Talk about Medicines: an evidence-based approach for teaching and learning

Kurt Wilson and Sarah Collins, Manchester Medical School

### **Background**:

Medication error and poor adherence to treatment have been highlighted as common occurrences in clinical practice: prescription error affects 7% of medication orders and 50% of hospital admissions (Dornan et al., 2009). Nonadherence (patients taking medicines as prescribed) is a well-recognized problem with around half of all long-term therapies taken sub-optimally by patients (Langley & Bush, 2014). Prescription error and non-adherence represent significant costs, both in terms of health and financial waste.

Communication has been identified as a key skill to improve adherence to prescribed medicines (NICE, 2009) and poor communication is a key contributor to medication errors (Keers et al., 2013). Manchester Medical School is renowned for its communication training; and prescription writing and review are core teaching in the undergraduate curriculum.

This project stems from our ongoing research into conversation about medicines in doctor-patient encounters. It draws on an existing collection of video recordings of actual consultations between patients and GPs, with ethical approval and participant consent to use anonymised clips from these consultations for teaching purposes.

UK medical schools frequently use actors to play the roles of patients in consultation training (Weller, 2004; Cleland et al. 2009). At Manchester we have a nationally renowned group of simulated patients (SPs) who provide high quality learning experiences with constructive feedback and opportunities for reflection on learning, for our medical and health professional students.

Conversation analysis (see Frankel 1984; Maynard and Heritage 2005; West 1984) is an approach to the study of interaction that allows for identification of sequences and patterns in communication. Through a series of turns at talk, participants co-construct their negotiations, express wishes or requests, and come to shared understandings and decisions about courses of action (such as the prescription of a medicine).

In this study we explored the potential for combining detailed observation and analyses of social interaction in consultations between patients and doctors, with creation and practice of simulated consultation scenarios and discussion and feedback involving simulated patients.

### Aims:

Our project aimed to:

1. Explore what happens, and what works, in talk about medicines in doctor-patient consultations in primary care

2. Investigate the potential for Conversation Analysis-based educational workshops to deliver crucial augmented training regarding safe prescription of medicines;

3. Experiment with combining simulation exercises and observation and analysis of real video-recorded interactions, in undergraduate medical education.

4. Investigate how theoretical teaching, skills practice and simulation actually translate into everyday practice.

### Methodology:

This project combined precise linguistic, conversation analysis insights from real consultations with approaches used in simulation.

### Participants:

To recruit students, an announcement was posted on the medical school intranet with a one-question survey. Forty students initially registered their interest, and were invited to attend an evening webinar with KW to find out more about the project and to ask questions. Fourteen students signed up to the project and attended the series of meetings and workshops.

Following conversations with simulated patients during regular teaching, an invitation was sent to those who are highly experienced and who have an expressed interest in working with real video-recordings of consultations. Eight simulated patients took part in the study, attending the meetings and workshops.

#### The workshops:

We delivered a series of three workshops to explore ways of combining conversation analysis of real consultations between patients and doctors, alongside simulated consultation practice.

The participants were: medical students in their penultimate (fourth) year of study, specialists in conversation analysis, shared decision-making and prescribing, and simulated patients.

The first workshop was based around presentation and teaching and learning principles of conversation analysis, using interactive exercises to explore selected extracts from the video-recorded doctor-patient consultations.

In the second workshop, in combination with analytical exercises using real consultation data, the students worked collaboratively with SPs to construct simulated consultations. These simulated consultations were developed from observations made during analysis of the real consultations, with the purpose of outlining and augmenting the learning points gained from review of real practice.

For the final workshop, academics and clinicians teaching communication and prescribing in undergraduate medicine and pharmacy at Manchester also took part. In this workshop, the participating students presented their experiences and views on communication about medicine, and showed the material they had created in the first two workshops to prompt further discussion. This final workshop also involved experts in evidence-informed decision-making (Prof Neal Maskrey, Keele University & NICE) and conversation analysis (Dr Susan Speer, University of Manchester and Prof. Liz Stokoe, Loughborough University).

### **Findings:**

For each workshop, we kept field notes of observations, and recorded participants' experiences and views through group discussions and written evaluations.

#### Student perspectives and experiences:

Using real consultations to view and critique everyday healthcare consultation practice enabled the students to enhance their learning, in new and compelling ways, opening up avenues for constructive and reflective discussion of communication practice.

Students reported benefits to their learning as a result of observing and discussing real consultations:

"The power of single words and silence in conversations"

"Thinking about how to convey the risks and benefits of treatment"

"Information transfer - what needs to be transferred and how"

"Negotiation - acceptance/refusal/alternatives"

"Shared decision-making: techniques to bring patients into the process" "Insightful to share different views on the video clips"

"How to observe and critique whilst on wards/GP placements"

"We can't be brilliant all the time, but with experience comes development of expertise.

"It really helped highlight the role of real and simulated patient discussion and their respective benefits and disadvantages. Simulated patients don't have 'the same stakes' as real patients."

Students found they gained more by setting simulated consultation training alongside exploration of real consultations:

"Can stop/restart"

"Exploring alternate directions"

"Can take advice from the group in real time"

"Can explore challenging situations in a safe environment."

"You can improve on real consultation practice in simulation, because

you can be more idealistic, and this can improve your consultations."

#### Simulated patient perspectives and experiences:

Simulated patients identified communication techniques and approaches to enrich their performance repertoire. For example: the use of overlap and hesitation to communicate difficulty and emotion; different ways (using different phrasings and forms of response in a consultation with the doctor) of expressing a concern or making a request for a medicine. By the same token, simulated patients made substantive and original contributions to the analyses of consultation data, bringing their own expertise and insights from their work to bear on the exercises used in the workshops. Their comments on the project included:

"fascinating to work with students and tutors looking at real consultations"

"The conversation analysis and the discussions about sequence – how one contribution follows from another – closely mirrors what we do in our work as simulated patients. We never have the time to discuss these things and it was incredibly useful."

"a new way of looking at the consultation"

"made me think about how I behave as a patient in a simulated scenario – am I as realistic as I could be?"

## Academic and clinician teachers:

For all teaching staff involved in the project, the combination of simulated and real consultations, and the conversation analysis approach, represented a new starting point for teaching and learning. about communication between patients and health professionals.

Teachers saw the potential for this combined approach of simulated and real consultations to enrich the curriculum:

"The augmented learning possible through communication training using a combination of real and simulated consultations"

"Combining real and simulated consultations helps promote discussion and reflection on real practice. Simulation supports real practice, rather than being a substitute for it."

"SPs have expertise in role-play, character observation, and dramatizing interactions between patients and doctors. They are well-placed to observe the nuances of real consultation data."

## **Dissemination:**

The approach developed in this project is now being incorporated into several areas of the MBChB programme, including Consultation Skills in Years 1 and 2, and our new Year 3 programme for Patient-Centred Consulting:

- Inclusion of anonymised clips in small group teaching;
- Using conversation analysis of the recorded consultations to create new exercises and scenarios for skills practice through simulation;
- Introducing conversation analysis techniques into teaching and learning repertoires.

Interest across the faculty

• The School of Pharmacy has expressed interest in using similar material to help students learn about active listening and patient cues.

Promotion of wider review and collaboration:

• Open access sharing of created content on the JISC website.

# **Conclusion:**

Combining conversation analysis with simulated consultation design and practice opens up new ways of thinking about healthcare communication in medical education and communication skills training. The project has enabled us to design and implement a number of new techniques for use in observing, discussing, practising and reflecting on effective communication in consultations. It has also fostered new ways of working together as tutors, students and simulated patients.

Incorporating conversation analysis presents an exciting opportunity to engage with students across the healthcare professions, to augment their learning. Crucially, it highlights the importance of in-depth critique and exploration of communication, and places this at the centre of students' learning regarding safe and effective prescription of medicines.

## **References**:

Cleland, J., Abe, K. & Rethans, J. (2009). The use of simulated patients in medical education : AMEE Guide No 42. *Medical Teacher*, (42), 477–486. doi:10.1080/01421590903002821

Dornan, T. et al. (2009) *An in-depth investigation into causes of prescribing errors by foundation trainees in relation to their medical education. EQUIP study.* Available at: <u>http://www.gmc-</u> <u>uk.org/FINAL Report prevalence and causes of prescribing errors.pdf 289351</u> <u>50.pdf</u> [Accessed 19 November 2015]

Frankel, R. M. (1984). From sentence to sequence: Understanding the medical encounter through micro-interactional analysis. *Discourse Processes*, *7*, 135-70. doi:10.1080/01638538409544587

Keers R. et al. (2013) Causes of Medication Administration Errors in Hospitals: a Systematic Review of Quantitative and Qualitative Evidence Drug Saf 36:1045–1067 doi: 10.1007/s40264-013-0090-2

Langley C,. Bush J. (2014) The Aston Medication Adherence Study: mapping the adherence patterns of an inner-city population. Available at http://www.aston.ac.uk/lhs/research/health/pharmacy/adherence/

Maynard, D. W., & Heritage, J. (2005). Conversation analysis, doctor-patient interaction and medical communication. Medical Education, 39, 428-435. doi:10.1111/j.1365-2929.2005.02111.x

NICE guideline 76 (2009). Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence. Available at http://www.nice.org.uk/guidance/cg76

Weller, J.M., 2004. Simulation in undergraduate medical education: bridging the gap between theory and practice. *Med Educ*, *38(1)*, 32–38. doi: 10.1111/j.1365-2923.2004.01739.x

West, C. (1984). *Routine complications: Trouble with talk between doctors and patients*. Bloomington: Indiana University Press