Using Simulation based learning to develop the confidence and competence of undergraduate Speech and Language Therapy students in Dysphagia practice.

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Our Clinical Research Culture: research-led teaching

The Brief……

- A need to offer increased dysphagia learning experiences.
- We knew this from student feedback and from SLT managers' survey in NW region
- There was also a change in the demands on students whilst on placement
- The aging population and increases in dysphagia caseloads across the lifespan have changed to demands of clinical caseloads in the profession
- Dysphagia preparedness is a challenge and a workforce gap

Teaching

- Historically teaching on campus has been theoretical in focus while practical learning and application of theory was introduced on placement.

- This leads to variability in –student confidence, -practice educator confidence, -placement availability, -skill and experience of practice educators and finally – quality learning opportunities for students

Learning Theories

- Constructive alignment (Biggs and tang)
- Experiential learning (Kolb)
- Constructivism (grounded in Piaget's theory of Constructivist learning)
- Spiral curriculum (Bruner)

Simulation based learning

- Widely used in healthcare; offers a way of developing student's knowledge, skills and behaviours whilst protecting patients from risk
- Evidence based approach to teaching and learning in other disciplines
- Lateef (2009)reports it to be a technique used to replace and amplify real experiences and is often immersive in its nature
- Limited use to date in SaLT but there is emerging research evidence supporting its use (Hill et al, 2010)

What is simulation based learning?

- Takes many forms including;

- Simulated patients (actors/ ‘real’ patients)

- Use of equipment

- Virtual realities

- Ward et al(2015) used simulation with paediatric dysphagia with very positive outcomes and feedback from students

- Miles et al (2016) utilised simulation based learning in dysphagia training with students reporting improved confidence, preparedness, knowledge and inter-professional knowledge

Blended Simulation Approach

- Sessions designed to run as clinical placement experiences rather than didactic or workshop sessions
- Use of the Medical School Clinical Simulation suite to promote integrity of the learning experience & to prepare students
- Lecturers as Practice Educators
- Real patient footage and information

Partnership working opportunity

- Local NHS trust with interest in learning
- Patient recruitment opportunity
- Staff engagement and participation

Outcome Measures

- Dysphagia skills rely on meeting specific competencies. However due to the ethical, emotional and pragmatic skills involved we felt it was also important to focus on training SLTs for capability and not just dysphagia competence.
- Pre-Simulation Students reported agreement/ disagreement with statements relating to their knowledge, ability, confidence and anxiety of dysphagia.
- Repeated Post Simulation.

Outcome Measures

	Positive Agreement with statement	Percentage of students
Knowledge	18/23	78%
Ability	6/23	26%
Confidence	10/23	43%
Anxiety	13/23	56%

Table 1: Pre-Simulation reporting

	Positive Agreement with statement	Percentage of students
Knowledge	23/25	92%
Ability	23/25	92%
Confidence	24/25	96%
Reduced Anxiety	24/25	96%

Table 2: Post simulation reporting

Qualitative Feedback

- Approaching the teaching session in a naturalistic fashion has a number of benefits – firstly, it makes clinical practice less daunting by introducing the setting and considerations in a safe environment before you apply the learning in the real world.
- Secondly, it gives you a good idea of what the expectations will be of your understanding when you engage in clinical practice, particularly when it comes to screening medical notes to form hypotheses.
- Finally, I found that the standard teaching sessions on dysphagia were very theoretical, which made achieving praxis seem much, much more complex than I have actually found it to be. The simulation session undid some of the feeling of being “blinded by science” created by the other lectures, and also rendered the other lectures more effective by providing a practical scaffold for the information I gathered from them

Future Plans

- Dysphagia curriculum review for BSc 3 SaLT programme to incorporate simulation based learning as core teaching methodology
- Developing Simulation Based Learning approaches within other course units on the BSc 3 SaLT programme at the UoM
- Securing research funding to evidence the impact of changing the teaching method.

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