

Learning clinical communication on ward-rounds: An ethnographic case study

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Abstract

Objective: To explore what factors influence student–doctors’ learning of clinical communication on ward-rounds and how such learning can be enhanced.

Methods: Adopting a qualitative ethnographic approach, the author audio recorded and observed 63 bedside episodes within 18 ward-rounds on four different wards over an 8-week period. Nine fourth year student–doctors and four clinicians also participated in semi-structured interviews. The combination of observations, audio-recordings, transcriptions, field notes, and interview data allowed us to produce a detailed description of the case.

Results: Each bedside episode offered opportunities for learning about clinical communication. However, the student–doctors did not always recognise that they were learning about clinical communication, since in this context, they were not being explicitly taught about communication. Student–doctors were rarely invited to participate in the ward-round and clinicians overlooked opportunities for learning. Some student–doctors questioned the educational value of ward-rounds and did not always attend.

Conclusions: Ward-rounds are a rich site for learning clinical communication but opportunities for learning are often overlooked.

Practice implications: By being alert to the power of role modelling and the importance of inclusion and participation, student–doctors’ learning of clinical communication can be enhanced even on busy ward rounds.

Introduction

Student–doctors learn clinical communication in the classroom with simulated patients in a controlled environment that contrasts strikingly with the complex, dynamic, and unpredictable context of clinical practice. Furthermore, they report a tension between their experience of clinical communication in the classroom and ‘real’ communication as practised in clinical settings (Malhotra et al. 2009). This mismatch remains poorly understood. Previous research has shown that learners perceive doctors as powerful role models of clinical communication (Thistlethwaite & Jordan 1999; White et al. 2009; Brown 2010). These studies showed that when students observe role models using clinical communication skills similar to those they learnt about in the classroom, they were enabled to assimilate these into their emerging clinical practice and professional identity. Where different approaches were observed it caused confusion. White has described three different responses to this tension between observed practice and ‘ideal practice’ namely continuing to value patient-centeredness; compromising while in practice but still intending to use the approach in the future; and dismissing the patient-centred approach as unrealistic to clinical practice.

In the UK, student–doctors learn clinical medicine through attachment to hospital medical teams during patient ward-rounds. These key events within the doctors’ routine practice involve accompanying the consultant physician or surgeon and their team progressing from patient to patient, reviewing

Practice points

- The ward-round is a rich opportunity for learning clinical communication.
- Students do not recognise the need to prepare for ward-rounds.
- Patient explanations, patient presentations and note taking are all relevant learning that students may not recognise.
- Clinicians can help students by role modelling and discussing what makes for effective clinical communication.

their problem lists and, discussing diagnoses and planning treatments, usually at the bedside. Patients are presented to the consultant or senior doctor and other team members by training doctors; there is a discussion with the patient and patient records are updated. Communication – both doctor–patient and interprofessional – is the main activity of the ward round. Without it, nothing can be accomplished and in this sense, the ward-round is par excellence a site for learning both formally and informally about professional interaction. Relatively few studies have examined learning opportunities on ward-rounds and even fewer have specifically addressed clinical communication. Dewhurst (2010) considered learning

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outcomes from the post-graduate trainee' perspective and found a lack of awareness among postgraduates regarding the potential learning opportunities afforded by the ward-round and that less experienced trainees felt uninvolved in the ward-round overall. Jaye and Egan (2009) undertook an observational study in New Zealand of student-doctors attending surgical ward rounds exploring the clinical setting directly rather than relying solely on participants' accounts. Although not explicitly focused on communication, they showed that student participation in the daily business of patient care offered opportunities to observe role models and became familiar with the expectations, values, and behaviours of the team. Little is known about how student-doctors learn clinical communication in the ward environment. The study reported in this paper addresses this gap by directly observing and audio-recording ward-round interactions to identify factors influencing the learning of clinical communication in this context and how opportunities for learning can be enhanced.

Methodology

This ethnographic case study drew upon the principles of socio-cultural theories of learning (Wenger 1998; Hager 2011) to examine student-doctors' experiences of learning clinical communication on the ward-round. We assumed that participation in routine workplace practices was key to learning (Billett 2011). Sensitising concepts from the disciplinary traditions of the ethnography of communication informed the analysis (Hymes 1996; Saville-Troike 2003). This tradition emphasises that language operates according to socio-cultural context and that communicative events such as a bedside episode (BE) need to be properly contextualised in terms of settings, participants, cultural and environmental constraints. Ethnographic research allowed us to combine observations, audio-recordings, field notes, and interview data to produce a thick detailed description of the case (Geertz 1973).

The study was undertaken at a UK Regional Hospital (St Joseph's pseudonym) which student-doctors were allocated to as part of their medical training. The undergraduate curriculum is a traditional curriculum, providing limited patient exposure in the first three years. Students from the fourth year attached to medical and surgical placements participated in the study. The research team brought together expertise in nursing (S. Q.) education (A. L.) (S. Q.) and medicine (J. S.). National Health Service ethical approval was obtained (09/H0305/85). Confidentiality of information and anonymity for participants was assured. Research data were stored securely in accordance with the Data Protection Act.

Data collection

All 32 student doctors in the 2009 cohort attached to St Joseph's between January and March 2010 were identified from the school's database. An e-mail was sent informing them of the study's aims and methods, with an attached information leaflet inviting voluntary participation. Nine students volunteered. Consultants from surgery and medicine were contacted either by e-mail or in person; following discussions with their teams (nursing and medical), two surgical and two medical

Table 1. Field note structure.

- The context – where, when
- Constraints (physical, time, and opportunities)
- Participants, who, position around bed
- Patients' background information
- Communication skills exhibited or attended to
- People's responses
- Key gestures
- Learning opportunities
- Significant moments
- Interruptions

Table 2. Topic guide used in interviews.

- Student interview
 - How would you describe the clinical communication on this ward-round?
 - Which doctor stands out for you and why?
 - What are you able to learn from observing and listening to clinicians interact on the ward-round?
 - Can you give me some examples?
- Clinician Interview
 - I have noticed some students choose not to attend the ward-round – what are your thoughts about that?
 - What sort of things are you hoping they'll learn on the ward-round about communicating?
 - Can you give me some examples of how that might happen?

teams agreed to participate. Patients were given written study information at the pre-op clinic or on the ward and had 48 h to decide whether they wished to participate. S. Q. obtained informed consent from patients prior to and after each recording. Consent was treated as on-going and recording ceased when consent became uncertain (patients received news they were not expecting).

Participants (patients, clinical team, and students) were observed and audio-recorded on 18 ward rounds by SQ who joined the team as an observer. Ward round observations lasting 84 h were conducted over two periods (three weeks and five weeks) and included 63 audio-recordings of BEs and ethnographic field notes written using the structure shown in Table 1. Follow up interviews were done once during the project with all nine students and four clinicians investigating background information (guidance given, student's own preparation) exploring observations made; and the interviewees' understanding of opportunities for learning communication on the ward round. Table 2 outlines topic guide used in interviews.

The analytic process involved recording observations, repeated listening to audio recordings, and production of verbatim transcriptions of audio-recordings and interviews. Broad transcriptions enabled assembly of topic-focused data sets, for example, all the recordings where a patient was given bad news. Topics were identified using the framework of the Calgary–Cambridge guide (Silverman et al. 2013). Thematic analysis of interviews involved three steps: familiarisation with the data by listening to tapes and reading transcripts; developing a thematic framework by producing codes which represented key concepts and ideas, and indexing by applying the thematic framework to the interview scripts (adapted from

Table 3. Details of ward rounds and participants.

Clinician/specialty	Rounds	No of BEs	SD present
C1/M#	A	4	SD1
C1/M	B	2	SD1
C1/M	C	2	SD9
C1/M	D	3	SD9
C1/M	E	4	SD9
C2/M#	A	5	SD2 & SD3
C3/S	A	1*	SD4
C3/S	B	2	SD5
C3/S	C	5	None
C4/S	A	1	SD5
C5/S	A	2	SD5
C5/S	B	7	None
C6/S	A	4*	None
R1/S	A	1	SD4
R2/S#	A	4	SD4
R2/S	B	2	SD7
R3/M	A	4	SD9
R4/M	A	3	SD8
FY2/S#	A	7	SD6
FY2/S	B	5	None
11	20 of which 18	68 of which 63	
6 Consultants	were recorded	recorded	
4 Registrars		*not recorded	
1 FY2			

C, consultant; R, registrar; FY2, foundation year 2; SD, student-doctor; S, surgery; M, medicine; #, interviewed.

Ritchie and Spencer, Ritchie et al. 1994). The author was aware of (and strove to allow for) her potential influence on the participants, given her interest in clinical communication and position within the Clinical School. The rich combination of ethnographic observation, field notes and interview data provided access not only to actual working practices but also to participants' reflections on their practice, with opportunity to move back and forth between different data sets in the emerging analysis. S. Q. took responsibility for preliminary thematic coding of audio recordings and interview data and this was refined through ongoing discussions within the research team.

Results

63 recordings of BEs were made during 18 ward-rounds in two different settings – eight in general medicine and 10 in surgery. Ward-rounds were undertaken by 11 clinicians (six consultants, four registrars, and one Foundation Year 2) involving seven surgical and four medical teams and 39 patients (see Table 3).

Complexity of the social context

Data analysis pointed to two features shaping the opportunities for learning: (1) the complexity of the social context: the environment, the nature of the interactions, and the students' own actions; and (2) role models.

The environment

Ward-rounds were noisy and 41/63 BEs contained at least one interruption. Numbers on the round varied from 3 to 11, with five being the average. When numbers were large,

Table 4. Timing of ward-rounds.

	Average length of round	No of patients	Shortest bedside episode (s)	Longest bedside episode	Average length of bedside episode
Medicine	4 h	15	2:20	10:52	4:55
Surgery	60 min	7	40	11:49	5:02

student-doctors frequently stood at the end of the bed with others in front of them and reported being unable to clearly hear the interaction.

The nature of the interaction

On 4/18 ward-rounds, the consultant was the only person in the team who knew the patient. Although members of the ward-round routinely referred to the team ward-rounds rarely had the same team members and on seven rounds team members did not know each other. Ward-rounds were frequently performed when the team was under significant time pressures (Table 4) and 13 of the surgical BEs lasted less than three minutes. Within the interaction itself, there were frequently several conversations occurring simultaneously. In addition to the consultant speaking to the patient, two or more simultaneous conversations were recorded in 48 BEs. These included senior student speaking to junior, registrar speaking to foundation year doctor and registrar speaking to nurse. In 39 BEs, patients' contributions were minimal consisting only of responses elicited to questions. Furthermore, there were only four occasions across the data set where patients were specifically asked about their concerns, goals, expectations, or wishes.

The student-doctors' actions

In 4/18 rounds, involving 21 BEs, there were no students present but SQ still observed the BEs to explore what interactions the students were missing. In interviews, the student-doctors reported that they felt they had no role and that the focus was patient management, with little education value.

We become more and more withdrawn during the ward-round as we feel less and less included (SD1)

We are at the stage now where people go to the things that they find useful and sometimes it's difficult to see what you'd learn from the ward-round (SD2)

It's not there really as a learning experience for us, I mean it is primarily you know, caring for the patients (SD7)

However, each round contained at least one communicative practice that would have afforded the student-doctors informal learning opportunities, including acknowledgement by a consultant that a mistake had been made; presentation of a patient by a senior student-doctor; a challenging interaction in which a patient expressed concern about his condition and

treatment and an interaction where the patient's questions were not answered.

There were also occasions described by three students when they had been sent away from the ward-round and left feeling de-motivated. SD5 recalled:

Yeah I was told 'this is a very busy ward-round we're going round very fast...why don't you go to clinics'...and that was the last round I tried to attend.
(Interview with SD5)

When they attended rounds, student-doctors were positioned in and assumed the role of observer. No student was asked to interact with the patient and only one was observed presenting a patient. They were infrequently included in discussions on ward-rounds and the recordings show they spoke in only 33/63 bedside episodes. There was often no opportunity for them to participate, question, or make sense of what they saw.

The student-doctors themselves were rarely pro-active; in interviews, 8/9 student-doctors confirmed that they did not prepare for ward-rounds and frequently did not know the patients being discussed. Students did report that case discussions which occurred prior to seeing a patient helped them to clarify the details of the case, therefore reducing complexity and allowing them to focus on the interaction.

In addition, no student was observed taking time out after seeing a patient and in interviews the student-doctors expressed frustration: "you're trying to keep up, so you don't really have time to think, and then after the round, because you've seen so many patients I think you kind of forget" (SD7).

The outcome of these actions was that student-doctors learnt clinical communication almost entirely by observing role models.

Role modelling

Every bedside episode attended by students, demonstrated communicative practices (see Table 5) offering opportunities for learning. The two most frequently observed practices were, unsurprisingly, taking a focused history and giving an explanation. Explanations were most commonly related to symptoms, treatment plans, and discharge. Clinicians also modelled

presenting a patient's case history to the team. Although all these practices were present, on only three out of 63 occasions was the learners' attention drawn to them by the doctor: once in relation to accuracy of documentation and twice in relation to breaking bad news.

Two student-doctors each recalled a ward-round which was a "really good learning experience" (SD3). SD8 described how "He asked me 'what do you think is important before you go and break bad news?' and then I saw that modelled." In this way, aspects such as having the correct information and involving the family were highlighted. The positive learning experience for SD3 involved being briefed and also being given a task to do whilst observing the interaction:

The FY asked us 'I'm breaking bad news, I want you to look at the way I do it and then tell me what I did well and badly'...it was quite structured it was the way we'd been taught...and the effect was the patient was able to take it in.
(Interview with SD3)

Despite significant time pressures, in 25/63 BEs, the clinician could be seen both verbally and non-verbally taking an interest in the patient. This extract of a consultant talking to an 88-year-old gentleman who has been admitted following a cerebral vascular accident illustrates this.

C1: Hello
P: Oh we're having this meeting are? (something missing?)
C1: Yes it's a grand meeting (bends down and leans on the patient's bed and smiles) how are you then?

Students were alert to these nuances. SD1 commented that this consultant always familiarised himself with patients' details before seeing them and seemed to be able to get patients to trust him.

SD1: You see him trying to remember something about them...rather than just their medical point of view, or having a joke so that when he got to the bedside he could relate to them on more than a medical level.

Equally, they were aware of the nature of patient interactions and how clinicians limited patient responses.

SD7: What struck me is that the patient speaks very little, he doesn't ask the patient about her progress or any part of her care for that matter. A few closed questions is the limit of the patient interaction.

Clinicians modelled complex skills on a number of occasions, such as negotiating management options, but were not observed drawing attention to these kinds of interactions. When C1 was asked whether he consciously drew the team's attention to these kinds of interactions or would ever explore how such a conversation might be tackled, he replied: "No, well I'm only...partially conscious of it myself". This suggests

Table 5. Types of clinical communication identified in the recordings.

Communicative practice	Frequency
Information gathering	41
Giving explanations to patients	49
Clinician presents patient's history	17
Creating a good inter-personal relationship	9
Team work	4
Responding to difficult questions	5
Listening to a patient to identify concerns	4
Acknowledging a mistake	2
Emphasising importance of documentation	1
Documentation (dictating notes)	1
Need to corroborate history with third party	2

that even effective communicators may have difficulty in articulating what they are doing.

Discussion and conclusion

Discussion

Our study sought to explore factors that influence learning of clinical communication on ward-rounds and how learning of clinical communication could be enhanced. The data show that clinical communication is constitutive of medical practice, diagnoses, decisions, and plans are communicated through talk, it gives further evidence of the gap between learning clinical communication in the classroom and practice and why this gap persists. The rich description helps us to understand the complexity of the ward-round, ephemeral teams combined with lack of time, developmental space, and information about what and how to learn, limit the students' possibilities to learn from role models about clinical communication. Because student-doctors are taught clinical communication in a controlled environment and according to a particular format they did not always spot when they are learning about clinical communication in practice. Despite this complexity, the ward-round has significant potential as a site for learning about clinical communication; in this study, however, that potential was seldom realised. Our analysis revealed that clinicians rarely explicitly focused on clinical communication and as Dewhurst (2010) found, some consultants were unaware of potential learning opportunities that were available and demonstrated on ward-rounds. Occasions when role models did highlight communication allowed the student-doctors to relate their classroom learning to clinical practice, whilst also observing the effects on a real patient.

Some students questioned the value of the ward-round as a learning experience. Empirical evidence relating to students' learning in the workplace points to the importance of students having a role (Dorman et al. 2007), being able to participate (Van Der Zwet et al. 2011) and to consideration of the social and cultural context (Lave & Wenger 1991). There may be several explanations as to why students feel disengaged from the ward-round process, including a lack of legitimacy (Lave & Wenger 1991), not knowing patients, feeling uninvolved, having few opportunities to present or participate, being poorly prepared, and not perceiving that they are learning. The impact of unfamiliarity with team members on the potential learning experience should not be underestimated by clinicians and educators. If students feel unwelcome and have no-one guiding them about which patients to see in preparation for the ward-round, their learning opportunities are limited. Ensuring students are acknowledged and briefing them about what they will see may significantly impact on their learning experience. If the students cannot participate in the experience, they may struggle to make sense of what they are observing. The purpose of students attending business ward-rounds is worth questioning. If they are expected to do so, a number of recommendations outlined by the students in their interviews may be helpful (Table 6).

This study's findings reflect Silverman (2009) and Brown's (2012) concern that students learn clinical communication in

Table 6. Students' suggestions for how to improve the ward-round learning experience.

- Acknowledge us on the round
- Orientate us to the ward round – what and how you can learn from it
- Explore ways to integrate us into teams more effectively
- Give us a clear role and responsibilities
- Let us actively participate

isolation from other clinical knowledge and skills and are not made aware of the need to integrate them. Student-doctors need support to identify, analyze, and reflect on the interactions they are observing. This may involve re-conceptualizing both what is being learnt and how learning occurs on the ward-round. Ward-round learning is by its nature opportunistic and cannot be predicted and we need to explore manageable ways for students to consider clinical communication. This may, on occasion, require them to attend to the intricacies and complexities of the interactions by asking themselves some specific questions. For example, how does this relate to the models portrayed in the classroom and how is it being shaped by the clinical context, is the patient's voice being heard and how would they respond? Giving students opportunities for debriefing in practice may help them to reflect on what they are seeing and discuss confusing issues. Furthermore, as educationalists we need to validate the clinical context in which students learn and explore ways to ensure our teaching reflects its complexity.

This study is rare in that it is based on recordings of actual ward-round interactions among the lead doctor, patient, and team and provides a detailed picture of both communicative and learning practices on the ward-round. However, the study also has limitations. It uses small numbers, involves one regional hospital with a specific practice and culture, and the author had a specific interest in clinical communication. Given these circumstances, decisions about transferability to other settings must be left to the reader.

Conclusion

This study has demonstrated that the ward-round is a complex experience that affords rich opportunities for learning about clinical communication; something that has long been assumed but never demonstrated. However, student-doctors may not always recognise the ward-round as a potential learning experience. Further research exploring how we can prepare students more effectively to learn on ward-rounds, elicit learning opportunities, and understand how learning relates to the social context of the ward-round is needed.

Practice implications

Interweaving teaching about communication into the occasions of use of real communication on the ward would ensure role models draw to student-doctors' attention that clinical communication is constitutive of medical practice. Whilst changes can be made to improve practice in relation to inclusion of students and organisation of ward-rounds student-

doctors themselves may need better guidance and preparation if they are to actively learn and participate on ward-rounds.

Notes on contributors

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Acknowledgements

The author would like to acknowledge the students and clinicians who participated in this study and thank Drs Adam Lefstein and Jonathan Silverman for their advice and support with the study.

Declaration of interest: The author reports that they have no declaration of interest.

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