



# Education Horizon-Scanning Bulletin - August 2019

Compiled by John Gale,

JET Library – Mid-Cheshire NHS

Foundation Trust and edited by

Michael Reid, Blackpool

Teaching Hospitals

| Contents  |    |
|---|----|
| General Healthcare Education  | 3  |
| Blended learning in the laboratory  | 3  |
| What do students think about looking after the dying?                                   | 3  |
| Mirror, mirror on the wall, who is the readiest for self-directed learning of them all? | 3  |
| Interprofessional Education   | 4  |
| Teamwork and tornadoes in the Mid-West  | 4  |
| Medical Education   | 4  |
| When gaming comes to the histology class  | 4  |
| Online learning in public health  | 4  |
| Why graduates are more likely to take the motorway not the A road                       | 5  |
| E-learning and occupational health  | 5  |
| Getting GPs prescribing better  | 5  |
| Reviewing the evidence on peer feedback   | 6  |
| Pretending to be lost in the system - teaching integrated care to medical students      | 6  |
| Nurse Education   | 7  |
| What do nursing students think about Gypsy Roma Travellers?                             | 7  |
| Blended learning and nursing students. What does the evidence say?                      | 7  |
| Spiritual care competency frameworks – coming to a bedside near you                     | 7  |
| Welcoming nurses into the community of practice   | 8  |
| What do nursing students think about domestic violence?                                 | 8  |
| Reducing attrition in new nurses – part 351   | 8  |
| What do students think caring is?   | 9  |
| What happened when nursing students went to kidney camp?                                | 9  |
| Swapping theatres of war for operating theatres   | 10 |
| Teaching nursing students ethics – is it time to start a debate?                        | 10 |

#### **General Healthcare Education**

#### Blended learning in the laboratory

Source: BMC Medical Education

In a nutshell: Not every medical professional in the NHS works regularly with patients — some of them end up behind several swipe-card protected doors analysing lab samples all day which, according to taste, is a loss of the human contact that makes the job worthwhile or a merciful escape from the general public. Recently a shortage of money, an increasing number of students and limited access to laboratory equipment have meant that those people training to work in medical laboratories have had less contact with trained staff. Blended learning — using online materials as well as traditional teaching is one way around this problem and in this study, Rebecca Donkin from the University of the Sunshine Coast in Australia (who probably don't even have to bother having a marketing department) led a team of researchers examining the effectiveness of blended-learning histology lessons. The researchers found that the students who took part in blended-learning had better practical examination scores and final grades, compared to a control group who had not used blended learning. You can read the whole of this article <a href="here">here</a>.

# What do students think about looking after the dying?

**Source:** Nurse Education Today

In a nutshell: Death happens to everyone yet despite this looking after people at the end of their lives is sometimes regarded as a complex and troublesome specialty best handled by someone else. In this study, Beata Dobrowolska from the Medical University of Lublin, Poland, led a team of researchers studying 213 students' attitudes to looking after the dying. 112 of the students were training to be nurses and the rest were medical students. Half the students anticipated various emotional and professional difficulties in caring for dying people and this was more pronounced among the medical students. Difficulties anticipated pertained mostly to the reaction of family members to the patient's death, addressing the psychological needs of the dying person and coping with their own emotions when dealing with a patient's death. Students thought that working with dying people could be more stressful – again this was more pronounced among the medical students. Most of the students were interested in learning more about palliative care with medical students being keener than trainee nurses. However, the majority of the student said they would prefer not to work in palliative or hospice settings. Reasons for this included: the desire to avoid negative emotions and stress that could be triggered by dealing with death and dying; and feeling that they lacked the required skills and personal abilities to handle such situations. You can read the whole of this article here.

# Mirror, mirror on the wall, who is the readiest for self-directed learning of them all?

**Source:** Nurse Education Today

In a nutshell: Students learn many things at university; don't mix Blue Bols with Webster's Yorkshire Bitter; don't try to cut your own hair and always label your milk in a communal fridge among them. They also learn how to study on their own account without being spoonfed by teachers – 'self-directed learning,' in the pedagogical jargon. In this study, Carolina Rascón-Hernán from the University of Girona, in Spain, led a team of researchers comparing self-directed learning readiness in 865 medicine, nursing, physiotherapy and psychology students. The researchers found that the nursing students had the highest self-directed learning readiness. Associations were observed between degree course and self-directed learning readiness in the learning planning, desire for learning, self-confidence, self-

management and self-evaluation subscales. Women scored more highly than men and students' scores improved with each additional academic year. You can read the abstract of this article here.

# **Interprofessional Education**

#### Teamwork and tornadoes in the Mid-West

Source: Nurse Education in Practice

In a nutshell: For medical staff at times of disaster working together as a team is slightly more high stakes than discussing the fonts on the new Powerpoint over a cup of tea and a chocolate digestive with Gemma down the corridor. In this study, Bethany Murray from Indiana University School of Medicine led a team of researchers studying a simulation exercised designed to mirror the effects of a Level-5 tornado with "massive destruction." The researchers concluded that "the development of critical thinkers who demonstrate intellectual engagement and use evidence in clinical reasoning and decision-making is enabled by live simulation events". You can read the abstract of this article <a href="https://exemption.org/linearity/person-page-12">h

#### **Medical Education**

#### When gaming comes to the histology class

Source: BMC Medical Education

In a nutshell: For those of us brought up on Space Invaders and Pac-Man it seems scarcely conceivable that computer games could be put to an educational use. Things have moved on a bit since then though and serious people are now using – or contemplating using – computer games for medical education. In this study, Szabolcs Felszeghy from the University of Eastern Finland led a team of researchers looking into using an online competition based on gaming software Kahoot® for teaching medical and dental students' histology. The programme was successful and resulted in learning gains. The overall satisfaction was high and the students said that the game had increased their motivation to learn. The gaming approach had helped the student to overcome individual difficulties and set up collaboration as well as promoting interest. The students found getting immediate feedback from senior professionals to be positive and they viewed collaborative, team- and gamification-based learning positively. You can read the whole of this article here.

#### Online learning in public health

Source: BMC Medical Education

In a nutshell: Public health is – put very crudely – the effect of people's environment and choices on their physical and mental health. In this study, Sarah Godfrey from Columbia Vagelos College of Physicians and Surgeons in New York led a team of researchers who developed a web-based curriculum for medical students and then tested its effectiveness. The students received guiding questions and media-based resources (including podcasts, TedTalks and YouTube videos) and were then tested to see what they had learned and asked about their views on public health. 59 students took part in the study and, after completing the five-week curriculum their average score on a multiple-choice test rose from 57% to 66%. The researchers concluded that "the online format allowed for high participation across five different specialty rotations, and community-specific data allowed students to recognise the importance of public health in medical practice".

You can read the whole of this article here.

#### Why graduates are more likely to take the motorway not the A road

**Source:** British Medical Journal

In a nutshell: The path to becoming a doctor isn't always a straight one from A to B. Sometimes people pull over into a layby for a cup of tea, visit a local market town or decide to go to a completely different destination. Sometimes people have done a completely different degree before they start training as doctors whilst other people go straight from school into their medical studies. Jennifer Cleland from the University of Aberdeen, has been leading a team of researchers looking into doctors' paths through the system. The researchers found that over 30% of trainees decide against going straight into specialty training during their second year of foundation training but that trainees who were graduate entrants to medical school were more likely than non-graduates to move straight into specialty training. Most of the trainees behaved in line with their original intentions in their first year of foundation training but 38% of doctors who had the intention to go directly into a training post at the end of the second year of foundation training did not do so. If you have access to the *British Medical Journal* you can read the whole of this article here.

#### E-learning and occupational health

**Source:** BMC Medical Education

In a nutshell: Many people feel queasy on a Monday morning but have recovered after a few cups of tea and some biscuits by Tuesday afternoon. For some though work really does take a toll on their health and for others ill health can prevent them from working. Dealing with these problems is the province of the occupational-health doctors and in this study, Lieke Omvlee from the University of Amsterdam, led a team of researchers asking occupational-health doctors what they would like to see in an e-learning programme. The doctors saw e-learning as useful when it contributed to creating a full clinical picture and supported diagnosis. A programme needed to be applicable to their daily practice and had to incorporate learning tools to increase their competencies. Feasibility was perceived to increase when the e-learning programme took less time to complete, when the quantity of written text was not too high and when the user was guided through the course. You can read the whole of this article here.

#### Getting GPs prescribing better

Source: BMC Medical Education

In a nutshell: GPs are at liberty to hand out all sorts of pills and potions to people. Some of them aren't always in the best interests of society as a whole or even the individuals concerned – think the opioid crisis in the US, or growing problems with antibiotic resistance, for example. Every so often training programmes – educational outreach – are given to GPs in an attempt to improve this problem but how effective are they? Breanne E. Kunstler, from Monash University in Melbourne, led a team of researchers reviewing the evidence in an attempt to get to grips with this problem. The researchers distinguished between isolated educational outreach – where all GPs got was the course – and multifaceted outreach where the educational outreach was supplemented by other interventions. Both programmes were found to change prescribing behaviours although there was limited evidence that educational

outreach could successfully change prescribing behaviours specific to GPs. Factors that made educational outreach successful included:

- Having a practical rather than didactic focus
- Making educational outreach compulsory
- Focusing educational outreach on preventing adverse events
- Using monetary or professional-development incentives
- In-person delivery

You can read the whole of this article here.

#### Reviewing the evidence on peer feedback

**Source:** BMC Medical Education

In a nutshell: One of the first rules for happiness in married life – life as a whole, perhaps – is never to ask a question where there's only one right answer e.g. "do you think I've put on weight?" "do you think I've made a mistake with this haircut?" or "do you want to turn off the football and have a chat about x?" Trainee doctors are made of sterner stuff though and peer feedback – asking your fellow students how you've done – is becoming increasingly prevalent in medical education. In this study, Sarah Lerchenfeldt from Oakland University William Beaumont School of Medicine in Minnesota, led a team of researchers reviewing the evidence on peer feedback. The researchers found 31 studies. Problem-based learning and team-based learning were the most common collaborative learning settings. Eleven studies reported that students received instruction on how to provide appropriate peer feedback. No studies provided descriptions on whether or not the quality of feedback was evaluated by faculty. Seventeen studies evaluated the effect of peer feedback on professionalism; 12 of those studies evaluated its effectiveness for assessing professionalism and eight evaluated the use of peer feedback for professional behavior development. Ten studies examined the effect of peer feedback on student learning. Six studies examined the role of peer feedback on team dynamics. The researchers concluded that "peer feedback in a collaborative learning environment may be a reliable assessment for professionalism and may aid in the development of professional behaviour.

#### Pretending to be lost in the system - teaching integrated care to medical students

Source: BMC Medical Education

In a nutshell: For older people getting to grips with the care system can be a bit like going to IKEA. You're sent on an arbitrary and confusing route with no idea where you will end up, you come out poorer, and end up frustrated and confused with no idea how anything fits together although you do – at least – get meatballs and a coffee at IKEA. It's important that doctors know how to navigate their way around the system and in this study, Samantha Yang from the University of Toronto, led a team of researchers studying the effectiveness of a pilot integrated care simulation called Getting to Know Your Patients' System of Care (GPS-Care). 177 first-year medical students took part in the simulation pretending to be older people (or their caregivers) in five simulated health-care appointments. The following four themes emerged from the students' written reflections:

• Students reflected on patients' complex care experiences

- Students reflected on the healthcare system needs of patients
- Students increased their understanding of integrated care
- Students' desire to improve the care of IC patients within the healthcare system

The researchers concluded "GPS-Care resulted in a transformative learning experience resulting in new insights into the importance of IC early in UME [undergraduate medical education] training". You can read the whole of this article <a href="here">here</a>.

#### **Nurse Education**

#### What do nursing students think about Gypsy Roma Travellers?

**Source:** Nurse Education Today

In a nutshell: If they ever think about ethnic minorities most people tend to think of Black or Asian people. However, Gypsy Roma Travellers are Europe's largest ethnic minority group and in this study Vanessa Heaslip, from Bournemouth University, led a team of researchers investigating nursing students' attitudes towards them. 23 nursing students from four European countries – the UK, Spain, Belgium and Turkey) took part in the study. Interviews with the students elicited four themes which were:

- Exposure to Gypsy Roma Traveller communities
- Perceptions of Gypsy Roma Traveller cultures
- Unhealthy lifestyles and culture
- Nursing Gypsy Roma Travellers

The researchers concluded that "although personal and professional contact with Gypsy Roma Travellers was limited, most of the students' perceptions of these communities were negative". You can read an abstract of this article here.

#### Blended learning and nursing students: What does the evidence say?

**Source:** Nurse Education Today

In a nutshell: A lot of people like to have a hobby, whether it's gardening, rock-climbing or – in this author's case – nodding off on the sofa before the murderer's identity is revealed in TV whodunits. Academics sometimes go in for meta-analysis, combining the results of several different studies to see what the evidence says. In this case, Li Cheng from Nanjing University of Chinese Medicine in China, led a team of researchers analysing the evidence on blended learning in nurse education, blended learning being combining elements of online and digital learning with traditional classroom teaching. The researchers found eight studies, involving a total of 524 students, which met their quality criteria. The studies showed that blended learning improved nursing students' knowledge and satisfaction. It led to some improvement in skills, although this was not statistically significant.

You can read an abstract of this article here.

Spiritual care competency frameworks – coming to a bedside near you

Source: Nurse Education in Practice

In a nutshell: Despite many people considering them to know a thing or two about such matters neither Jesus, Buddha or Moses developed a spiritual-competency framework for pre-registration nurses and midwives. Plunging boldly in to fill the gap where a team of researchers led by Josephine Attard from the University of Malta. They gathered chaplains, spiritual leaders, nursing and midwifery lecturers, qualified nurses and midwives, parents, carers and patients together into five focus groups. From the discussions they drew up a seven domain, 54-item framework which had "good to strong internal consistency, stability and a good fit with a six-factor model," a quote unlikely to be found on the dust jacket of the next edition of the Gideon Bible. You can read the abstract of this article here.

#### Welcoming nurses into the community of practice

Source: Nurse Education in Practice

In a nutshell: While communities of practice conjure up images of people sitting around a campfire whittling, while someone picks out Kum Bay Yah on an acoustic guitar they are in fact a bunch of people doing — or interested in — the same thing and then talking about it. In this study, Karen Connor from Edge Hill University, looked at how student nurses developed their knowledge and consolidated themselves in clinical practice while on their placements. Four themes emerged from the research which were:

- Establishing a place in the community
- Shaping identity
- Initiating learning opportunities
- Preparation for future practice

Karen Connor concluded that "the clinical community of practice provides an opportunity for students to both learn the technicalities of nursing and develop their professional identity. However, whilst the learning environment may be functional in maintaining current practice, it may not facilitate the learning required for contemporary nursing practice". You can read the abstract of this article here.

#### What do nursing students think about domestic violence?

Source: Nurse Education in Practice

In a nutshell: In this study, Frances Doran from the School of Health and Human Sciences in New South Wales, led a team of researchers exploring what student nurses and midwives think about domestic violence. 1,076 students from nine Australian universities took part in the study which found that the students' attitudes to domestic violence did not really change throughout their course. Nursing students were more tolerant of violence than midwifery ones. Male students born in China and Australia were more likely to deny that domestic violence was more common against women. The researchers concluded that "students had a limited understanding of domestic violence suggesting a critical need to address undergraduate nursing and midwifery curricula".

You can read the abstract of this article here.

Reducing attrition in new nurses – part 351

Source: Nurse Education in Practice

In a nutshell: Every so often – in their noble pursuit of people weeping on camera – TV producers like to show pictures of World War One regiments in 1914 and contrast them with the pitiful shell-shocked survivors four years later. One could undertake a similar exercise with newly-graduated nursing students, albeit, one hopes, with fewer flesh wounds and less bloodshed. Attempts to reduce this attrition are a hardy perennial of the nursing literature and in this study, Yuping Zhang from the Second Affiliated Hospital of Zhejiang University School of Medicine in China, led a team of researchers trying to see if one-to-one mentoring of newly-qualified nurses made a difference. 438 nurses took part in the study. 199 received a basic preceptorship while 239 had one-to-one mentorship. The study found that the turnover rate for nurses in the group having mentorship were significantly lower in their first year but not significantly different in the second and third years of the study. The researchers concluded that "a one-on-one mentorship program is beneficial for the retention of new graduate nurses, particularly during the first year".

You can read the abstract of this article here.

# What do students think caring is?

**Source:** Nurse Education Today

#### What happened when nursing students went to kidney camp?

Source: Nurse Education Today

In a nutshell: Summer camps are popular in the US and other places as a way of both securing child care over the summer holidays and helping children learn Mandarin, lose weight or improve their tuba playing, among other things. In Australia a Kids' Kidney Camp allows children with kidney problems to meet other kids in the same situation, have fun, make friends and learn how to manage their condition while being supported by trained nursing and medical staff. A team of researchers led by Kolleen [sic] Miller-Rosser from Southern Cross University, had the bright idea of placing nursing students in the Kids' Kidney Camp to gain experience. The students taking part in the scheme described how the placement changed their view of nursing and the nurses' role. Five themes emerged from the research which were:

- Developing knowing through children's eyes
- Entering the world of primary care
- Facing a journey of self-discovery
- It's all in the way you communicate

It makes you think differently about nursing

You can read the abstract of this article <u>here</u>.

### Swapping theatres of war for operating theatres

Source: Nurse Education in Practice

In a nutshell: At first sight there doesn't seem to be much in common between the military and nursing. One involves at least threatening to kill people whilst the other usually revolves around saving lives. However, teamwork, the ability to keep calm under pressure and good communication skills are all things the services and nursing have in common and in this study, Barbara Patterson from Widener University in Philadelphia, led a team of researchers who interviewed 11 veterans who had subsequently gone into a career in nursing. Themes emerging from the interviews included:

- Embracing and living core professional values
- Learning from a team-based framework to achieve a common goal
- Learning how and when to communicate with faculty and healthcare members
- Incorporating learned behaviours into everyday professional practice

The researchers recommended that nursing lecturers gained basic knowledge of military culture and how that influences veterans once they transition to civilian life. You can read the abstract of this article here.

#### Teaching nursing students ethics – is it time to start a debate?

**Source:** Nurse Education Today

In a nutshell: Debate used to mean Socrates and Plato arguing the toss about the nature of being in front of a crowd of spell-bound Athenians. Thanks to two millennia of progress and universal education it now consists of burly men engaging in fisticuffs while disputing DNA tests on the Jeremy Kyle show. In this study, Wol-Ju Kim from Shingyeong University and Jin-Hee Park from Ajou University (both in Korea) led a study looking into the effectiveness of debate-based ethics education at improving the "moral sensitivity and moral judgment," of nursing students. 64 senior-year nursing students took part in the study. 35 of them took part in debates and 29 had lectures on the same topics. The study found that there was a significant improvement in idealistic moral judgment and realistic moral judgment in the debate group, compared to the lecture group although there was no difference in "moral sensitivity". You can read the abstract of this article here.