



Joint Education and Training Library



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Dental Education

When the drill loses its thrill

Source: Pakistan Armed Forces Medical Journal

In a nutshell: Whether it's a new calendar year, a healthy-living drive or a new course people often embark on new ventures with a sense of enthusiasm. New notepads are bought, pencils are sharpened and timetables drawn up. This doesn't always last that long though and in this study Sahar Zubair Abbasi, from the College of Physicians and Surgeons in Karachi, led a team of researchers investigating what happened to dental students' motivation in the first six years after starting college. 106 students took part in the study which found that there was a 40% drop in the students' motivation within the first six months after starting their course. Intrinsic motivation fell by 46.9% and extrinsic motivation fell by 32.1%. Quality of teaching (79.1%), teaching methodology (68.1%) and contents (49.5%) were rated as the most important factors for students' motivation.

You can read the abstract of this article [here](#).

Teaching dental students about antibiotic resistance

Source: BMC Medical Education

In a nutshell: If we're not worrying about Brexit, coronavirus or the weather there's always antibiotic resistance to keep us awake at night. In this study Veronica Veses, from Universidad Cardenal Herrera, in Valencia, led a team of researchers carrying out a project to improve undergraduate dentistry students' knowledge of this topic. 10 volunteer "ambassadors," were recruited to manage the project with assistance from lecturers. 1,164 students took part in the project. They were very positive about the experience and most improved their knowledge of antimicrobial resistance. The students also reported improved knowledge about critical thinking and study design, as well as a deeper understanding about microbiological analysis methods.

You can read the whole of this article [here](#).

Medical Education

When the flipped classroom met evidence-based medicine

Source: BMC Medical Education

In a nutshell: The flipped classroom – where students do their reading before, rather than after, lectures – is all the rage now; in fact it's probably rarer to find a

classroom that's the right-way up (or round), so to speak. In this study Hsien-Li Huang, from Chang Gung University College of Medicine in Taiwan, led a team of researchers looking at how flipped classrooms could be used in the age-old struggle to get medical students to embrace evidence-based medicine (aka going to the library). 62 medical-technology students took part in the study which found that the flipped classroom approach improved test scores and was a satisfying approach for students.

You can read the whole of this article [here](#).

What do junior doctors want to know about ultrasound?

Source: BMC Medical Education

In a nutshell: Those of us who have had the experience of being present during their baby's scans will have been mightily impressed to see what looks for all the world like a black and white film of some jelly in a microwave confidently assigned legs, arms and a face by the people doing the scan. This is down to training rather than paranormal abilities though and in this study Tycho J. Olgers and Jan C. ter Maaten, from the University of Groningen in the Netherlands, asked 247 junior doctors how much ultrasound training they had had. 78.6% of them had had less than 10 hours of training and 40% of them had never done an ultrasound at all. 92% said that being able to do an ultrasound was a useful skill for a junior doctor. They said that the most useful application of it was to do scans of the inferior vena cava, the kidneys, abdominal free fluid, deep vein thrombosis, heart, and lungs. The main barrier to doing an ultrasound was the lack of availability of experts for bedside supervision.

You can read the whole of this article [here](#).

Feedback – training supervisors to get the helpings right

Source: BMC Medical Education

In a nutshell: Most people prefer their feedback like their meals – given regularly in easily-digestible quantities. Instead most of us get a starvation diet followed by the six-monthly equivalent of an all-you-can-eat buffet followed by a pie-eating competition. The former approach is known as micro-feedback and in this study Najma Baseer, from Khyber Medical University in Pakistan, led a team of researchers looking into the effectiveness of micro-feedback workshops for doctoral supervisors. 17 supervisors and 34 doctoral students took part in the study. There was a high level of satisfaction with the workshop. Before the workshop supervisors and students disagreed about how feedback should be given but after it there was much more agreement between the two groups with the supervisors shifting their perceptions to be closer to the students'.

You can read the whole of this article [here](#).

Why you can't get better than a real person

Source: BMC Medical Education

In a nutshell: For some people each new gadget is like Christmas morning all over again. They can't wait to put it into practice and those who work in medical education are no exception. Some people take a more sceptical view though and a new study, carried out by a team of researchers led by Cory J. Rohlfen from Nebraska Medical Centre, should make them happy. 286 medical students, enrolled in a second-year rheumatology course, took part in the study which compared six different teaching techniques. Live Patient Experience (LPE) – i.e. meeting a real-life patients – was the most popular technique, getting an average of 4.77 out of 5. Second in popularity was Augenblick (diagnosis based on short slides in a Powerpoint presentation) (4.21), followed by problem-based learning (4.11), a Gout Racer video game (3.49), a Rheumatology Remedy e-module (3.49) and a simulated knee injection (3.09). The researchers concluded that “technologically-advanced novel learning strategies were outperformed in this study by the more traditional active learning modality of LPE,” and that “conflation of technology with innovation may lead to a myopic view of educational reform.”

You can read the whole of this article [here](#).

When a simulation gets to breaking point

Source: Medical Education

In a nutshell: “When you sing and play the guitar everyone thinks you're a genius. Add a pair of cymbals and everyone thinks you're a lunatic.” That was Bob Dylan's view on one-man bands. Doctors can feel the same when they try and treat several patients at once; it's alright up to a point but one patient too many can send you over the edge. In this study Luca Carenzo, from the University of Piedmont in Italy led a team of researchers studying 95 junior doctors in 24 teams taking part in a national simulation-based training event, the SIMCUP Italia 2018 competition. Teams of four took part in the competition in simulated medical-emergency scenarios. The researchers found that, up to a point, both demands and resources had a positive effect on performance. “A high level of resources is associated with better performance until demands become very high.” Cognitive and somatic (bodily) anxieties were correlated with demands but the longer the doctors had spent training the more resources to deal with the situation they felt they had.

You can read the abstract of this article [here](#).

The 'feminisation,' of medicine

Source: BMC Medical Education

In a nutshell: More and more doctors are women now and at many universities women make up half or more of the people studying medicine. In this study D. Laurence, from the University Medical Centre Göttingen, led a team of researchers asking 181 medical-school applicants, 590 medical students, and 225 doctors what

they thought about it. Most of them favoured a balanced gender ratio among doctors. 77% of applicants, 68% of students, and 61% of doctors said this was important, or very important. Most of the study's participants thought that 'feminisation,' had had an effect on their workplace particularly when it came to more people working part time; people's comments on this were "mostly categorised as negative."

You can read the whole of this article [here](#).

What makes success for a doctor-researcher?

Source: BMC Medical Education

In a nutshell: Successful people tend to be gluttons for work as opposed to the rest of us who prefer being gluttons for white-chocolate Toblerones and steak-and-kidney pie. Some people find being a doctor too easy-peasy, for instance, and like to do a bit of medical research as well so they don't get bored. Unfortunately the physician-scientist workforce is decreasing and those people who start out on it often fall by the wayside. In this study Ruth Gotian and Olaf S. Andersen from Weill Cornell Medicine in New York interviewed 21 physician-scientists asking them what they thought counted as success. Younger ones focused on factors by which they were judged, such as publications and grants whilst older ones concentrated on their legacy – how much they had contributed to the field and their work mentoring younger researchers. Women were more likely to emphasise objective measures of success, like publications, while also concentrating on relational skills, like networking, collaboration and public recognition. Men were more likely to emphasise the impact of science and subjective characteristics like boldness, confidence and critical thinking.

You can read the whole of this article [here](#).

The Theory of Planned Behaviour and medical professionalism

Source: BMC Medical Education

In a nutshell: In an ideal world everyone would floss their teeth every night, eat five pieces of fruit and veg a day and behave professionally at all times. In pursuit of the last of these three utopian objectives Antonia Rich, from UCL Medical School, led a team of researchers looking at how the theory of planned behaviour influenced doctors' professionalism. The theory of planned behaviour is made up of four elements which are:

- 1) **Attitudes.** The doctor's overall evaluation of the behaviour
- 2) **Subjective norms.** The degree of pressure felt from various organisations and people to act in a certain way.
- 3) **Perceived behaviour control.** Doctors' confidence and beliefs about their ability to carry out the behaviour

- 4) **Intentions.** The extent to which doctors intend to carry out the behaviour in the future.

314 doctors took part in the study. Attitudes, subjective norms, and behavioural control all predicted doctors' intentions to raise concerns, to engage in reflection, and their use of confidentiality guidance. Perceived behavioural control was the strongest predictor of intentions to raise a concern, while attitude was the strongest predictor of intentions to engage in reflective practice and use confidentiality guidance.

You can read the whole of this article [here](#).

Is empathy research a dog's breakfast?

Source: BMC Medical Education

In a nutshell: Individual studies often get reported with great excitement in the newspapers when the totality of the research is nowhere near as clear cut and it turns out that life is a lot more complicated than people think it is. In this study Freja Allerelli Andersen, from the University of Southern Denmark, led a team of researchers reviewing the evidence on levels of empathy among medical students. The researchers found 30 articles that met their quality threshold. In 14 studies significantly lower levels of empathy were reported as students went on in their medical degree. The remaining 16 studies identified both higher, mixed and unchanged levels of empathy. In 18 out of 27 studies women were found to have higher empathy scores than men. Only three out of nine studies found an association between empathy scores and specialty preferences and nine out of 30 studies showed a tendency towards lower empathy scores in non-Western countries, compared to Western ones.

You can read the whole of this article [here](#).

Me Too and the medical student

Source: BMC Medical Education

In a nutshell: It sometimes seems that the number of Hollywood actresses *not* subject to outrages from Harvey Weinstein would fit comfortably into a Mini. But how common is this problem among medical students? Konstantin Jendretzky, from Hannover Medical School, led a team of researchers attempting to find out in a study of 343 medical students – 15% of the total enrolled in the school. Over half of them said they had either witnessed sexual harassment or had suffered from it themselves. Women were three times more likely to have experienced it than men, with verbal forms of harassment predominating. “These observations and experiences of sexual harassment,” concluded the researchers “demonstrated significant influences on many perceptions regarding equal opportunity and equal treatment in ... [Hannover Medical School]

You can read the whole of this article [here](#).

Group cohesion and self-directed learning

Source: BMC Medical Education

In a nutshell: Group cohesion sounds like something that might happen after an unfortunate conjunction of Twister and a tube of superglue; suffice it to say it's a quality in plentiful supply in the current incarnation of Liverpool FC but rather less obvious in Westminster and the Labour Party. In this study Soyun Kim and Eunbae B. Yang, both from Yonsei University in Korea, looked into the links between group cohesion and self-directed learning in a sample of 106 medical students. A significant increase was observed in the students' self-directed learning a year after starting university, followed by stable scores until their third year. There was a significant increase in group-cohesion scores as the students went through medical school and there was a positive relationship between the students' group-cohesion scores and their self-directed learning.

You can read the whole of this article [here](#).

The benefits of teaching students to do things for themselves

Source: Medical Teacher

In a nutshell: Autonomy is a bit like getting a subscription to BT Sport; it's nice to have but it would be great if someone else could arrange it for us. In this study Adam Neufeld and Greg Malin, from the University of Saskatchewan in Canada, looked into the influence of "instructor autonomy support," on 183 medical students' motivation and psychological wellbeing. They found that the more students felt their teachers were training them to be autonomous the higher their wellbeing was. This relationship was mediated completely by the students' feelings of basic-need fulfilment whilst "relatedness satisfaction contributed most to ratings of instructor autonomy-support."

You can read the abstract of this article [here](#).

Nurse Education

What do student nurses know about patient safety?

Source: BMC Medical Education

In a nutshell: The best pilots can find themselves involved in plane crashes, through no fault of their own when air-traffic controllers get things wrong or equipment fails. In the same way patient safety in hospitals is about more than the competence of individuals and can be as much about systems and working practices as individuals' skills, or lack thereof. In this study Fei Fei Huang, from Fujian Medical University in China, led a team of researchers looking into how much students on placement knew about patient safety. 732 students took part in the study which found that although the students were fairly confident about their clinical-safety skills they were less confident in what they learned about the socio-cultural or

context-dependent aspects of patient safety and in speaking up about patient safety. They were less confident they could communicate effectively and in their understanding of human and environmental factors. Less than half of the students felt that they could approach someone engaging in unsafe practice and they were reluctant to voice concern about adverse events.

You can read the whole of this article [here](#).

When things turn nasty in the operating room

Source: Nurse Education Today

In a nutshell: Rather like DIY operating on people involves cutting things up, sawing things, mopping up mess and the occasional display of bad temper when things don't go according to plan. In this study Haiyan Shen, from Central South University in China, led a team of researchers investigating 'incivility,' in the operating room. 215 nursing students took part in the study. Over half of them (56.7%) had experienced various degrees of uncivilized behaviour in the operating room. The most frequent 'uncivilized behaviour,' was raising voices (41.9%), followed by inappropriate tone (36.7%), being embarrassed in front of others (36.3%) and snide remarks (34.4%). Surgeons (59%) were considered the rudest, followed by staff nurses (46.7%). When students experienced bad behaviour 61.5% of clinical instructors defended and comforted them, 23% comforted them privately, 13.1% ignored them and 2.5% joined in with the criticism.

You can read the abstract of this article [here](#).

Gimme, gimme, gimme a man on ward 20

Source: Nurse Education Today

In a nutshell: Despite efforts to encourage more men into nursing the proportion of nursing students who are male has remained at around 10% a year. In an attempt to get to the bottom of this conundrum Anna Gavine, from Dundee University, led a team of researchers reviewing the research on this topic. The researchers found 23 articles which met their quality criteria. The evidence suggested that men who come into nursing have a family member or acquaintance who is a nurse or have had contact with a male nurse as a patient or carer. Motivating factors included financial security, career mobility and the opportunity to have a job in a caring profession. The research pointed to a need for better careers advice at school and shorter graduate programmes. Some clinical areas were easier for male students but in some departments patients refused to be treated by a man. Being in a minority and gender stereotyping could affect people's experiences but the researchers concluded that "ensuring equitable treatment, and providing additional support and placements in clinical areas with more men could minimise these challenges."

You can read the abstract of this article [here](#).

Will nurses still love me when I'm 64?

Source: Nurse Education Today

In a nutshell: In large parts of the world populations are aging. This includes Finland and in this study Sirpa Salin, from Tampere University of Applied Sciences, led a team of researchers interviewing 523 nursing students about their attitude to older people. The students' attitude to older people were positive. Of the suggestions for improving the teaching of gerontological nursing 60% were related to the contents of teaching, 37% to didactic solutions and 3% to the capabilities of the teacher. The students thought of older adults as individuals with their own personalities and many resources but wanted to move teaching away from classrooms to the real environments of older people's care.

You can read the abstract of this article [here](#).

Fighting burn-out in the care home

Source: Nurse Education in Practice

In a nutshell: Working in old people's homes can be interpreted as an irregular verb: I look after older people's wellbeing; you supervise the bingo, she wipes Dorothy's bottom. All of the above can leave people working in nursing homes feel burnt out and in this study Analisa Smythe, from Birmingham and Solihull Mental Health Foundation Trust, led a team of researchers investigating the effectiveness of training in person-centred dementia care on this problem. Interviews with the nurses found that working long hours; and feeling overloaded, unsupported, isolated, and not feeling valued both led to nurses' feeling burnt out. However, training in person-centred dementia care and supervision appeared to reverse or "break through," some of the conditions that led to burnout.

You can read the abstract of this article [here](#).

Fighting prejudice with volunteering

Source: Nurse Education in Practice

In a nutshell: Nurses aren't always the ministering angels they are sometimes portrayed as. A tiny minority of them kill their patients and many have the same flaws, faults, and prejudices as the rest of us. This can include prejudice against the mentally ill and in this study Rocío Juliá-Sanchis, from the University of Alicante in Spain, led a team of researchers studying the effects of volunteering in an acute mental-health inpatient unit on nursing students' attitudes towards the mentally ill. The researchers found positive changes in the students' attitudes over time and a reduction in their prejudices. The researchers concluded that "participation in educational strategies such as volunteering in [an] acute mental health inpatient unit, complementary to undergraduate programmes and clinical-practice

placements, allows nursing students to develop more diversified and positive attitudes towards mental illnesses.”

You can read the abstract of this article [here](#).

Placements and collaborative learning

Source: Nurse Education in Practice

In a nutshell: It’s not just front rooms and gardens that get make-overs, words can have them too. Collaboration used to be something sinister people in Vichy France or Norway did during the war but is now a synonym for working together and is generally seen as a good thing. In this study Graham R. Williamson, from the University of Plymouth, led a team of researchers looking into the effectiveness of the implementation of a Collaborative Learning in Practice model for nursing students going out on placement. 40 students and eight clinical-practice staff took part in the study which concluded that Collaborative Learning in Practice using models of coaching and peer support “offers benefits to students who are exposed to the reality of nursing practice from the beginning of their placement experiences, enabling them greater responsibility and peer support than under normal mentoring arrangements.”

You can read the abstract of this article [here](#).