Health & Social Care cluster

Project title: Bedside teaching encounters – secondary analysis of video data

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Background to the study

There is a plethora of research within social sciences that has examined the nuances of the doctor-patient interaction. Indeed, medical education makes use of such work through the teaching of communication skills to students. However, when we add a student into this mix, we know very little about the impacts and changes that occur. While we know a great deal about doctors’, patients’ and students’ views about participating within bedside teaching encounters (BTEs), very little is known about what happens interactionally when medical students are present. Our previous research involved the audio-recording of six BTEs and investigated the communicative practices that constitute BTEs (Monrouxe et al., 2009; Rees and Monrouxe, 2008, 2009). The present BTE study seeks to extend this work to include the embodied nature of BTEs and medicine in general. Therefore, permission to video record these real-time medical encounters was granted and a corpus of video recordings has been established.

Purpose of HEA funding

A Higher Education Academy (HEA) grant awarded to the research team was sufficient to support six weeks of research activity investigating professionalism within bedside teaching videoed activities (this included Dr Elsey’s time and a summer student bursary). In addition to this, the research team won a second student bursary from the Cardiff Undergraduate Research Opportunities Programme (CUROP) to undertake a secondary analysis of the video data. The team of three carried out intensive and sustained work during the summer with additional support from Dr Monrouxe and Dr Grant.

The work began with a systematic secondary analysis of a subset of the video data that we had previously collected. To date the video corpus comprises 43 separate BTEs across multiple healthcare settings including inpatient wards, outpatients and General Practitioner (GP) surgeries, totalling 937 minutes. It was decided that the 12 GP-based BTEs – including four different GP/student pairs, and totalling 236 minutes – would be analysed in depth as it comprised a distinct subset of the data and was of a manageable size given the time restrictions.

Crucial to the analysis was the involvement of medical students in the research process. Ms Chantelle Rizan and Mr Thomas Lemon (both medical students at the end of their third year at Cardiff) were interviewed and appointed in June 2012 (the second student place was supported by other funds). Medical students were chosen as they were able to apply their experiences of participating in similar contexts to the analysis of the data and their medical knowledge would enhance understanding of what was being discussed during the consultations. Furthermore, these particular students demonstrated a potential aptitude for interactional analysis.

Bedside teaching encounters (BTEs) research activity (July 2012-September 2012)

The process of analysis that was carried out was as follows:

- all researchers began with familiarisation and preparation of video materials;
- following this, identification of recurrent phenomena and relevant issues around professionalism was undertaken (e.g. type/form of participation of different parties);
- researchers then developed a research framework, establishing distinct topics and sub-topics to pursue (this stage involved the whole research team);
- Ms Rizan and Mr Lemon were trained on Transana transcription and video analysis software by Dr Elsey;
- Dr Elsey, Ms Rizan and Mr Lemon systematically created collections of short video clips of examples of professionalism topics designated for further exploration. For example, feedback and correction; the
Ideas, Concerns and Expectations (ICE) communication framework; and moral accountability of patients;

- the two student researchers each focussed on a single topic for further exploration facilitated by Dr Elsey. In particular, Mr Tom Lemon (stipend funded by the HEA) focussed on how key factors of the ICE model were taught and learned during bedside teaching encounters;
- video collections were investigated for similar and different communicative practices and re-organised accordingly;
- video collections were scrutinised to establish provisional findings (see the following section) to explore for dissemination and publication.

Provisional findings and analysis

To date, two main areas of interest found within the GP BTE data have been investigated and worked-up to varying degrees of completion.

1. Ideas, Concerns and Expectations (ICE) communication framework: this relates to a model of communication that medical students are taught during their training, which is actively promoted within General Practice. In short the model brings together a number of key professionalism factors (e.g. individual factors such as empathy and interpersonal factors such as patient-centredness, trust and patient dignity). It is primarily designed to help structure consultations to facilitate patients with the opportunities to talk about the different aspects of their health issues or problems. In terms of the teaching and learning of this communication framework we noted that GPs routinely use this communication device in consultations, while students use it in a more rigid and scripted form (e.g. given their lack of authority to sanction patient treatment students tended to avoid seeking patient ‘expectations’ for the consultation). If questions relating to each ICE-component are not elicited by the GP or student, patients may cautiously volunteer this information but issues of patient-centredness and trust are negotiated and sometimes compromised.

2. Feedback-in-action: predominantly this relates to the different ways in which GPs correct or monitor student performance during bedside teaching and so directly relates to the explicit teaching and learning of key professionalism issues (e.g. students gaining appropriate ongoing consent for examining patients). The central upshot relates to how educators establish a supportive environment in which to learn key professionalism behaviour (rather than values). Correction by patients towards students has also been identified as a future topic for investigation (i.e. how patients teach key professionalism behaviours to students via feedback in action). The actions of patients during GP feedback sequences has already been noted and offers an additional perspective on how to teach in front of patients.

Future analytic avenues to pursue

Due to time restrictions the number of analytic angles that we were able to rigorously and systematically pursue was limited. However, we have a number of different discoveries of key professionalism topics within the GP-based BTE data which we hope to pursue over the next 12 months including the active participation of patients (or how they are excluded). In brief, this concerns the contributions patients make during BTEs, and how these are managed and encouraged within the triadic (doctor-patient-student) dynamic. The analysis would potentially explore how patients answer GP or student questions, ask their own questions (e.g. what type of questions do they ask, when do they ask them, etc), how physical examinations are conducted and issues of consent that they raise. Further the topic of feedback sequences (and patient-involvement) will be applied to another subset of our video corpus (general surgery and medicine) to explore similarities and differences across healthcare settings. For instance, one major difference is that in GP settings there is a single student present, whereas in general surgery outpatient BTEs multiple students are found.
Full list of outputs and dissemination

A pleasing amount of dissemination based on the above lines of enquiry and analysis has been produced after the two-month funded placements ended. This has taken two forms: conference outputs and development of journal articles. The audiences for these outputs include medical students, clinicians, medical educators and other health and social care professionals. We are grateful to the delegates of these events for their questions and suggestions. The extensive list of outputs is outlined below.

Conference presentations*, posters and workshops
(*outputs listed are presentations unless otherwise stated)

- ELSEY, C., RIZAN, C., LEMON, T., GRANT, A. J. & MONROUXE, L. V. (2013) Correction as feedback-in-action within bedside teaching encounters. All Wales Medical & Dental Education Conference. Swansea, UK. (13 March 2013);

Journal articles in preparation (with indicative placement)

- Elsey, C., Lemon, T., Rizan, C., Grant A. J. & Monrouxe L.V. (in prep) A study of Ideas, Concerns and Expectations elicitation in General Practice bedside teaching encounters. For submission to Advances in Health Sciences Education.
References


Rees, C.E., Monrouxe L.V. (2010) "I should be lucky ha ha ha ha": the construction of power, identity and gender through laughter within medical workplace learning encounters. *Journal of Pragmatics*. 2010 (42), 3384-3399.