

Structuring ward rounds for learning: can opportunities be created?

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SUMMARY

This paper explores the ways in which ward rounds can be conducted to maximize educational opportunities, as part of a project to improve the effectiveness of on-the-job training (OJT) for hospital doctors. Ninety ward rounds taken by 24 trainers in the Anglia region were observed. Each observation produced a note of the ward round's structure and routines and of the contributions made to it by trainers and trainees. Teaching was a feature of all ward rounds and different types of round were valued for different reasons. A range of ward round structures was observed and, within each, a range of routines for conducting the round. Ward round structures fell into four categories, with almost three-quarters of trainers making no use of either pre- or post-ward round meetings. Where such meetings took place, however, opportunities for OJT were created and, in some cases, optimized through routines to encourage trainee contributions. Discussion time away from patients structured into ward rounds enabled trainers and trainees to take advantage of many opportunities to learn from service. Although unplanned and unsystematic opportunities for OJT do arise, far more reliable are those created through systematic planning and preparation. Trainers have choices to make about how they conduct ward rounds and by choosing to make use of pre- and/or post-ward round sessions, valuable opportunities for OJT can be created.

Keywords

Consultation; *education, medical, undergraduate; England; hospital medical staff, *education; patients' rooms; teaching, *methods

INTRODUCTION

The combination of the Calman reforms (Department of Health 1993) and New Deal (National Health Service Medical Executive 1994) has had a significant impact on the time available to train junior doctors. One estimate suggests that, for surgeons, the time available to train has been reduced by almost two-thirds, from 13 years at over 100 h per week, to 8 years at 56 h per week (Bulstrode & Hunt 1997). Providing training to the same, or to more demanding, levels over a considerably shorter period of time represents a significant challenge.

This challenge exists in a climate of rising work intensity levels (Bulstrode & Hunt 1997) and ever-increasing demands by patients, purchasers and managers (Royal College of Physicians 1996), which has resulted in an 'increase in the conflict between service provision, experience and training' (Bulstrode & Holsgrove 1996). Reducing the tension between these demands requires them to build upon, rather than compete with, one another. 'Service work must complement training rather than interfere with it' (Committee of Postgraduate Medical Deans 1995) and theoretical teaching must be integrated with practical work (Calman 1993).

For trainers, the effective integration of service, experience and training is essential if training is to be improved with no significant impact upon the valuable resource of time. For trainees, effective integration is vital if they are to maximize the learning opportunities available to them and if they are to learn as much as possible from service. Such integration is the art of fusional on-the-job training (OJT) (Hargreaves *et al.* 1997).

This paper reports on some of the findings of a research and development project to improve the effectiveness of OJT for hospital doctors. In particular, it focuses on the ways in which ward rounds in medical specialties are structured and conducted and the implications of the range and diversity of practices for the development of OJT on ward rounds.

BACKGROUND

Informal training acquired through service is an important part of a junior doctor's training. In a pilot survey of senior house officers (SHOs) in four hospitals,

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nearly three-quarters of respondents said that teaching and learning arose mainly in informal ways (Booth *et al.* 1995). With regard to ward rounds, Grant *et al.* (1989) report that of the 608 doctors they surveyed, 58% of SHOs and 84% of consultants regarded the consultant-led ward round as a learning method upon which most SHOs rely. Between 41% and 51% also regarded ward round teaching with a senior registrar or registrar as a learning method upon which they rely most.

The reliance placed upon ward rounds as settings for learning (also noted in the United States by Weinholtz & Edwards (1992) in their manual of teaching ward rounds) render them important in the strategy to improve the effectiveness of learning through service. Elliot & Hickam (1993) note of the UK that 'the structure of medical ward rounds reflects tradition, rather than experimentation with the impact of different structures on educational and patient care objectives'. They conclude that there is a need for new educational formats and teacher development programmes.

New ward round formats serving educational purposes require, as a first step, an understanding of the ways that educational opportunities arise from the various ward round structures and routines. It is this understanding to which this paper seeks to contribute.

METHODS

Ward rounds taken by trainers in three medical specialties (general medicine, care of the elderly, paediatrics/special care baby units) in four hospitals in the Anglia region were observed between February 1995 and June 1996. Twenty-four trainers (two-thirds of consultant grade, one-third of specialist registrar grade (SpR)) were observed on a total of 90 ward rounds. Rounds were attended by registrars, SHOs, house officers (HOs) and, in some cases, medical students. They took place either during routine service work or during or immediately after a period on-take.

An observational note of each ward round was taken, including:

- how each was structured;
- the routines employed, and
- the contributions made by trainers and trainees.

Follow-up open questions were asked where possible to clarify understanding about the event witnessed.

On the basis of the observational notes ward rounds were categorized according to their structures. Examples of ward round routines and of trainer and trainee perceptions of rounds were extracted from the notes, from which patterns and themes were identified.

RESULTS AND DISCUSSION

The traditional distinction between teaching and business rounds was not apparent. Trainers and trainees regarded teaching as a feature of all rounds, whether led by a consultant or a fellow trainee and whether the round was routine or taking place during, or after, a period on-take. Teaching was therefore not confined to 'teaching rounds', but also to 'business rounds'. Indeed, rounds labelled as 'teaching rounds' tended not to feature prominently, as they were more likely to be organized for medical students than for junior doctors.

While *all* types of round were regarded as venues for teaching and learning, they were valued for different reasons. In particular, post-take rounds provided opportunities to review diagnostic and management skills with a senior doctor; rounds led by registrars were valued because of their approachability, their closeness in terms of seniority and their high levels of clinical experience and skill; and consultant-led rounds provided direct access to 'fountains of knowledge'. Different types of ward round therefore offer different learning opportunities for trainees.

Ward round structures

Ward rounds were categorized into four types (Hargreaves *et al.* 1997):

(1) ward round only (teaching or business);
(2) pre-ward round meeting followed by the ward round;
(3) ward round followed-up with a post-ward round meeting; and
(4) pre-ward round meeting, ward round, followed-up with a post-ward round meeting.

Of the 24 trainers, more than two-thirds (71%) conducted type 1 rounds only, with two trainers (8%) routinely undertaking type 2 rounds, one (4%) of type 4 rounds and the remaining four (17%) varying their practice between the different types (two making use of types 1 and 2; one making use of types 1 and 3; and another of types 1, 2 and 3). Variations in the structures adopted were by individual trainer preference rather than by specialty. For example, in one specialty, one consultant conducted a pre-ward round meeting routinely, while another made use of a post-ward round meeting.

The pre- and post-ward round meeting

Pre- and post-ward round meetings, where held, differed considerably in their aim, their frequency, the range of staff attending and the routines established for

presenting and discussing cases. For example, in one team a pre-ward round session took place once a week in a seminar room. Its aims included the review of all patients, briefing the team on-call and informing and/or seeking the input of other medical professionals, such as dieticians, community nurses and psychologists. As many specialty trainers and trainees attended as possible and the session generally lasted between 60 and 90 min. Discussion generally followed a pattern:

(1) the SHO presented a brief case history, and described symptoms and treatment given so far;
(2) consultants (usually) added information and discussed outstanding problems and action steps, contributions from nurses and other professionals were requested;
(3) decisions were taken, primarily by consultants, and
(4) the SHO noted decisions in the file and proceeded to the next case.

In contrast, a different team conducted a pre-ward round meeting before *every* round, in the consultant's own office away from the ward. It was attended by doctors only and all patients to be seen on the ward were discussed. The meetings generally followed this pattern:

(1) SHO, registrar (R) or consultant (C) presents patient history and presenting symptoms;
(2) if SHO, R or C asks factual information questions;
(3) all three discuss the case;
(4) C asks SHO and R for opinions;
(5) all discuss possible diagnoses and agree a course of action.

Each session type presented unique opportunities for OJT. For example, in the former the opportunities were perceived to be learning about management from a range of professionals and in the latter the opportunities to learn were created by providing space to offer opinions, seek explanations and ask questions. The examples also reflect a variation in the level of contribution expected from trainees. In the former, trainees took a predominantly passive role of observer and record-keeper and, as a result, learning opportunities tended to be trainer-determined. In the latter, trainees took a more active role, creating opportunities to meet their learning needs.

As with pre-ward round sessions, the structure and practice adopted in post-ward round sessions varied considerably. For example, with one consultant it was very informal, taking place over coffee at the end of the round where trainer and trainees discussed issues which had arisen. Discussions observed were interactive and wide-ranging and, on occasions, lengthy. A consultant in a different specialty and hospital managed a more formal session, attended by nursing staff and social workers. Its aim was to brief other professionals about patients and trainee contributions were limited.

Pre- and post-ward round sessions are thus capable of providing trainees with many opportunities for learning from service. By structuring discussion time into ward rounds away from patients' bedsides, trainees can take advantage of many opportunities to learn from service work. These opportunities can be maximized by structuring sessions in a way that invites trainee participation.

In practice, few trainers make regular use of pre- and/or post-ward round sessions, despite their value for learning. In addition, the diversity of the routines render some sessions more effective for OJT than others.

The ward round

As with pre- and post-ward round sessions, ward rounds were also conducted in different ways. For example, discussions about patients took place either at the bedside or around trolley notes in a corridor, or trainers took decisions with or without seeking the opinions of trainees. Each variation inevitably has implications for OJT.

Where a pre-ward round session took place, there was generally less need for discussion and debate on the ward round itself. As a result, some rounds took a service delivery or a patient-relations focus and were completed in less time, thus compensating for some of the time devoted to the earlier session.

Observations of the various ward round practices suggest that the location and timing of ward round discussions is important in determining the opportunities available for OJT. Formal discussion times structured into ward rounds, although not commonly used, enabled trainers and trainees to build upon more usual opportunistic discussions. For example, in one team, a 10-min period was structured into one ward round each week for trainees to raise any issues from the round they wished to discuss. Trainees willingly shared the responsibility for raising issues. In another team, trainers and trainees introduced a '3-minute round-up', where trainers routinely offered a period of 3 minutes to trainees in which they could raise any issues they wished. By dedicating time to teaching and learning, opportunities were created in an environment controlled by the participants (i.e. in private, out of the hearing of patients and relatives), and thus conducive to learning.

DISCUSSION

Teaching and learning was an implicit part of all ward rounds observed. No teams agreed explicitly among themselves that a particular training focus would be taken, nor were there many rounds in which dedicated time was aside for trainees to raise issues of concern. Teaching was largely opportunistic, arising from discussions about patients where circumstances and time permitted. Where individual enthusiasm did not drive the teaching, there was a danger that the teaching element was squeezed out by service pressures. Although the immediacy of service demands did, on occasions, make such a focus entirely necessary, with the absence of clear teaching and learning objectives and expectations the teaching element was often difficult to sustain.

The variations in ward round structures resulted in considerable variance in the opportunities available for OJT. As the examples demonstrate, both pre- and post-ward round discussions can be used to create opportunities for OJT. By structuring discussion time into ward rounds, in a place out of the hearing of patients and relatives, trainers and trainees can take full advantage of opportunities for:

- full and frank discussion of each patient's condition and circumstances as it affects management;
- questioning by trainers, enabling trainees to offer answers in private without embarrassment;
- open correction of unwise or erroneous answers and suggestions from trainees;
- debating the advantages and disadvantages of various diagnostic and management options;
- analysing the degree of success of treatment and management;
- comparing the current case with similar current or past cases;
- deciding on the next steps in patient management, after discussing the merits of all options;
- discussing what needs to be done in relation to each patient, and
- selecting patients, conditions or topics to form the focus of the teaching and learning on round itself.

Structured discussion time, however, by no means guarantees that trainees' learning needs will be met; decisions must also be made about the way sessions are to be conducted. In the absence of explicit teaching and learning expectations, routines can either create or inhibit opportunities for OJT. By making use of routines which maximize trainee contributions, trainees will be fully cognisant of the opportunities for:

- identifying relevant teaching and learning material (e.g. patients, conditions) at the start of each round to shape the OJT agenda;
- participating in the round fully by offering opinions on patient diagnosis and management;
- asking questions to fill information gaps or correct erroneous thinking;
- contributing to agreement about a course of action; and
- asking for feedback.

CONCLUSIONS

Implications for effective on-the-job training

The wide variations in the structures and practices of ward round delivery have considerable impact upon their value for teaching and learning. In turn, this means that there is considerable scope for development. Although unplanned and unsystematic opportunities for OJT do arise, far more reliable and effective are those opportunities created through systematic planning and preparation.

Trainers have choices to make about how they structure and conduct ward rounds. By choosing to make use of pre- and/or post-ward round sessions, valuable opportunities for OJT can be created. They also enable trainers to teach in explicit and direct ways by, for example, providing immediate feedback where trainees make an error. Discussions of this nature, if conducted in front of patients, may lead to unnecessary concern and to undermining patient confidence in the medical team.

To develop OJT on ward rounds trainers must address not only whether a pre- or post-ward round session would create additional opportunities for on-the-job training, but also how such sessions could be planned and structured and what practices employed to maximize those opportunities.

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