruited through hospital BST supervisors and personal referral. Participation was voluntary, with no training onus to participate and no compensation for participation. Participants were contacted by email, telephone or in person. There was a 60% response rate from all trainees approached to complete the survey. Only fully completed surveys were included in the results.

The survey was administered either in written format or electronically via email. Both the electronic and handwritten responses were blinded for analysis with regard to responder identity.

The survey comprised two main sections: the first compiling detailed participant demographics and the second analysing views on hospital-based teaching and training. The latter contained five main areas analysing trainee satisfaction: practical and skills courses, teaching courses and seminars, printed or electronic course materials, research opportunities and assessment. Responses were of two varieties. Type 1 questions comprised a numerical scale, with answers ranging from one to five, with five being the highest or most favourable response. Type 2 questions were yes/no questions, answered by ticking the relevant box, and were assigned a value of one for yes and zero for no for the collation of results. Each of these areas were assessed for quantity of teaching, quality of teaching, overall satisfaction and whether more teaching was required. Overall satisfaction was calculated by averaging the sum of all responses within a subgroup. The same survey was administered to both the BST and BPT subgroups.

The primary outcome for the study was a requirement for more hospital-based teaching, assessed by the “more required” questions. Data were collated and analysed descriptively. For comparative statistics, BSTs were compared with BPTs for each of the five areas analysed by paired *t* test. A *P* value of less than 0.05 was considered to indicate statistical significance. The comparison for each of the five areas was achieved using the average scores for quantity, quality, overall

I Surgical and physician trainee responses to the quantity and quality of hospital-based training



BPT = basic physician trainee. BST = basic surgical trainee. Scale: 1–5, where 1 is the lowest or least favourable response and 5 is the highest or most favourable response.

satisfaction and the inverse of more required (ie, a score of one was given a value of five).

Results

Sixty-four participants (44 BSTs and 20 BPTs) completed the survey. There was a majority of male responders (75%), particularly from the surgical trainee participants, which was an appropriate reflection of the general demographics of trainees. The majority of BST participants were in their first year of training and in their second postgraduate year.

Results, as averaged over all responders, showed that BSTs felt that they received an inadequate quantity of overall hospital-based education, with particularly strong responses to skills courses, seminars and course material. On average the BSTs gave a low score of one to quantity and quality of skills courses, seminars and course materials. BSTs also felt that they received inadequate ongoing assessment (Box 1).

In comparison, BPTs considered the quantity and quality of didactic teaching satisfactory (average satisfaction was four for seminars and three for course materials). However, even though BPTs

felt that they received few skills courses (average satisfaction was three for skills courses) and ongoing assessment, they felt that this was adequate for their training (Box 2 and Box 3).

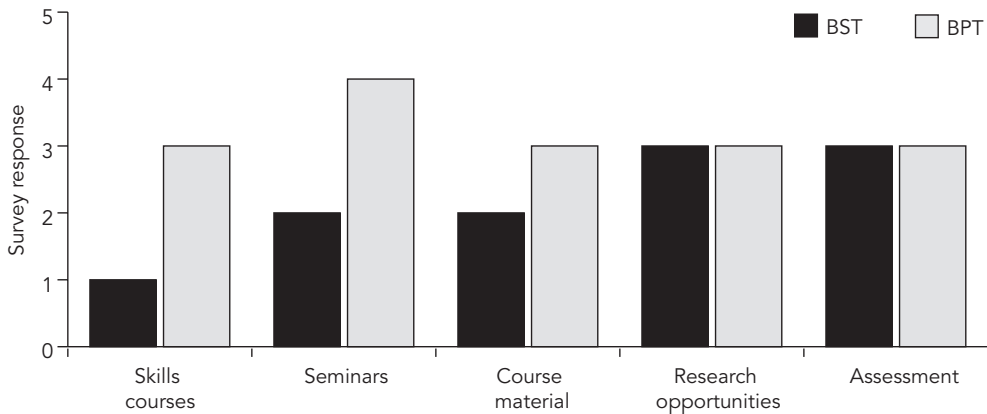
The comparison of BSTs with BPTs reflected an overall dissatisfaction of BSTs with the quantity and quality of hospital-based teaching considerably in excess of the experience of BPTs. BSTs were significantly more dissatisfied with hospital-based seminars ($P = 0.0012$) and course materials ($P = 0.017$), with a strong trend also in skills courses ($P = 0.15$) (Box 2). There was no significant difference in assessment or research opportunities.

Overall satisfaction was significantly less for BSTs compared with BPTs ($P = 0.046$). The primary outcome measure, whether more hospital-based teaching is required, revealed a significantly greater requirement perceived by BSTs ($P = 0.0072$) (Box 3).

Discussion

Basic surgical trainees depend on hospital-based teaching as a major component of their teaching before entrance into advanced surgical training.

2 Surgical and physician trainee overall satisfaction with hospital-based training



BPT = basic physician trainee. BST = basic surgical trainee. Scale: 1–5, where 1 is the lowest or least favourable response and 5 is the highest or most favourable response.

The RACS has a structured basic surgical training teaching program, which includes skills courses and seminars, course material, thorough assessment and the promotion of research. Courses are restricted in quantity and frequency to only three courses to be completed by each trainee over the duration of their basic surgical training. These are the Early Management of Severe Trauma, Care of the Critically Ill Surgical Patient, and Basic Surgical Skills courses. Course material is supplied via online learning modules, and assessment comprises in-training assessment and formal examination. Similarly, the Royal Australasian College of Physicians (RACP) has a structured teaching program. While this provides trainees with many lectures, there are no skills or practical courses. As such, both colleges rely heavily on hospitals to contribute to the training of their trainees.

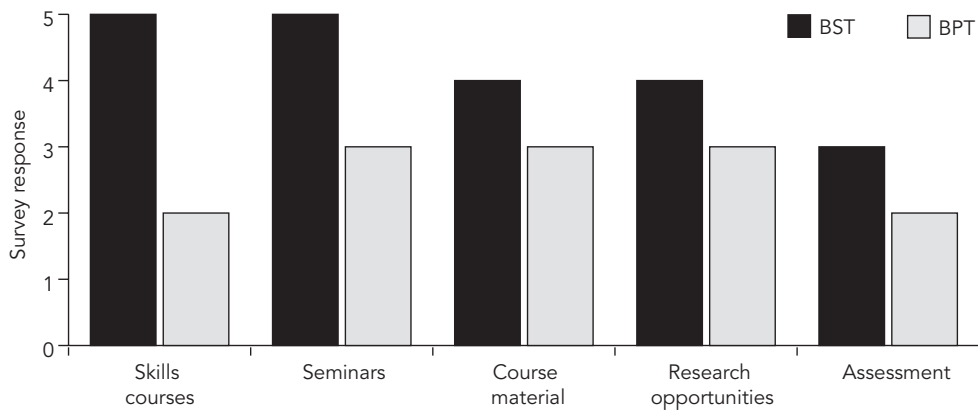
There are notable differences between the two colleges, in that the RACS selects trainees on a merit basis with a national curriculum and structured courses and course material, while the RACP delivers training to hospital-selected trainees with greater hospital-based teaching. The RACS has not enforced hospital-based training, and hospitals allow access to college teaching activities but have not supplemented this teaching in-hospital. Despite the discrepancies

between hospital-based training for these two groups, there is a clear directive from both colleges for hospitals to contribute extensively to training.^{3,4}

The lay media, as well as surgical journals such as the *Australian and New Zealand Journal of Surgery* and other RACS publications, have increasingly discussed the adequacy of training for BSTs.^{4,5,6} The Australian Medical Workforce Advisory Committee report in 2002 called for “changes in postgraduate education and training” and “changes in hospital practice”.^{7,8} However, there has been little change to the specialist training of junior doctors for many years. There is ample literature focused on the hospital-based teaching of undergraduate medical students, however a review of the literature showed no formal account of hospital-based teaching for postgraduate doctors.

This study comprised a descriptive component, which has established a global understanding of the views of current BSTs on their training at hospital level, and a comparative component which compared these views with those of current BPTs. The results of all fields clearly suggest the overall dissatisfaction of BSTs with the adequacy of their training at hospital level, and more specifically the need for an increased quantity and

3 Surgical and physician trainee opinions as to whether more hospital-based training is required



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frequency of courses and seminars. There is a shortfall across many facets of hospital teaching, including medical theory, practical skills and patient interaction.

The broad discontent with training was echoed in dissatisfaction with hospital-based assessment, with trainees dissatisfied with both the quantity and quality of assessment. Surprisingly, there was not a clear call for an increased requirement for assessment. This may be explained by the already high requirements for assessment by the colleges.

When reviewed in contrast to the responses of BPTs, the results were disproportionately unsatisfactory. This was notably not the case for research opportunities, for which there were satisfactory responses by trainees from both colleges. The overall contrast reflected a discontent with training that was appreciably more pronounced for BSTs.

The United Kingdom has established guidelines for hospital-based teaching, instituting a universal curriculum for all postgraduate trainees. This includes experiential training (ward-based teaching, debriefing, supervised consultations and skills review), group learning opportunities, one-on-one teaching, and the provision of time for external courses as well as personal study.⁹

This holistic approach to surgical training is certainly aimed at correcting some of the deficiencies of college-only training. However, with the workload of Australasian junior surgical trainees known to reach 120 hours per week, and an increasing burden on the health sector, there is scepticism that this hospital-based training is easily administered.¹⁰ There have been no obvious solutions as to how overseas methods can be implemented in Australia.

Despite these challenges, our results suggest that hospital-based teaching does require greater monitoring and enforcement. Without greater involvement by the respective training colleges, there will remain inadequacies in specialist training, and ongoing discontent by trainees themselves. Indeed our results confirm the perceived shortcomings highlighted by the members of the RACS that prompted this study.

Conclusion

Surgical trainees have a dual reliance on the RACS and on the teaching hospital to maintain standards for their training. Although guidelines are in place for the administration of this teaching, hospital-based teaching has been minimally regu-

lated. This review of trainee satisfaction with current levels of hospital-based training, by 64 current specialist trainees, demonstrates the inadequacies in both the quantity and quality of this teaching. A change to the regulation and administration of hospital-based teaching for surgical trainees is required.

Competing interests

The authors declare that they have no competing interests.

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