Medical Education

The Educational Value Of Post-Take Ward Rounds For Senior Trainees

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ABSTRACT

Background: The educational value of post-take ward rounds (PTWRs) is an under-researched area of postgraduate medical education.

Objective: We investigated perceptions of this activity amongst higher specialty trainees.

Methods: The project was conducted in a large district general hospital in London, UK. Quantitative and qualitative data were collected to establish opinions of the PTWR amongst higher specialty trainees in medicine. Eighteen senior trainees were eligible to participate. Of these, 14 (78%) responded to our questionnaire and 4 were selected by purposive sampling to participate in semi-structured interviews.

Results: Most trainees felt that the focus of PTWRs was service provision with little time devoted to teaching (79% of respondents) and that feedback was rarely provided (71% of respondents). Trainees commented on learning opportunities available on PTWRs, as well as consultant behaviour they considered valuable. The main barriers to teaching and learning were time pressures, workload, interruptions, management (rather than patient assessment) focus, lack of follow-up of cases and feedback. The data included useful suggestions for improving the educational value of PTWRs.

Conclusions: PTWRs are currently a wasted educational opportunity. Radical change to organisation and practice will be necessary to address this. There will be resource implications.

Keywords: Ward round, post-take ward round, medical education

INTRODUCTION

The ward round (WR) has been compared with "walking a tightrope".¹ The medical teacher must balance service demands with the educational needs of learners and often has to teach multiple learners, at different stages of training, who have different learning objectives. The rotational nature of training and the shift-work pattern of learners add to the complexity of this educational activity.²

The PTWR is a specific type of WR, in which a consultant reviews the patients admitted to hospital as acute medical emergencies within 24 hours of admission. The patients have usually been initially assessed by a trainee who would normally present the case to the consultant during the PTWR.³ The traditional role of the PTWR is to provide both teaching in acute medicine and a review of patients.⁴

There is limited literature available in relation to the educational value of ward rounds in general and a very small number of studies have focused specifically on the role of the PTWR. This is surprising, considering that PTWRs are a central component of registrars' training in General Internal Medicine (GIM). The present study investigated higher specialty trainees' (HST) perceptions of the educational value of PTWRs with a specific focus on the characteristics of PTWRs, the available learning opportunities and barriers to effective learning, as well as suggestions for improving the quality of teaching and learning on PTWRs.

METHODS

The setting for this study was a large district general hospital in London, UK. The participants were medical HSTs involved in GIM on-calls and PTWRs. The target population for this study included 18 medical HSTs, of whom 7 were male and 11 were female. Trainees were from the following specialties: acute medicine, cardiology, endocrinology, gastroenterology, geriatrics and respiratory medicine.

The study was divided into two phases: a questionnaire phase and an interview phase.

A previously piloted questionnaire (Appendix 1) was

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	Never	On few PTWRs	On some PTWRs	On most PTWRs	On every PTWR			
I have opportunities to ask questions	2	3		7	2			
The consultant makes changes in my initial differential diagnosis	2	10	1		1			
The consultant makes changes in my management plan	1	8	4		1			
There is some time devoted to teaching (formal or informal)	7	4	2		1			
I learn something new	4	4	5		1			
The consultant asks me questions	4	4	3	1	2			
I receive feedback on my performance	7	3	2	1	1			

TABLE 1:Characteristics of PTWRs

distributed to all medical HSTs. The questionnaire was designed to cover a wide range of topics relating to teaching and learning on PTWRs and was divided into five parts: demographic data, characteristics of PTWRs, learning opportunities, suggestions for improvement and factors that may limit learning opportunities on PTWRs. The questionnaire design allowed the collection of both quantitative and qualitative data. The questionnaire was distributed several months after the start of the academic year and as a result trainees had been exposed to PTWRs for a sufficient period of time. The questionnaire was anonymous and participation was voluntary. Once the questionnaire collection had been completed, data were coded and interesting themes that emerged from the questionnaire data were further explored during the interview phase.

A purposively selected sample of 4 trainees was used for the interview phase. Purposive sampling allowed the selection of trainees from different specialties and different grades, thus making the sample more representative, but the risk of selection bias was also acknowledged.⁵ The trainees who participated in the interviews were from different levels of training (ST3-ST6) and different specialties (gastroenterology, endocrinology, respiratory medicine. Two trainees were from gastroenterology, which was the specialty with the highest number of HST in the hospital, thus requiring a proportionately larger representation). The interviews covered four main themes: feedback, team structure, time and quality issues and suggestions for improvement (**Appendix 2**). The interviews were audiotaped and transcribed.

Thematic analysis was used to organise qualitative data and two authors with experience in medical education research (FL, HEM) reviewed the interview transcripts and created codes and overarching themes.

The study protocol was reviewed by the University College London (UCL) Ethics Screening Service and did not require formal ethical approval by the UCL Research Ethics Committee.

RESULTS

A. Questionnaire data

Demographic data

A total of 14 out of 18 higher specialty trainees returned the questionnaire (response rate 78%). There was a balanced representation in terms of sex and speciality.

Characteristics of PTWRs

Most responders (n=11) participated in one PTWR per week on average, with a few (n=2) participating in two PTWRs per week and one on a daily basis.

Many trainees reported that they had opportunities to ask questions during the PTWR. However, many stated that consultants rarely asked them questions and often they learned nothing new after the PTWR. The majority of the responders felt that changes were rarely made in their diagnosis and management plan, that little time was devoted to teaching (either formal or informal) and that they rarely received feedback on their performance (**Table 1**).

Trainees also mentioned that the focus of the PTWR was on service provision rather than education and that there was often lack of feedback. In addition, trainees mentioned that consultants were probably interested in teaching but it was often difficult to create personal relationships with acute medical consultants. For example, one trainee wrote: 'Although it seems consultants no longer care about junior doctors (as service is now so consultant-delivered that they see junior doctors as just there to bring up the results on the computer screen and find the patient and notes) deep down I think they still feel a sense that teaching is an inherent responsibility for a senior doctor.'

Learning opportunities

In relation to clinical skills, most responders felt that PTWRs were not very useful in conveying medical knowledge or learning history taking or physical examination. However, they were valuable in learning how to make difficult decisions, such as those about escalation of care or resuscitation (**Table 2**).

Trainees also reported that PTWRs were usually busy and quick, which limited learning opportunities. For example, one trainee wrote: '*Post-take ward-rounds are about service provision due to the high volume of patients, not teaching*'.

In addition, they felt that PTWRs were more valuable when led by a specialty consultant rather than a general physician. Responders mentioned that PTWRs were also useful in the development of non-clinical skills, such as communication, time management and leadership skills.

Most trainees felt that valuable consultant behaviours on PTWRs included the consultant explaining his/her thought processes, giving feedback and his/her approach towards patients and staff (role modeling). Some trainees also valued other behaviours, such as the consultant's experience and ability to advise in difficult situations. They appreciated a constructive challenging approach from their consultants.

Factors that limit trainees' learning opportunities

Most trainees agreed that there were several factors limiting learning opportunities, including time pressures, large volume of patients, frequent interruptions, lack of follow-up of cases, the fact that their main duty was the organisation and management of the acute take and that they often did not have the chance to present their patients on the PTWR and receive feedback.

Suggestions for improvement

Trainees made several suggestions for improving the quality of teaching and their learning opportunities on PTWRs, which included changes in trainee (active participation, setting of learning objectives/goals, reflection on performance) and consultant behaviours (consideration of teaching role, development of a personal relationship with trainees, provision of feedback to trainees and explanation of rationale for clinical decisions), as well as structural changes (protected time for PTWRs, discussion of interesting cases at Grand Round meetings, protected time for completion of workplacebased assessments [WPBAs]).

B. Interview data

Feedback

Trainees mentioned that feedback was generally non-specific and variable depending on the type of the shift (e.g. day oncall or night shift) and the role of the trainee in the acute take.

For example, trainee 1 mentioned:

"Other than perhaps in workplace-based assessments, I would not say that you get specific feedback really. Perhaps there may be a change in the management plan and indirectly that is feedback of some sort"

Trainees also mentioned that the quality of feedback varied depending on the background of the consultant (locum vs. permanent, general physician vs. specialty consultant) and their relationship with trainees.

For instance, trainee 2 stated:

"I think the teaching is better when you have a specialty consultant, because they are more thorough...and they have more expertise. The acute physicians are very good in the general management of acutely unwell patients, but do not get into the details of the management of each patient"

II. Team structure

Trainees agreed that there was lack of a "firm structure" on the PTWR, as they were on-call with a different set of doctors each time and this had an impact on their learning. They felt more comfortable with permanent consultants rather than locums and with specialty consultants instead of general physicians. They reported that generally there was little interaction with consultants.

III. Time issues, quality and value of PTWRs

Trainees stated that teaching and learning on PTWRs was often compromised due to time pressures and that they learnt more from consultants who spent more time to review each case.

For example, trainee 1 stated:

"Some consultants are very quick and some will take a very

Learning opportunities								
Clinical skills	1 (not beneficial)	2	3	4 (extremely beneficial)				
Conveying medical knowledge	4	5	2	3				
History taking	5	4	3	2				
Physical examination	6	5	1	2				
Diagnostic investigations	3	4	5	2				
Patient management	3	4	3	4				
Difficult decision making	3	3	3	5				

TABLE 2:

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long time, look at every investigation and they are probably the ones where there is more opportunity to learn"

Trainees also mentioned there was rarely change in their management, but sometimes the consultant would make a more complete and long-term plan. Trainees felt that another issue affecting the educational value of PTWRs was the fact that the PTWR was often done in the absence of the clerking doctors.

For instance, trainee 2 mentioned:

"Certainly after the night take, the consultant will come at 8am and the handover is at 8:45am, so then they post-take your patient without you having presented them; so unless you go back, you won't know what they thought and you wouldn't have got feedback"

IV. Suggestions for improvement

Trainees made several suggestions for improving the quality of teaching and learning on PTWRs, which were divided into 3 categories:

a. Actions that trainees should take

Trainees reported that they should become more proactive by following-up their cases, asking for feedback, participating actively and improving the efficiency of the team on the PTWR, so that consultants have more time to teach.

b. Actions that consultants should take

Trainees agreed that consultants should devote more time to teaching and feedback by discussing selected cases with trainees, organising teaching sessions and having post-round briefings with trainees.

c. Actions that institutions should take

Trainees reported that changes should be made to the on-call rota, in order to preserve a firm team structure with the same set of doctors and ideally consultants being on-call together. They also suggested that staffing levels should be improved to reduce time constraints due to the high volume of workload and allow more time for teaching. Specialty-specific teaching in organised multidisciplinary meetings, such as Grand Rounds, was also felt to be useful.

DISCUSSION

Our findings suggest that although medical registrars are exposed to a busy clinical environment with potentially many opportunities for teaching and learning, it is often difficult to make appropriate use of these experiences due to several limiting factors. Other studies have also shown that trainees considered WRs to be predominantly service orientated with little time devoted to teaching. ^{6,7}Chaponda et al (2009) conducted an audit to assess the educational value of PTWRs and concluded that, although National Health System (NHS) targets were met, junior doctors' education was compromised with the introduction of the European Working Time Directive (EWTD) and Modernising Medical Careers (MMC).⁴ A number of factors which are undermining teaching and learning in the workplace have been identified in both this and previous studies⁶⁻⁸, including time pressures, large number of patients, changes in team structure, interruptions, lack of interest from seniors and lack of organisation. Interestingly, our study also showed that lack of follow-up of cases seen on PTWRs is perceived as one of the most important factors limiting learning opportunities. Trainees tend to perform the initial assessment and management of patients, but do not usually follow-up their progress. This demonstrates that trainees need to become more active learners, take ownership of their own learning and make an effort to follow up their cases, in order to maximize learning opportunities on PTWRs.

Our study suggested that the quality of PTWR teaching and learning could be improved with changes in current practice. Active trainee participation on the rounds was highlighted as one of the key factors that could have a positive impact. This is in keeping with the findings of a previous study which showed that trainees who were uninvolved failed to benefit from many learning opportunities available on PTWRs, whereas those who were participating more actively by asking questions and presenting patients were more likely to develop their skills and attitudes.³ Another suggestion made by HSTs in our study was that consultants should devote more time to teaching and feedback, which has also been proposed by other authors^{6,7}, but often there is a lack of interaction between trainees and consultants. Dewhurst (2010) mentioned that there are several explanations as to why consultants do not ask trainees questions, including not wishing to embarrass them, avoiding alarming patients by discussing other potential diagnoses, time pressures, lack of interest in teaching and trainees not being available for the entire duration of the WR.³ Finally, changes involving the management or the hospitals have not been emphasised in the previous literature, which seems to focus more on the role of teachers and learners. Yet, it appears reasonable that improvements in the quality of teaching and learning on PTWRs would necessitate changes in the broader context in which this educational activity takes place. Trainees felt that changes in the on-call rota should be made, in order to follow a partnership system, in which the same team of doctors are on-call. This would allow more effective learning through the development of good personal relationships and teamworking. In addition, improving staffing levels would allow more space and time for interaction between teachers and learners. Adequate staffing levels are not often considered in terms of their impact on education and often on-call teams operate under pressure with the minimum number of doctors needed to provide the necessary service. This in turn leads to time pressures and high volume of workload, which often has a direct negative impact on teaching and learning on PTWRs.

LIMITATIONS

This study has several limitations. Firstly, it was conducted in a single centre, which is a busy district general hospital in London. Secondly, there was no triangulation of the findings with the consultants. It would have been interesting to identify consultant opinions regarding the educational value of PTWRs and what the issues or difficulties are from a teacher perspective. Thirdly, the primary researcher was a medical higher specialty trainee in the hospital and this could have introduced bias in the trainee responses. However, every effort was made to maintain trainee anonymity and create a confidential environment during the interview phase, in the hope that trainees would feel at ease and make unbiased comments. Finally, the interview phase included a relatively small number of participants. However, the researcher used purposive sampling, so that trainees of different levels and specialties could be included, in order to make the sample more representative.

CONCLUSION

PTWRs are currently an underused area of postgraduate medical education and many available learning opportunities are wasted. Medical teachers and learners, as well as institutions and management, should make efforts to alter current practices, in order to improve the educational value of training in acute medicine. This will result in a more highly trained and competent physician workforce. Appendices 1 and 2 can be obtained from the corresponding author.

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