

Communication: Preparing undergraduate radiation therapy students for initial clinical patient interactions



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ABSTRACT

Introduction: Radiation therapy students need to demonstrate appropriate communication skills when entering the clinical environment. To assist students with preparation for their first clinical placement a clinical reasoning module comprising theory and practical sessions was developed. This paper describes the module and presents the results of student evaluations.

Methods: The module consisted of lectures, observational role-play and participatory role-play. Students were ultimately tasked with providing information to a simulated patient (SP). Each student received feedback independently from the SP, peers and facilitator. At the conclusion of the module, students had the opportunity to provide feedback via an anonymous survey (8 Likert scale questions with space for written comment). Data was analysed both quantitatively and qualitatively.

Results: Four hundred and thirty seven students were enrolled in the course between 2008 and 2016 and the response rate of the survey was 93%. Even though most students reported some level of anxiety before and during the role-play sessions, the majority of students perceived all aspects of the module to be extremely/very useful. The most useful aspect of the module (Likert scale assessment) was the feedback provided by the SP. The two most important themes arising from the thematic analysis were gaining an understanding of the role of the radiation therapist and the complexities of patient interactions.

Conclusion: Overall, the module was deemed successful with students becoming conscious of newly acquired clinical knowledge whilst acknowledging patient feelings during interactions. Collaborative critiquing contributed to students' ability to self-reflect to improve clinical interactions.

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Introduction

Communication involves the exchange of information between two or more parties. This can be of visual, verbal or non-verbal forms. Effective communication in the health setting requires the mutual understanding of a message between the health provider and the patient and is an essential skill for all medical professionals.¹ This helps to reduce patient anxiety and concerns and maintains their psychological state.² Radiation therapists (RTTs) are expected to be skilled communicators and to be able to collaborate with patients and health professionals to deliver quality health

care.³ Undergraduate radiation therapy (RT) students are also expected to demonstrate appropriate communication skills when entering the clinical environment.⁴ Shuid et al. (2015) reported benefits of learning communication and collaboration skills prior to clinical placement in allowing students to gain experience and confidence.⁵ Additionally, individual feedback allows students to reflect on their skills and identify areas for improvement before their first contact with patients.

Clinical feedback is provided to students by clinical staff while on clinical placement.^{4,6} While this is significant in assisting student communication development, patient feedback can provide a unique perspective.⁶ Whilst it is unrealistic for patients to continually provide performance-related feedback to students, the concept of utilising actors (simulated patient (SP)) to provide feedback within a controlled environment is a more feasible option. Essentially, simulating patient-student interactions in an educational

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setting has been shown to offer a myriad of benefits in improving student communication capabilities.⁷

Communication skills training for students and health professionals can be taught via a number of methods; instruction, modelling, role-play, feedback and discussion.⁴ Of these, role-play exercises have proven to be useful in teaching communication and collaboration skills and reflective thinking to midwifery, nursing and medical students.^{2,8,9} Role-play can include using students or actors playing the role of patients and has been in use in medical training for over 40 years.^{6,7} It provides students with exposure to the patient/clinician interaction without detriment to the patient whilst being supported by an experienced facilitator.^{7,10} Dungey and Nesar (2017) reported that feedback from the SPs facilitates student reflection by gaining insight into the experience of the patient, as students do not usually receive information from 'real' patients in the clinical environment.¹¹ Apart from Dungey and Nesar's 2017 study, there is no other evidence confirming the successful use of SPs within communication skills training for undergraduate RT students.

At The University of Newcastle, first-year RT students undertake a clinical reasoning module, embedded within the Professional Methods Radiation Therapy Course. The objective of the module is to assist students with preparation for clinical placement.

This research paper is divided into two parts; the first part discusses the development of the clinical reasoning module, the second part assesses student perception of the module via an anonymous survey.

Aim

The aim of this study seeks to evaluate the effectiveness of the clinical reasoning module as a successful tool in teaching communication skills to radiation therapy students.

Methodology

Study participants

The participants were students enrolled in the first year Professional Methods RT course at The University of Newcastle between 2008 and 2016. A total of 437 students enrolled in the course. Ethical approval for this survey was granted by the Institute's Human Research Ethics Committee under their quality assurance scheme (QA64).

Development of clinical reasoning modules

The objective of the module was to equip students with communication skills, critical thinking and preparedness with real patient interactions before entering the clinical environment. The module was developed using evidence-based theories.¹⁰

Elements within the Module included:

- Didactic lectures
- Observational and preliminary participatory role-play sessions
- Participatory role-play sessions

Didactic lectures

Two 1.5 hour lectures were given on the theory underpinning effective communication and clinical reasoning. These included a definition of clinical reasoning followed by facilitating five key components of effective communication. These were:

- active listening
- framing and presenting the message

- matching the audience
- self-monitoring
- awareness, capability and clarity.

The lectures ended with content on the barriers to effective communication.

Observational and preliminary participatory role-play sessions

Students were provided the opportunity to observe two experienced clinicians (RTTs) role-playing a pre-simulation and pre-treatment education session with one RTT acting as the patient. Discussion was generated around different questions that might arise with a patient. One objective of the session was for students to learn what takes place within standard simulation and treatment sessions. Students were then paired up and tasked to use this new information to practice role-playing the patient and RTT, whilst providing feedback to each other over a two hour period. The roaming facilitator provided regular feedback.

Participatory role-play sessions

Six different "patient" scenarios were prepared reflecting on clinical cases typically encountered (Table 1). Recruited SPs assumed one of the six patient personas. In 2008, the SPs were played by coached individuals from the community. In subsequent years, SPs were played by senior RT students, RTTs or community members. SPs were provided details about clinical reasoning and how important these skills are to health professionals. Actors were also provided with details regarding their symptoms, diagnosis and social situation so the interaction would be organic, based on student interactions. Preparation of senior RT students and RTTs was less complex as they had 'industry' experience based on professional experience.

Students were provided with a background history about each of the patients' prior to the sessions. Students were tasked with educating the SP with information usually provided at pre-simulation or pre-treatment sessions. This included initiating the conversation by way of introducing themselves, discussing and explaining the information, addressing questions raised by the SP, and building a relationship/rapport with the patient. All aspects of the interaction would utilise students critical thinking skills to be able to problem solve some of the issues the SP may raise.

Within the four hour session, students were divided into groups of four. All students were required to participate in 2–3 scenarios. Within each group, one student was nominated to provide RT related information to the SP; the remaining students were instructed to observe and provide feedback. Students took turns until all students had completed an interaction. The roaming facilitator provided regular feedback to each group. Students' performance was independently critiqued according to the information given and quality of the interaction with the patient by the facilitator, their peers and the SP.

Student feedback on module

The module incorporated an optional and anonymous survey to encourage students to self-reflect on the usefulness of the module. The primary purpose was to establish if the style and function of the module met learning objectives. The survey included a total of eight questions; each question contained a Likert Scale response and an open-ended question for written comments (Table 2).

Quantitative data was analysed using the Likert Scale scores. Data analyses was conducted using SPSS Statistical program (IBM SPSS, V24.0). Kruskal-Wallis H Test (one way ANOVA on ranks) was used to assess any statistical differences across years. Post-hoc analysis was performed using Mann-Whitney and statistical significance was established as 0.05.

Table 1
Simulated patient scenarios for communication labs.

Cases	Scenario
Case 1	60 y F Nasopharyngeal cancer T1NoMo, smoker, drinker
Case 2	35 y F Early Breast cancer, a single mother of 3 children
Case 3	62 y F Basal Cell Skin Cancer, frail and early-stage dementia
Case 4	25 y M Anaplastic Astrocytoma, Left parietal region. Surgical excision, ECOG 0
Case 5	30 y F Adenocarcinoma of the Cervix Stage 1B. Overall, Poor health, completed all External Beam Radiation Therapy, about to start Brachytherapy.
Case 6	35 y F Early Breast cancer, a divorced businesswoman from a rural area.

Table 2
Survey Questions Provided after the lab sessions.

- Q1. Did you find the preparation leading up to the clinical reasoning tutorial to be helpful (including readings, case scenarios, and in-call role play)?
 Q2. Do you believe today's tutorial helped you to better understand your role as a radiation therapist with regards to patient care/clinical reasoning?
 Q3. Please rate the organisation of the labs (e.g were they well organised and paced).
 Q4. Do you believe receiving feedback from your peers was a helpful way to identify your strengths and weaknesses?
 Q5. Do you believe receiving feedback from the simulated patient was a helpful way for you to identify your strengths and weaknesses?
 Q6. Do you believe receiving feedback from the facilitator (lecturer) was a helpful way for you to identify your strengths and weaknesses?
 Q7. Overall, how would you rate your experience today?
 Q8. Please rate your level of anxiety leading up to this tutorial.

Qualitative data from the written comments were analysed using thematic analysis. A range of codes were derived and reviewed individually by two independent researchers. Codes were categorised into sub themes. Sub-themes were then grouped into main themes. Any disagreement in coding was resolved through discussion by the researchers.

Results

A total of 319 out of 342 students (93% response rate) completed the evaluation survey (Table 3). The 2009 and 2010 student cohorts were not assessed.

Quantitative analysis

Overall, students indicated that the clinical reasoning module was successful (Table 4). Students reported the preparation leading into the role-playing sessions to be “extremely helpful” (37.6%) and 45.8% reported the preparation to be “very helpful”. Ninety-five percent of students rated the organisational structure of the laboratory session (using small groups and the variety of feedback) as “extremely helpful” or “very helpful”.

Students' absence of clinical exposure at this point was evident as 69.2% of students reported understanding the role of the RTT was “extremely helpful” when having to step into the role of a clinical RTT. Feedback from all three sources was appreciated as evidenced by the strong results. Students rated feedback as “extremely helpful” from the SP (76.9%), facilitator (72.7%) and student peers (62.1%). Students were asked to rate their level of anxiety going into the laboratory sessions and responses demonstrated a full range of

Table 3
Enrolments and survey response rates.

Year	Number of Year 1 RT students	Response rates	% Response rate
2008	41	33	80.5
2009	44	not evaluated	–
2010	51	not evaluated	–
2011	57	44	77.2
2012	59	57	96.6
2013	36	36	100
2014	52	52	100
2015	53	53	100
2016	44	44	100
Total	437	319	93%

results. Seventeen percent of students were “extremely anxious” with just over 3% of students reporting to be “very relaxed”.

The weighted sum average was calculated for the Likert Scale scores (Fig. 1). The responses extremely helpful/organised/interesting/anxious was weighted as a 6 and waste of time/poorly organised/very relaxed was weighted as a 1. The analysis allowed the ability to rank questions and ultimately allow comparison of feedback from the SP, the facilitator and peers. The “Feedback from the simulated patient” with a score of 5.75 ranked first, followed by “Understanding the role of the RTT” with a score of 5.64.

To observe any differences in student perceptions across years, the Kruskal-Wallis H-test was performed (Table 5). There were extremely significant differences between years ($H = 52.1$, $p < 0.0001$) and the post-hoc analysis revealed that the 2014 responses were significantly lower against other years. This indicated students reported the module to be less helpful that year. To determine what aspects of the module were considered less helpful, the analysis was repeated for each question (Table 5). The “mean of ranks” is presented to account for the difference in student numbers in each year. Only two questions did not trigger significance and these were “feedback from the facilitator” and “Anxiety”.

Qualitative analysis

The written comments revealed six major themes. These were:

1. Exposure to the RTT role associated with patient interactions
2. Understanding the complexity of “patient” interactions
3. The ability to self-reflect and
4. Learning from peers
5. Preparation/Organisation of the module
6. Anxiety

Exposure to the RTT role associated with “patient” interactions

The students were able to gain insight into what the role of the RTT is, in relation to what a potential interaction with a cancer patient might be like.

“It certainly helps with our understanding of what will happen when we go on placement, what to expect and what patients will be like” (P35, 2008)

Students are yet to enter a radiation oncology department, so using terminology, and discussing patient related procedures with

Table 4
Student evaluation scores for all years combined.

Category	Extremely Helpful	Very Helpful	Somewhat helpful	Helpful in parts	Not very helpful	Waste of time
Q1 Preparation	37.6%	45.8%	14.1%	1.6%	0.3%	0.6%
Q2 Understand role of RT	69.2%	26.1%	4.4%	0.3%	0%	0%
Q4 Feedback from Peers	62.1%	29.5%	6.3%	2.2%	0%	0%
Q5 Feedback from simulated patient	76.9%	21.5%	1.6%	0%	0%	0%
Q6 Feedback from facilitator	72.7%	23.5%	3.8%	0%	0%	0%
Q3 Organisation	Extremely well organised	Very well organised	Somewhat well organised	Organised in parts	Not very well organised	Poorly organised
	49.2%	45.1%	5.7%	0%	0%	0%
Q7 Overall experience	Very interesting	Interesting	Not interesting	Dull	Boring	Waste of time
	62.7%	37%	0.3%	0%	0%	0%
	Extremely anxious	Very anxious	Slightly anxious	Anxious but prepared	Not anxious	Very relaxed
Q8 Level of Anxiety	17.1%	31.6%	29.6%	13.5%	4.9%	3.3%

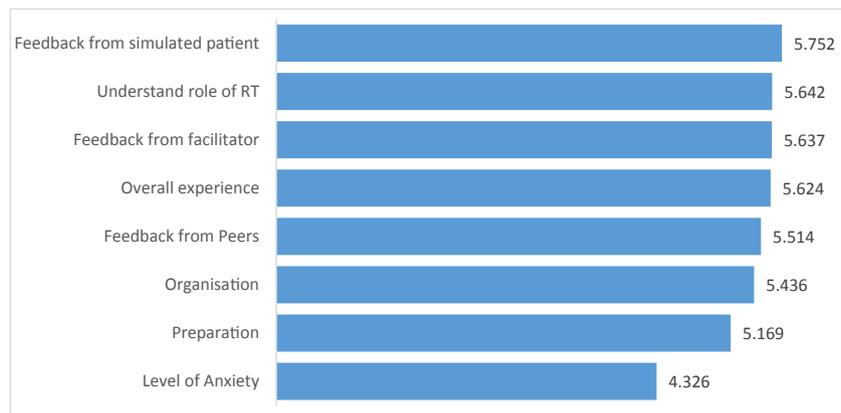


Figure 1. Average Weighted Mean of all questions for all years.

Table 5
Mean of ranks values identifying differences in Likert scores between years and questions.

Year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	TOTAL
2008	183.06	159.64	158.56	187.8	149.75		177.04	163.56	1294.3
2011	158.15	147.76	146.81	176.49	161.56		140.55	170.99	1193.9
2012	139.64	165.1	157.32	157.91	154.49	125.42	140.08	167.18	1202.7
2013	171.31	174.83	178.29	170.76	161.46	131.44	165.36	147.94	1293.1
2014	141.81	128.09	127.46	139.05	121.94	106.24	109.77	132.23	1030.8
2015	172.63	167.83	184.23	159.7	163.19	124.24	177.16	159.75	1295.2
2016	168.08	178.2	172.31	142.08	155.81	112.29	173.38	128.87	1241.2
H-Statistic	10.308	15.803	16.78	12.663	14.984	6.888	33.443	10.783	52.125
p-value	0.11	0.015	0.01	0.0487	0.0204	0.1419	<0.0001	0.0953	<0.0001

The “mean of ranks” is presented here instead of ‘sum of ranks’ to allow for the different number of responses each year.

the “patient” allowed for an authentic experience that the students reported to be helpful.

“It was ... a very beneficial experience. I felt it simulated the radiation therapy workplace really well and had helped build my knowledge and confidence” (P41, 2012)

Understanding the complexity of patient interactions

Students understanding of the “patient” unfolded as the interaction took place and the patient was able to reveal their emotions and feelings about their situation through some difficult questions they asked the students.

“Yes, they let us know how they felt in relation to the questions they were asked- raises awareness for me” (P46, 2012)

Feedback was provided to the students from the “patient” after the interaction, which appeared to have a big impact on the student’s perceived success.

“You want to make the patient feel as comfortable as possible so they have the confidence in you, good to see how you came across” (P13, 2008)

In the situation where a third-year RTT student played the role of the patient, this comment was made;

“Especially, Harry (pseudonym), as he is an RT student, drew from his past knowledge to really help us understand what real patients will be like. (P15, 2008)

Self-reflection on performance

Self-reflection can be defined as serious thought about one's character and action. This theme encompassed a number of sub-themes as follows;

- consideration of individual student strengths and weaknesses,
- building confidence and broadening perspectives in relation to patient interactions,
- knowing what to do and how to improve.

Students appeared keen to have the interaction and to receive constructive feedback to determine their level of success as well as wanting to know how to improve for next time.

"I feel much more confident and can appreciate how we have to be more engaging in communication than I originally thought." (P119, 2013)

Learning from peers

Learning from others' success and mistakes appeared to be a powerful technique to learn, correct and deliver appropriate communication methods as the sessions progressed.

"It was good to be able to see the feedback for everyone else and being able to take on their feedback as well as your own" (P34, 2012)

Student evaluation suggests the confrontation of revealing honest thoughts on someone else's performance were too difficult for some students.

"Peers were reluctant to give negative feedback or constructive criticism" (P151, 2015)

Preparation/organisation of the module

Students were able to observe the scaffolding of lectures, observational and participatory role-play to prepare them for their encounters with the SPs.

"I found the clinical reasoning notes coupled with the patient case files to be very useful and helpful in preparation for our task. It is impossible to predict the human factors of patients, but that is no fault of the notes and can only be gained through experience." (P72, 2012)

Students also commented on the size of the groups, the structure, layout of the session and the timing to achieve the preset goals.

"a good amount of people in each lab. Not too fast paced. Had plenty of time to learn and absorb new information" (P63, 2013)

Anxiety

There were students that were so overcome with anxiety it appeared to affect their normal daily functioning, where others felt very comfortable about the situation.

"I did not eat all day because I felt sick" (P57, 2012) and

"... had knowledge of the patients and what to include for each patient. Rather relaxed about the meetings" (P69, 2013)

Students appear to react to anxiety and potentially highly stressful situations differently. Whilst every measure is made by the facilitators to make students as comfortable as possible (student comments acknowledge the comfort and support of lecturers), it appears student outcomes are unpredictable.

Discussion

This study aimed to assess the effectiveness of a clinical reasoning module that first-year RT students undertake in preparation for their first clinical placement. The students reported the module was extremely helpful and were receptive to the feedback via collaborative critique contributions of the SP, their peers and facilitator. The in-depth analysis of the survey results have both highlighted what is working well and provided suggestions for improvement.

Preparedness and organisation

Meticulous planning, organisation and coordination by the facilitators' had a two-pronged effect; it ensured students achieved desired learning outcomes as well as feeling personally successful with their own newly developing communication skills and self-confidence.

Using a mix of theoretical lectures, observational role-play, authentic patient cases and SPs appeared to appeal to students thinking and learning styles. This is consistent with Gysels et al. (2005)¹⁰ recommendations from a systematic review that providing a range of different learning mechanisms including instruction, modelling, role-play opportunities and discussion promotes learner-centred experiences at the same time introduces the concept of patient-centred care, all within safe learning environments. Student comments were reflective of the process of the scaffolding within the model confirming this is a sound approach to adapt.

Gysels et al.¹⁰ also suggested providing opportunities for constructive feedback from peers and facilitators, and small groups of 5 or 6, encouraging more intensive participation. The clinical reasoning module included all of these suggested elements, however, feedback from the SP was included as an additional resource of feedback. This addition was highly regarded and evidence from the highest student ranking, perhaps adding more authenticity to the patient scenarios.

Role of the RTT

The role of the RTT was a strong theme with written comments demonstrating that many students were unaware of the some of the daily tasks an RTT engages in. Students, therefore, had to quickly learn some of these in enough detail to describe them to a patient whilst demonstrating newly learnt communication skills, such as empathy. The simple reflections students revealed through written comments regarding the RTT role align with Chapman's¹² thoughts that RTT practitioners can easily incorporate reflective practice into their daily practice, thus promoting experiential learning.

Feedback

Quantitative analysis identified that although all sources of feedback were useful during the collaborative critiquing experience, students valued feedback from the SP the most. The Kruskal-Wallis H-test returned an extremely significant difference ($H = 18.96$, $p < 0.0001$) between the three different sources of feedback.

The critical value of SP feedback in role-play scenarios was confirmed by Bokken et al. (2009). This was a systematic review confirming the value of the SPs perspective in providing unique patient-centred feedback.¹³ The strength of the results from within this study as well as Dungey and Nesers' (2017) research confirms that utilising SPs with communication training for radiation therapy students is a successful method.

The researchers could not identify interactions from specific SPs (community members, senior RT students, RTTs) conclusively. The

strength of student interaction may determine how much feedback, both positive and constructive the student received. This may also be variable from student to student and between SP to SP. Bokken et al. (2009) further notes that although recommended, generally only 25% of SPs provide feedback from the patient's perspective. The remaining SPs tend to provide feedback on both clinical and communication skills. Feedback on clinical and communication skills is still considered essential, therefore Bokken et al. (2009) recommend that SPs provide feedback on all three areas; patient perspective, clinical instruction and communication skills. The results from this research are therefore consistent with Bokken et al. (2009) where there are no clear standards for training SPs in providing feedback and therefore interactions are largely heterogeneous. As feedback detail is immeasurable within the scope of this research, it could be surmised that this uncertainty would be present in each student interactions due to the SP variations unless there was prepared, tight constraints of feedback given to SPs prior to the role-play session. Results presented in Table 5, question 5 demonstrates whoever played the SP did not change perceptions of students across years. This is evidenced by the mean of ranks being quite similar with the exception of 2014 result. SP feedback ranked first in the average weighted mean analysis as well confirming a strong result regardless of who played the SP.

Results pertaining to receiving feedback from the facilitator was ranked in third place. Facilitators require an awareness of the issues and barriers associated with poor student experiences within interactive laboratories sessions as Mubuuke et al. (2017)¹⁴ outlined, factors such as overloaded feedback, perceived limited knowledge of topic of the facilitator, and feedback differing across tutorial groups can be avoided. Given the overall rank the facilitator received within this study, there is little doubt these factors were already largely acknowledged and particular preparation was made to avoid them from occurring.

Evaluating students' perception receiving feedback from their peers on their strengths and weaknesses was also interesting. Student's comments revealed the reluctance of peers to speak honestly during opportunities to provide feedback within the groups. Dungey and Nesar (2017) also established within their study that students reported receiving verbal feedback to be challenging, particularly when students were randomly assigned to groups where people were unfamiliar.

While feedback given directly by the SP is a highly valued source when compared to the facilitator and peers, providing feedback using a collaborative approach proved to be successful as students reported to enjoy hearing different perspectives and observations of the same interaction. Expansion of professional knowledge and personal growth of students through reflection has been enhanced through the various interactions.

Anxiety

Anxiety ratings covered the full range from 'extremely anxious' to 'very relaxed' with the majority of students indicating a mid-range score. LeFebvre et al. (2018)¹⁵ reported when cataloguing student fears on public speaking, 23% of students expressed fears about their own performance during public speaking, in particular as related to their inability to regulate different necessary aspects of themselves.

Overall experience

The overall experience question was deemed extremely significant ($p < 0.0001$) when comparing the mean of ranks across all years, in particular students in 2014 were less satisfied than other

years. There were very few written comments in 2014, it is possible students felt less engaged with the process that year and were less inclined to write a reflective comment. However, quantitative results for all years rated the overall experience very strongly. This may explain why it was ranked fourth in the average weighted mean analysis.

Thematic analysis

The themes identified in this research were supported by Dungey and Nesar (2017)¹¹ where three reported themes were extremely similar.¹¹ The overlapping themes include learning from peers, self-reflection and preparation for the clinical environment. This confirms that although the communication training methods may be have been slightly different, the same reflections, emotions and anxieties were felt when students were placed in similar role-play situations.

Impact of facilitator on training outcomes

In 2014, students rated the communication modules lower than students in other years. Further investigation revealed that a different facilitator led the communication laboratories in that year. This facilitator had very limited prior experience in facilitating interactive sessions. The facilitator's impact on the student experience is therefore fundamental and is evidenced by our analysis.

Limitations

One of the main limitations of the research was that information was not collected on who was playing the role of the SP. While details provided within the evaluation comments provided hints as to who the students did interact with, it was not possible to perform analysis on this. It is fair to suggest all groups of people stepping into the SP role, came with differing agendas and set of experiences. This can have a bearing on the experience the student may have during the interaction and is worthy of future research.

Facilitator training was enabled via a verbal description of the laboratory sessions initially and the facilitator could use discretion and experience to enhance the session. On reflection, the development of supportive material and training for any facilitator is warranted and recommended.

Other limitations were that the clinical reasoning module had very few changes from the time of inception in 2008. This is a one-model, single university study, which limits the amount of variation observed.

Future directions and recommendations

Further research into assessing the students' own opinions and interpretations as to their preparedness and assimilation into the clinical environment with respect to their communication skills is warranted post clinical placement. As a follow on study, the researchers have identified that students should be surveyed and/or interviewed following their first clinical placement. This will provide students with another avenue to provide feedback and an opportunity to perhaps make changes to the structure of the module.

Summary

The themes identified through this analysis have confirmed some students were beginning to think and feel for the position of the patient and consider the impact their interaction has on the

patient, in real time. This is consistent with Chapman's¹² research relating to reflective theories of how radiation therapy practitioners may make the link through reflection from unexpected outcomes from an event to influence future actions of the next event, known to be "reflection in action". In this case students are quickly reading the patient and changing their behaviour based on conscious decision making. Students were conscious of newly acquired clinical knowledge and its impact on educating the patient, and interpersonal skills to ensure the patient felt comfortable and calm whilst the interaction took place. The realism of the SP assisted the student to understand what some patient encounters can be like and they had to think on their feet to ensure patient needs were met, just as in the clinical environment. The proposition of this thinking fitting into Chapman's¹² suggestion of reflecting on a clinical event and combining it with imagination to assist with avoiding future clinical errors; consideration of what went well, what can be improved and what they can do to improve when faced with a clinical situation.

Conflict of interest statement

The authors declare there is no conflict of interest.

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