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Developing understandings of clinical placement learning in three professions: work that is critical to care.

Alison Ledger and Sue Kilminster

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ABSTRACT

Background This study contributes further evidence that healthcare students' learning is affected by underlying assumptions about knowledge, learning, and work.

Aims To explore educators and students' understandings of early clinical placement learning in three professions (medicine, nursing, and audiology) and examine the profound impacts of these understandings on students' learning and healthcare work.

Method Narrative interviews were undertaken with 40 medicine, nursing, and audiology students and 19 educators involved in teaching these student cohorts. Interview transcripts were read repeatedly and interpreted using current practice-based understandings of learning.

Results Across interviews and professions, students and educators made distinctions between aspects of clinical placements which they understood as 'learning' and those which they tended to disregard as 'work'. In their descriptions of learning in clinical workplaces, medicine and nursing students and educators privileged activities considered to be technical or specialised, over activities that were understood to be more 'basic' to care. Furthermore, interviews with medical students and educators indicated that rich and unique possibilities for learning from other members of the healthcare team were missed.

Conclusions Distinctions between "learning" and "work" are unhelpful and all participation in clinical workplaces should be understood as valuable practice. Action is needed from all parties involved in clinical placement learning to develop understandings about learning in practice.

INTRODUCTION

Recent efforts to improve healthcare practice and patient safety have focussed on improving healthcare students' preparedness for practice and easing the transition from student to healthcare professional (for examples see Bombeke et al., 2012; Brennan et al., 2010; Godefrooij et al., 2010; Widyandana et al., 2012). However, our work (Kilminster et al., 2010, 2011; Zukas and Kilminster 2012) suggests that this emphasis on preparedness is misplaced because it fails to recognise the distributed, collaborative nature of actual practice.

The notion of preparedness relies upon an understanding of learning in which knowledge exists in individuals' minds and can be transferred from training to practice in straightforward ways (Hager & Hodkinson, 2009). However, human factors research has shown that the problems in healthcare attributed to a lack of preparedness are rarely the result of individual failures, but are instead caused by cumulative acts and interactions within systems and between people (Reason, 2000). Furthermore, ideas about knowledge transfer are at odds with the latest workplace learning theories, which emphasize the critical role of the workplace in facilitating workers' learning and practice (Hager, 2011).

According to authors such as Fenwick et al. (2011) and Shove et al. (2012), knowledge does not exist solely in individuals' minds, but is created in interaction with other bodies, objects, tools, and texts (in the case of healthcare, other professionals, patients, equipment, drugs and so on). Such practice-based perspectives indicate that learning is complex and is not reducible to simplistic notions of transfer from theory to practice. Further, a growing body of medical education literature shows how learning in clinical workplaces is affected by underlying assumptions about knowledge, learning, and work (Bleakley, 2006; Donetto, 2012; Yardley et al., 2010; 2013).

Our previous study of doctors' transitions showed how doctors' practice was highly dependent on "the setting, the trust in question, time of day or night, the composition of the team and whether other members of the team were present" (Kilminster et al., 2011, p. 1011). Rather than suggesting that doctors can and should be better prepared, we recommended that transition points be recognised as *critically intensive learning periods* (CILPs). By calling transitions

CILPs, we intended to emphasize that learning is central to all increases in responsibility and that doctors' learning should be supported in everyday workplace environments. The current study was designed to explore learning at an earlier transition point, namely the time when healthcare students first enter clinical environments. Early clinical placements are a particularly critical and intense learning period, when students are first exposed to the everyday work of healthcare professionals and are required to adapt and develop extremely quickly (O'Brien & Poncelet, 2010; Prince et al., 2005). In order to maximise students' learning in these CILPs, we needed to gain more detail about students and educators' understandings of early placements. Therefore, our study asked the following research questions:

1. What do students say they are doing (and not doing) on early clinical placements?
2. What is the clinical experience like for students?
3. Are there any differences in what students say they are doing and what educators say that students are doing? and
4. How can we help facilitate early clinical placement learning?

METHODS

Study overview

We undertook 59 qualitative interviews with healthcare students and educators about students' early clinical placement experiences. We compared placement experiences in three undergraduate healthcare courses, to allow detection of

any similarities and differences across healthcare professions and to facilitate interprofessional learning about clinical placement education. Although placement details differed depending on the course, all interviewees shared common experiences of entering clinical workplaces for the first time. The study was approved by the relevant university ethics committee.

Sampling and recruitment

We selected undergraduate medicine, nursing, and audiology courses for this study, as we had worked with the leaders of these courses in previous projects and existing relationships were critical for access and recruitment. Close working relationships were also essential for understanding the timing and nature of clinical placements in each of the courses studied. At the time of the study (2011-2012), the undergraduate medical course was undergoing a change in curriculum to include greater patient contact in the early years of training. Consequently, third year medical students undertaking the old curriculum and first year students undertaking the new curriculum had similar levels of patient contact and clinical experience. The maximum length of time medical students spent in any one clinical setting was five weeks. Nursing students began entering hospital wards within weeks of starting their training, and also rotated around different clinical areas within their first year (rotations varied from 3 weeks to 3 months). Only adult nursing students were included, as these students encountered similar patients and conditions to the audiology and medical students studied (which facilitated comparison and contrast between the different groups). Audiology students began longitudinal clinical placements in their third year of training. Each audiology student was placed in

an audiology department full-time for a full year (as a paid employee of the UK National Health Service).

We recruited students and educators in the following ways. First and third year medical students, first year adult nursing students, and third year audiology students were recruited through a mixture of face to face meetings with students during class time and email advertisements sent by course staff.

Nineteen medicine students (six first year, thirteen third year), twelve adult nursing students, and nine audiology students volunteered for the study and followed through with a research interview. Educators who taught undergraduate medicine, adult nursing, or audiology students were recruited through existing university contacts (university staff members forwarded information about the project to colleagues who supervised students).

Educators were asked to contact the researcher if they wished to participate. Eight medicine educators, nine nursing educators, and two audiology educators volunteered to be interviewed. (As participants were volunteers, we expected that they were relatively enthusiastic about placement teaching and learning.) All interview participants received information sheets and completed consent forms.

Data collection

Interviews were arranged at times and places convenient to the participants (either at the university or in non-clinical areas at placement sites) and lasted an hour on average. The interviews were narrative in format, to enable interviewees to talk about what they considered most important in clinical placement learning. We did not ask interviewees about learning directly, as our

own work and previous research has shown that “informal learning” is often not recognised and needs to be inferred from descriptions of what has happened and “how it has been experienced” (Fowler et al., 2012, p. 108). Each interview began with a single question aimed at inducing a narrative – ‘tell me about placement, all the things you think it may be important for me to know’ (for more information about this narrative interview method, see Wengraf, 2001). Follow-up questions were then asked to gain additional information and clarification. For example, when a student referred to interactions with other healthcare professionals, he was later asked ‘Can you tell me about a specific time when you interacted with other healthcare professionals?’. Interviews were audio-recorded and later transcribed and anonymised using pseudonyms. As interviews were undertaken at various times throughout the academic year, the students’ amount of placement experience varied across the sample (from only a few weeks to several months and obtained in one to three different placement sites). Placement sites included a range of hospital wards and departments and general practices and were located in a range of metropolitan and rural areas.

Analysis

Our approach to analysis developed the iterative process described in our previous research on transitions (Kilminster et al., 2011) and was informed by the practice-based understandings introduced at the beginning of this paper. After carrying out the interviews, Alison read transcripts repeatedly and prepared a descriptive summary of each interview. Transcripts and summaries were then read by Sue. Each of us interpreted the data from our own

perspective, before discussing our interpretations to identify and corroborate students and educators' understandings of early clinical placement learning. (At the time of the study, Alison was a post-doctoral researcher who was new to the university and to medical education, though experienced in music therapy practice and clinical education. Sue was an established medical education researcher, who had previously worked as a nurse in different hospital settings.) This paper focuses on an overarching theme which emerged repeatedly during our analysis - students and educators' distinctions between learning and work. Across interviews, we found multiple references to hierarchies of learning which were potentially detrimental to students' learning and patient care.

RESULTS

In undertaking this study, we expected students and educators to hold different understandings of early clinical placement learning (as indicated by one of our research questions). Instead, we found similar understandings in the interview responses of students and educators across professions. Both student and educator interviewees made distinctions between those placement experiences which they described as 'learning', and those experiences which they considered to be 'work'. First we explain how these distinctions emerged in the interviews in different professions, before identifying how certain types of activities and interactions were valued as learning by students and educators.

Learning vs work

A distinction between learning and work was immediately apparent in the interviews with nursing students and educators, who expressed concern about students being 'used' as free labour in busy ward environments:

I think like on placements where it is understaffed it affects you quite a lot... maybe you don't *learn* as much as you could learn, you maybe do *more work* than you should be doing. (Eve, 1st year nursing student)

The activities which nursing students and educators referred to as 'work' tended to be aspects which are normally described as 'basic care' tasks (e.g. feeding, bathing, and lifting patients) and were often undertaken with healthcare assistants rather than qualified nurses. Nursing students appeared to experience tensions between wanting to do something helpful and feeling 'used' to complete healthcare work. For example, one nurse educator described how a student had refused to carry out toileting duties with a healthcare assistant:

I asked, "...could you not take a bedpan to a patient?" And she said, "but that's the work of healthcare." (Isabelle, respiratory nurse)

Audiology students also described themselves as 'working', but work was described in much more positive terms:

I've been quite enjoying coming *to work* every day and just being part of the team. (Fatimah, 3rd year audiology student)

Audiology students described their participation in hearing tests, hearing aid fittings and repairs, and patient education, but also in work such as ordering stock, tidying the stock room, answering phones, collecting post, and booking appointments. In most cases, these 'jobs' were accepted as part of the role of

any member of the audiology team and audiology students appeared to view themselves as both learners and workers:

I know I'm still learning and I'm still asking questions all the time but, because I'm dealing with patients, I do feel like an audiologist and healthcare worker (Jamila, 3rd year audiology student)

There were fewer references to students 'working' in the interviews undertaken with medical students and educators than in the interviews in other professions. When 'work' was mentioned by medical students and educators, it tended to be referred to as something that medical students were rarely allowed to do. For example, Ben (third year medical student) reported:

...we feel like we can ease *the workload* on wards but sometimes that people are reluctant to let us do it. I don't know whether it's they just don't trust us 'cause we're medical students...

Although there were fewer references to 'work' in the medicine interviews, our analysis revealed that medical students and educators valued certain types of placement experiences as 'learning' and that these were qualitatively different to experiences which were described as 'work' (examples of work included helping with paperwork, collecting the next patient for a consultation, and collecting and sorting equipment).

We found that there were two main hierarchies when it came to understanding an experience as 'learning' – a hierarchy of activities and a hierarchy of interactions. These hierarchies appeared to have a profound impact on whether a placement experience was valued as learning and are therefore

explained in more detail below. We have included more quotations from medicine participants than interviewees in the other professions, in keeping with the readership of this journal.

Hierarchy of activities

Medical students described themselves as learning when they were undertaking procedures such as venipuncture and intravenous cannulation, practicing their examination skills, or 'being taught' about drugs, anatomy, and diseases. Furthermore, students said that they were learning when they were being observed or 'signed off' undertaking the tasks which were included in their clinical workbooks (their 'blue books'), as evident in the following description of a GP placement:

Amy (3rd year): it was a good insight into what GP life was like but it was less useful for learning things for what the course wants...

Interviewer: What do you think the course wants?

Amy: Well different procedures to learn and the practical skills that we have to do... we've got a blue book of things we got to see, things we got to do, things we've got to do under supervision. And then there's like a list of drugs and a, yeah the list of diseases...

Another 3rd year student, Tom, confirmed the blue book's influence in shaping medical students' understandings of learning:

I think a lot of it is box ticking... I think there's a lot of focus on that blue book rather than your experience with the hospital...

Nursing students also privileged technical aspects of placement which they could get 'ticked off' in their clinical workbooks, such as wound dressing and medication dispensing. Sometimes this appeared to be at the expense of holistic patient care. For example, one student recounted leaving a patient so that she could capitalise on an opportunity to get another box ticked:

I was busy with a patient and I was helping her and all the rest of it and having quite a nice chat with her, which I had to cut short because I suddenly thought, 'Oh they're doing that now, and I really, really need to go and do it because I've got to get that particular box ticked off in my book' (Jessica, 1st year nursing student)

The interviews with Amy, Tom, Jessica, and other medical and nursing students indicated that learning was understood to have occurred when students were carrying out activities which were regarded as technical or highly specialised, rather than activities which were considered to be more "basic" to care, such as talking to patients. These understandings were reinforced by the clinical workbooks which students were required to complete during their placements. A hierarchy of activities was not as apparent in the interviews with audiology students, who understood a range of activities as contributing to the work of their audiology teams (see earlier quotes).

Hierarchy of interactions

A second hierarchy was evident in medical and nursing interviewees' descriptions of learning. Often the situations that were identified as valuable learning were instances when students were interacting with senior staff or

when staff members were giving students explicit feedback and support.

Medical students recognised that there was potential for learning in interactions with patients and other professionals, but they tended to identify this learning as occurring when there was nothing 'better' to do:

Interviewer: How do you go about talking to a patient? How does it happen?

Ben (3rd year): ... it tends to be the times when you're talking to them are times when you've got nothing else to do anyway so you'll just let them talk. Maybe bring it back to topic but you've got nowhere else to be anyway...

A hierarchy of interactions emerged in understandings of learning at all levels of training and experience. Olivia (3rd year medical student) explained how educators assumed that students only wanted to spend time with doctors and that possibilities for learning with other professionals were missed:

the GPs sort of assumed that I wanted to sit with them all the time... more time with maybe the receptionist, or, the nurses would have been more helpful because... you do need to learn about all of it you know like the financial side, how to use the computer system, how the pharmacy works this that and the other...

Olivia's observation was supported by interviews with medical educators, including Misba (a paediatrician) who reflected:

we always think doctor, but I think actually they [the students] need to think about where else are they gonna get their learning from and I don't

think they do... to be honest and I'm not sure we're very good at it either...

In comparison to medicine and nursing interviewees, audiology students and educators were more likely to describe learning with staff at all levels of seniority. For example, Chris (3rd year audiology student) reported that he learned from assistant audiologists, who he understood as being 'in the same boat... with what they can do'. Chris recalled a time when he filled in for an assistant audiologist as one of his most exciting and rewarding placement experiences.

DISCUSSION

We found that students and educators made distinctions between learning and work that were not necessarily helpful to students' learning, nor to clinical practice. Students and educators privileged certain types of activities and interactions over other valuable learning experiences which could contribute to high quality care, such as 'working' with patients.

Distinctions between learning and work were least pronounced in audiology and most pronounced in nursing, despite all three groups of students having similar status (not yet legally qualified professionals). Medical students were rarely described as 'working', however it was clear that they valued certain types of activities and interactions as 'learning'. The differences we observed across professions could be explained by the students' different positions in relation to work at the time of the study. Audiology students on third year placements

were paid members of the UK National Health Service. It was therefore unsurprising that audiology students frequently and positively referred to themselves as 'working'. Nursing students did not pay university fees and were expected to be 'supernumerary' during clinical placements. Nursing students and educators seemed particularly sensitive to times when students were 'working' or filling in the role of a paid staff member, and expressed discomfort around these times. The stipulation that nursing students must be supernumerary is a relatively recent introduction to UK Nursing and Midwifery Council guidelines, and is the subject of much debate (Allan et al., 2011). In contrast, medical students did pay fees and seemed to understand their role primarily as 'learning'. Rather than being wary of 'work', medical students expressed wishes to be more involved, to be helpful, and to contribute to the work of the healthcare team.

We observed that two main hierarchies influenced whether a placement experience was regarded as 'learning': a hierarchy of activities and a hierarchy of interactions. These hierarchies were undeniably affected by students and educators' positions in relation to power, gender, social class, and race. Numerous scholars (for examples see Pringle, 1998; Walby, 1986) have dissected the gendered and class-based hierarchies in which medicine is almost always the most dominant. This historical context undoubtedly influences doctors' and medical students' understanding of what is most important in clinical learning. In the case of nursing, training has moved increasingly into the higher education sector and nursing roles are becoming increasingly specialised. Nursing work has also become more fragmented, and

much of the work previously done by nurses is now being done by others, including therapists and technicians, healthcare assistants, cleaners, catering and laundry staff (Armstrong et al., 2008). Changing understandings of the position, roles, and responsibilities of nurses are highly likely to influence what current students and educators value as essential clinical learning.

It was notable that the aspects of placements which students and educators described as 'work' tended to be 'basic care' activities such as bed making, feeding, bathing, dressing, moving patients, and talking to patients and family members. Scholars such as Armstrong et al. (2008) have explained how these activities are typically undervalued as work undertaken by women, immigrants, and/or poorly paid workers. For example, to call something 'women's work' is to suggest that it is somehow natural and does not require extensive skills, or learning. Armstrong et al. have convincingly argued that the roles which tend to be undervalued in healthcare environments are those which are 'critical to care' and are essential components of healthcare work. Worryingly, our study indicates that healthcare students have already developed negative attitudes towards basic care work by the time they enter their first clinical placements.

There were several examples of how students prioritised activities listed in their clinical workbooks over other aspects of healthcare work, such as talking with patients. This is concerning for two reasons. Firstly, because this prioritisation contradicts professional understandings about holistic and patient-centred care, and secondly, because of the current emphasis on holistic care in both policy and public discourse (for example, see Francis, 2013). Our interviewees considered clinical workbooks and assessment procedures as helpful in setting

up students and educators' expectations of what should happen on placements. However, this benefit of workbooks and assessment can also be regarded as a weakness. Medical students and educators showed how in privileging 'sign-off' tasks, other learning specific to the context was missed, including possibilities for working with staff other than doctors. In the few interviews where interactions with other staff were described in detail, it was clear that these times were not only valuable for students' learning about professional roles and identities, but also about healthcare systems and processes.

The idea that medical students most value tasks which are assessed is of course not new (Wormald et al., 2009; Wylie & Boursicot, 2010). However, we propose that there are problems in clinical placement learning that stem much deeper than the observation that 'assessment drives learning'. The distinctions we observed reflect persistent understandings about work and learning which focus on the individual learner or practitioner and presumptions about knowledge transfer from the classroom to practice (Hager, 2011; Hager & Hodkinson, 2009). Distinctions between 'learning' and 'work' are not only articulated at undergraduate level, but are also apparent in the separation between 'education' and 'service' at all levels of medical policy and training (for examples see General Medical Council, 2011a ; 2011b).

In contrast, we have been working with practice-based understandings about work and learning which emphasize how learning occurs through and within practice (Fenwick et al., 2011; Hager et al., 2012, Shove et al., 2012). From this perspective, it is not possible to separate learning from work, so *all* participation in clinical settings can offer valuable learning. We propose that

clinical workplaces offer a wealth of activities and interactions that can contribute to students' development as compassionate and effective healthcare practitioners. By focusing on a narrow set of specific skills or tasks at the top of a hierarchy, there is a risk that students and educators will ignore other possibilities for learning and misunderstand the nature of clinical practice itself.

CONCLUSIONS

There is a risk that students and educators limit learning and misunderstand the realities of clinical practice when they focus on a narrow set of skills to be 'ticked' or 'signed off'. In our study, the situations described most positively were often interactions with staff outside the students' future profession, experiences which were unique to a particular clinical context, and times when the students perceived that they were making meaningful (and safe) contributions to patient care. Clinical teachers should therefore be encouraged to develop ways that students can become more involved in the everyday work of healthcare teams and beyond the limits of sign-off activities.

PRACTICE POINTS

- All participation on placement offers valuable learning, including "basic" care work
- Action is needed at all levels to develop understandings about learning and work – from policy, regulation, healthcare and educational institutions, to healthcare teams and individual students and staff

- All parties should take time to consider their own assumptions about clinical learning and recognise the range of opportunities for learning that exist in their own contexts.

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