

Preparing Undergraduate Physiotherapy Students For Clinical Practice Through The Use Of Simulation



Martyn Wyres, Associate Lecturer
ac4949@coventry.ac.uk



Purpose

Undergraduate Physiotherapy students are required to undertake 1000 hours of clinical placements prior to graduating. Clinical placements can cause high levels of anxiety for students especially before their first placement. The evolving and dynamic role of a Physiotherapist requires students to work in a range of locations and within a multidisciplinary team. My aim was to reduce student anxiety towards clinical placements, specifically community working through the use of simulation. It is hoped that this will allow students to feel more confident towards clinical practice and Inter-Professional working. Simulation involves replicating clinical experiences within a safe learning environment.

Methods

Two separate simulation events recently took place at Coventry University, both of which Physiotherapy students had the opportunity to attend. The first was a Physiotherapy Uni-Professional event (seen in green below) that took part in the simulated Community House and focused on developing students clinical reasoning and self confidence within a non hospital/clinic setting. The second event used Inter-Professional Education (seen in orange below) and required students from a range of healthcare courses to work in collaboration to develop skills in four key areas.

Uni Professional Event

As part of the Physiotherapy curriculum second year students took part in a neurological simulation teaching session within the Community House. Students were randomly allocated into groups of five and worked on four tasks within the two hour teaching session.

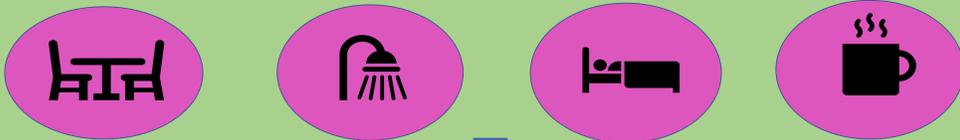
A pedagogical approach of problem based learning incorporating a flipped classroom element was applied within this session. This element involved the students watching a video clip that showed a patient struggling to mobilise within a small flat.

On arrival to the teaching session students were informed that the video clip was from 2 weeks ago and the patient has since had a stroke resulting in left sided weakness. Within session they would be performing a home visit with the simulated patient.

Patient Video

Disruption

Patient was hospitalised following a Stroke and is now returning home



Staff Led Debrief



Inter Professional Event

Physiotherapy, Occupational Therapy and Dietetic students from all three year groups were invited to attend an extra curricular simulation event. To register for the event they accessed a webpage that allowed them to see the titles of the simulation stations (see below) and select the time slot and stations they wanted to attend. Each simulation station focused on an important skill required for working clinically.

On arrival students found themselves in groups of six and collaboratively worked for 15 minutes at the simulation station. This was followed by a 15 minute staff facilitated debrief.

Students were able to attend any combination of the stations that they felt were relevant to them.

Ethical decisions on a simulated ward setting

Virtual reality experience of an aggressive patient

Station 1
Values/Ethics

Station 2
Roles and Responsibilities

Station 3
Communication

Station 4
Teamwork

Sim Man 3G
ITU weaning
MDT discussion

Amputee patient returning home

Results

Students were asked to anonymously provide words that represented how they felt towards working in a community setting, this was done at three different stages.

The most common words were –

- Pre simulation session = Nervous
- Post simulation session = Excited
- Post first community placement = Challenging

The most commonly reported barrier to performance on placement was self reported reduced confidence levels.

Following each simulation station students gave anonymous written feedback.

Key findings =

- 100% found it to be an effective learning experience
- 54% found it useful to work with one other profession at a time
- 46% said they preferred to work with both of the other professions at the same time

Conclusions and Implications

Students found both types of simulation beneficial in preparation for their clinical placements. There was a slight preference within the Inter Professional simulation tasks towards working with only one other profession at a time, it could be suggested that this may be due to possible information overload within the simulation task. Further research is required to establish the reasoning behind students preferences and to explore the impact of group dynamics within collaborative simulation.

Physiotherapy Uni-professional simulation within a community setting appears to reduce student self perceived anxiety towards community based clinical placements. This is an important development as community working is increasingly common for Physiotherapists working within the healthcare system. It also highlights reduced self confidence as an important factor in student performance on placement. Further research is needed to explore the impact of simulation on clinical effectiveness on placement.

Simulation in higher education is having significant implications on the profession, by enabling students and clinicians to develop skills within a safe learning environment.