The application of the Practitioners in Applied Practice Model during breaking bad news communication training for medical students: A case study

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Abstract

Background and Aims

Breaking bad news is a key skill within clinical communication and one which can impact outcomes for both the patient and practitioner. The evidence base for effective clinical communication training in breaking bad news is scarce. Frameworks have been found to assist the practitioner, such as SPIKES, however the pedagogical approach used alongside such frameworks can vary. This study sought to examine the impact of utilising the Practitioners in Applied Practice Model (PAPM) alongside the SPIKES framework for training undergraduate medical students in breaking bad news.

Methods and Results

A case study approach is used to highlight the impact of training based on the PAPM and SPIKES on patient-centred communication and simulated patient satisfaction with the clinical communication behaviour.

Results showed that following training, both patient-centred behaviour and patient satisfaction improved. With detailed communication behaviour changes a balance was established between rapport building behaviour, lifestyle and psychosocial talk alongside biomedical information.

Conclusion

This case study shows how the PAPM could be utilised alongside the SPIKES framework to improve breaking bad news communication in medical undergraduate students and describes the behavioural basis of the improvement. Further research is required to show the generalisability of this training intervention.

Key words

Clinical communication training, SPIKES, patient satisfaction, patient-centered

Introduction

The method used to break bad news can have widespread effects upon the patient such as their comprehension of information and satisfaction with the care they receive[1,2]. The process of breaking bad news to a patient can also impact upon physicians who rate it as one of the most stressful tasks to complete[3]. Ultimately the approach taken to breaking bad news to a patient can also affect subsequent clinical outcomes for the patient[4,5]. A patient-centered approach to communicating with patients is known to produce highest patient-satisfaction[6], and the same approach has been shown to be most effective when breaking bad news[7]. However it is clear that not all practitioners use a patient-centred approach[8]. Therefore training medical students and junior doctors in breaking bad news is of significant importance.

However, few evidence-based training techniques have been established and implemented in order to educate in this approach. The SPIKES protocol is arguably the most frequently utilised framework to assist in the training of patient-centred breaking bad news[9]. The acronym stands for Setting, Perception, Invitation, Knowledge, Explore and Empathise, and Summary and Setting. It was developed by Robert Buckman to assist in training physicians in breaking bad news. However, the pedagogical approach used alongside the SPIKES framework varies[9]. The Practitioners in Applied Practice Model (PAPM)[10] describes the development from an atheoretical practitioner to one who is informed by theory and tries to implement it in their practice, but does so consciously and with effort (Fig. 1). Potentially an individual may then further progress to reflective practitioner whose practice is informed by theory with less effort but who also critically reflects upon their own practice and theoretical knowledge to continually improve. Finally, the last stage within the PAPM is the

scholar practitioner who also contributes to improving the field through scholarship relating to their practice[10]. This model, alongside experiential methods[11] could be an effective way of using the SPIKES protocol[9] to train medical students in breaking bad news.

[insert Fig. 1]

This case study investigated the extent to which patient-centered behaviours and patient satisfaction with clinical communication could be improved within a breaking bad news consultation as a result of a medical undergraduate clinical communication training intervention based on the PAPM and SPIKES framework.

Methods

Sample and procedure

This case study involved one third year medical student from the Medical School, University of St Andrews completing three separate video recorded breaking bad news consultations with three different simulated patients over a five week period (February – March 2014). The first consultation was recorded as a baseline, with no prior breaking bad news education. The consultation scenarios included breaking bad news relating to a diagnosis of; diabetes (consultation 1), breast cancer, (consultation 2) and ovarian cancer (consultation 3). Alongside these simulated consultations the student also experienced their normal teaching, which during the time period between the simulated consultations, included two clinical teaching days involving two x 15 minute simulated history taking sessions each and one or two day-long clinical placements.

Training

In line with the PAPM, following the first consultation theoretical knowledge was increased alongside practice with the introduction of the SPIKES framework[9]. The participant was provided with information regarding the SPIKES protocol, the rationale behind it and also viewed video clips showing its potential use. Following the second consultation and again, in line with the PAPM, the participant was encouraged to reflect upon their clinical communication performance having previously been informed of the theoretical background to breaking bad news. Reflection was encouraged by the participant transcribing the first and second interviews from the video footage, and carrying out a detailed self-analysis of their own communication behaviour using the Roter Interaction Analysis System (RIAS)[12].

RIAS is extensively used in healthcare communication research and codes utterances (units of speech with distinct, separate meanings) with mutually exclusive codes which relate to their function and content[13]. Following this reflective exercise the participant then completed a third breaking bad news consultation which was again recorded, transcribed and coded using RIAS[13]. All participants were blinded as to the nature of the PAPM until after the final consultation was recorded.

Measures and analysis

The Roter Interaction Analysis System (RIAS)[12] was used to analyse the behaviour of both participant and simulated patient in all three consultations and determine the clinical communication training intervention's effects. A single coder (RD) coded each of the consultations. A patient-centeredness score was subsequently calculated for each of the three consultations using specific RAIS categories, as described elsewhere[8]. The simulated patients completed the student version of the 'Communication Assessment Tool' (CAT)[14]

immediately following each consultation in order to assess patient satisfaction with the clinical communication.

As this is a case study, statistical analysis was limited to descriptives to highlight potential changes to behaviour and patient clinical communication satisfaction ratings.

Results

The three consultations lasted varying lengths with a mean = 16mins 18 secs (range = 11.34 – 21.46). This impacted on the number of utterances from both the simulated patient and student within the consultations, mean = 289 (range = 218 – 366).

The patient-centredness scores and the patient clinical communication satisfaction rating (CAT) for each of the three consultations are shown in Fig. 2. It can be observed that whilst consultation one had the highest patient-centredness score, consultation two has the highest CAT score. Consultation three however, scores relatively highly in both patient-centredness and the CAT.

[insert Fig. 2]

When the communication behaviour exhibited by both the student participant and simulated patients in these three consultations was examined using the RIAS coding scheme, distinct differences were observed in the proportion of utterances which were of specific codes.

It is clear from Fig. 3 that following the SPIKES training the percentage of student participant utterances that were classified as emotional rapport building, patient facilitation and lifestyle / psychosocial data gathering decreased compared to consultation one, whilst those

classified as biomedical patient education and counselling increased. Following the RIAS coding and reflection training however, the percentage of student participant utterances coded as facilitation behaviour increased compared to consultation two, whilst the proportion categorised as biomedical patient counselling utterances reduced.

[insert Fig. 3]

When we examined the simulated patient communication behaviour, between the first and second consultations, the percentage of simulated patient utterances coded as lifestyle and psychosocial, procedural and asking biomedical questions decreased, whilst the percentage of rapport building positive utterances increased. After the student participant completed RAIS coding and reflection training (consultation three) however, the proportion of the simulated patient utterances which were coded as rapport building emotional or giving lifestyle and psychosocial information or biomedical information increased compared to consultation two, whilst the proportion categorised as rapport building positive reduced (Fig. 4).

[insert Fig. 4]

Discussion

This case study examined the impact of a training intervention based on the SPIKES framework[9] and PAPM[10] on the breaking bad news clinical communication behaviour of a medical undergraduate student and simulated patient communication satisfaction. It was shown that, in this example that the two stage intervention initially resulted in clinical communication behaviour that was categorised as reduced in its patient-centredness but which generated improved patient satisfaction (CAT). However at the end of the training the

participant exhibited clinical communication behaviour that rated highly in both its patient-centredness and CAT. Both patient satisfaction and patient centredness have been linked to improved patient outcomes[6,15,16], and thus both are an important outcome for clinical communication training.

When the detailed clinical communication behaviour of the participant was examined to determine the potential basis of these changes, patterns were observed which could be explained by the application of the SPIKES framework[9] and PAPM[10]. Prior to education about breaking bad news with the SPIKES protocol[9], the CAT score was low as the medical student focused on instinctive consultation skills (atheoretical), resulting in an emphasis on data gathering on the topic of lifestyle and psychosocial along with procedural communication and patient facilitation. The patient communication during this consultation constituted mainly information provision relating to lifestyle and psychosocial, procedural and asking for biomedical information. This style of communication within a consultation could be referred to as emotion-centred, and was found previously to result in low patient satisfaction ratings[7] due to its focus on the emotions the patient experiences combined with little biomedical content.

With the implementation of SPIKES protocol and following further practice there was an increase in student participant biomedical patient education and counselling but a decrease in emotional rapport building, patient facilitation and lifestyle / psychosocial data gathering. Meanwhile the simulated patient had a higher proportion of rapport building positive utterances, but decreased lifestyle and psychosocial information provision, procedural utterances and they also asked fewer biomedical questions. This style of breaking bad news matches the disease-centred approach outlined by Schmid Mast et al.[7], with its focus on

biomedical aspects and disregard of emotional and psychological aspects. This also fits with the practitioner component of the PAPM as the practitioner has gained knowledge, but has not had the opportunity to practice and reflect upon the use of that knowledge within a consultation context[10].

Finally, following the experiential learning methods alongside detailed self-analysis and reflection, patient satisfaction with clinical communication was increased and the third consultation also achieved a high patient-centeredness score. This could be a result of the participant becoming a reflective practitioner[10]. The student participant facilitation behaviour increased, whilst the proportion of student utterances categorised as biomedical patient counselling utterances were lower than consultation two but not as low as consultation one. Meanwhile the simulated patient used more rapport building emotional communication and provided more lifestyle / psychosocial and biomedical information increased, whilst exhibiting less rapport building positive communication. This style of communication achieves a balance, with an increased amount of patient engagement, biomedical understanding and emotional rapport building, which is essential to a patient-centred approach to breaking bad news[7].

This study has several limitations which should be acknowledged when considering the results. As it is a case study it is difficult to generalise findings, however this study does have sound theoretical underpinnings which influenced the design of the intervention and results are in line with those hypothesised. Another limitation is that, due to the design of the intervention, the researcher coding the communication behaviour was the participant. However, that individual was blinded to the PAPM until after the final consultation had been completed and coded, thus reducing potential bias.

Conclusion

This study therefore highlights a model, the Practitioners in Applied Practice' model (PAPM)[10], which can be used alongside the SPIKES framework[9] in achieving improvement in clinical communication behaviour following a breaking bad news clinical communication training intervention. However this study adds to the literature in that the actual clinical communication behaviour changes which occurred during the training intervention were explored in detail and were shown to match recognised approaches to breaking bad news, as described in previous research[7]. The process outlined within the PAPM could be applied in different clinical communication context, however as this is a case study, further research would be required on a larger scale to examine its generalisability.

Notes on Contributors

Rose Dunning, BSc (Hons) St Andrews, is an undergraduate MB ChB student continuing her clinical training at the School of Medicine, University of Manchester, UK.

Dr Anita Laidlaw, BSc (Hons), PhD, is a Principal Teaching Fellow with an interest in research in healthcare communication and medical education research, School of Medicine, University of St Andrews, UK.

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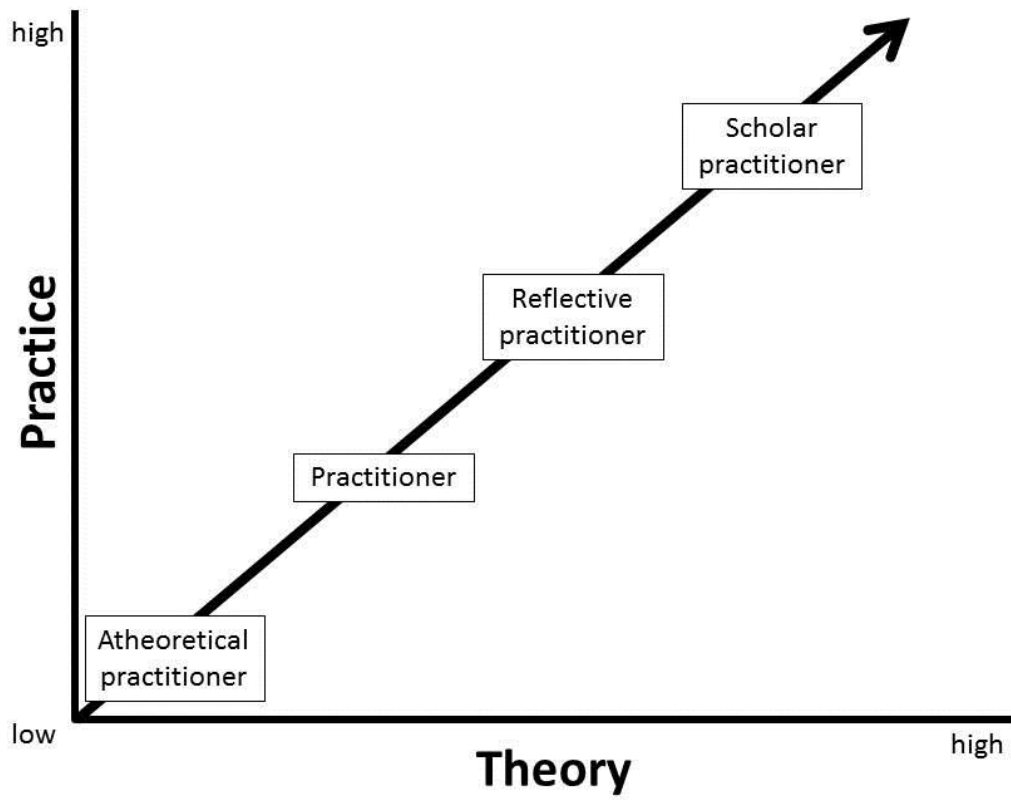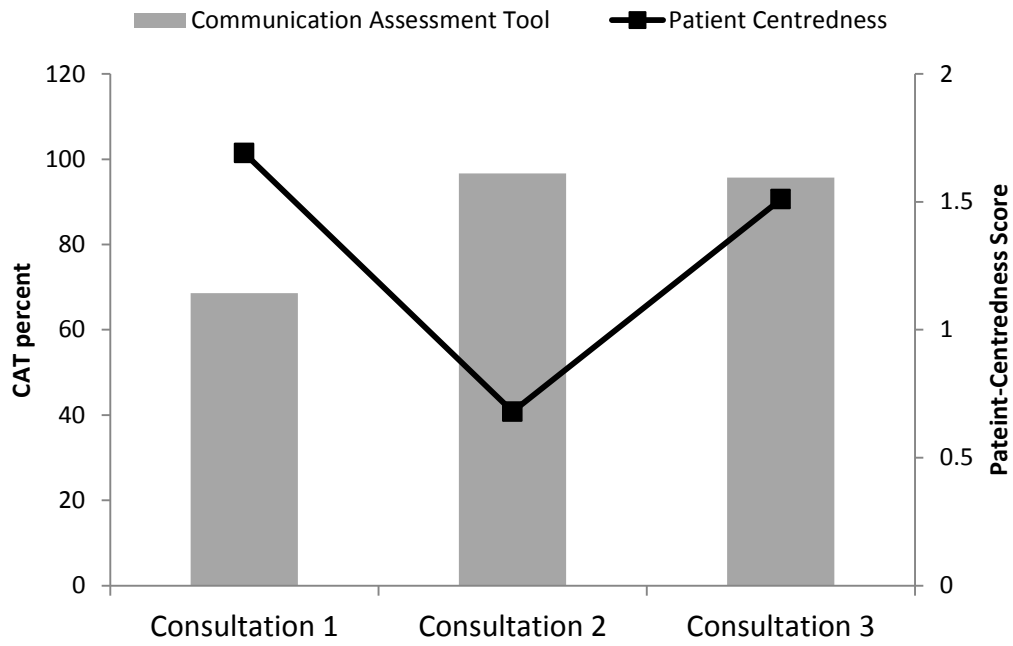
Figure 1: The Practitioners in Applied Practice Model (Ruona & Gilley 2009).

Figure 2: The Communication Assessment Tool (CAT) percentages and RIAS based patient-centredness scores for all three consultations.
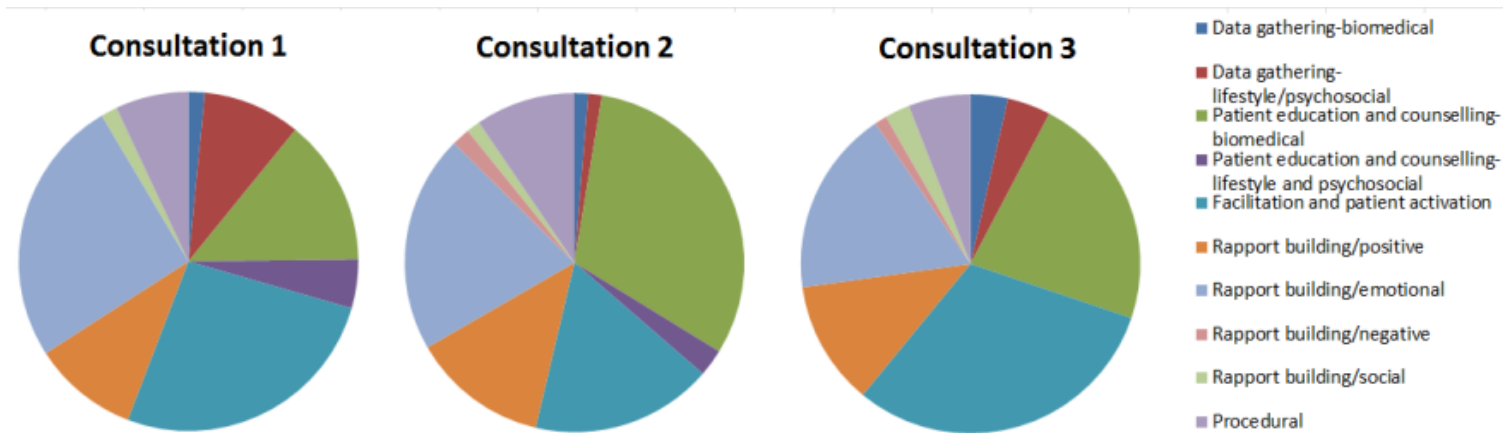
Figure 3: The percentage of student participant RIAS utterance codes for all three consultations.
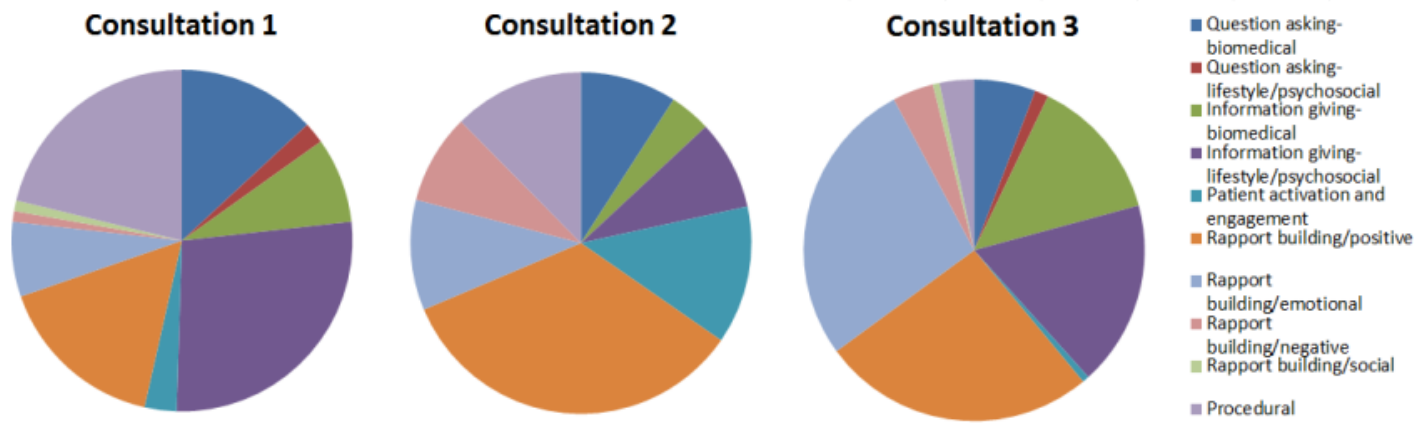
Figure 4: The percentage of simulated patient RIAS utterance codes for all three consultations.