# **Education Bulletin**



#### **November 2023**

A monthly update delivered to you by East Cheshire NHS Trust Library & Knowledge Services

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We welcome your feedback on this bulletin: <a href="https://forms.gle/NeWnsK1tBD9BB1hk7">https://forms.gle/NeWnsK1tBD9BB1hk7</a>. This is completely anonymous and will only take a couple of minutes.

Other services to help you keep up-to-date are available: www.eastcheshirenhslibrary.net/keep-up-to-date.html.

We can undertake further evidence searches on your behalf if you would like additional information on any of the topics in the bulletin. Please contact <a href="https://example.com/hdl/.com/hd

Compiled by John Gale, JET Library (Mid Cheshire NHS Foundation Trust)

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#### **General Healthcare Education**

#### The Masters of the Universe will mark your essay now

Source: International Journal of Educational Technology in Higher Education

In a nutshell: The latest field for AI to muscle in on is marking essays – the subject of this study by a team of researchers led by Juan Escalante, from Brigham Young University in Hawaii. They found no difference in learning outcomes between a group of students given written feedback by their tutor and another group given feedback by ChatGPT. Another group of students was also divided into those given feedback by AI, and those given feedback by their tutors – the students were found to be evenly split in preference between AI and a human teacher.

You can read the whole of this article at

https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-023-00425-2

#### Ditching defunct drugs – drains, dustbins, or dollies' tea party?

Source: BMC Medical Education

In a nutshell: In this study a team of researchers, led by Wuraola Akande-Sholabi from the University of Ibadan in Nigeria, attempted to find out. They surveyed 930 healthcare students studying medicine, surgery, nursing, pharmacy, physiotherapy, and medical laboratory science. Two-thirds of the students were unaware of proper disposal methods and most scored either 0 (31.9%) or 1 (46%) out of four on a test. Pharmacy students knew most, but even their knowledge did not always correspond to correct practices. Only 10.1% of participants reported using recommended disposal methods such as returning unused medicine to a pharmacy or a drug take-back programme. Major barriers identified included lack of access to drug take-back programmes; lack of knowledge; and inconvenience.

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04788-y

#### **Interprofessional Education**

#### Complexity, resilience, and simulation

Source: BMC Medical Education

**In a nutshell:** A team of researchers, led by Torben Nordahl Amorøe, from the University of Gothenburg, investigated the issues of complexity theory and resilience in interprofessional simulations. Three themes emerged from the interviews which were:

- Concepts of complexity and resilience are relevant for interprofessional simulations as students often need to deviate from prescribed guidelines/algorithms in order to solve cases
- Exploring complexity. The fact that there might be several ways to approach a challenge can contribute to important insights into the conditions for teamwork
- Unpacking how solutions are achieved. The importance of addressing self-criticism by highlighting how students were often able to overcome challenges and find solutions

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04690-7

#### **Medical Education**

## Does oral debrief come up with the goods?

Source: BMC Medical Education

**In a nutshell:** Engaging in self-reflection were 16 OSCE examiners taking part in this study, led by Alexis Régent, from the University of Paris. In the study pretend students – of varying degrees of competence – took part in three simulated oral debriefs and the examiners were asked to think aloud about their thought processes while they marked them. The researchers found that the examiners thought about several things while they marked the students on their clinical reasoning during the oral debrief. These included:

- The adoption of a confident structured approach
- Discriminating between relevant and less-relevant information
- The ability to prioritize and justify decision making

The students' clinical-reasoning skills were judged "in [the] light of potential risks to patient safety and examiners' own illness scripts."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04668-5

#### Peer education – moving on from the Golden Cage

Source: BMC Medical Education

In a nutshell: In this study Nermin Sakru, from Trakya University in Turkey, led a team of researchers investigating what students made of peer education there. 233 students took part in the study which found that 78.5% of them thought that peer education was helpful. 69.9% thought it could help them reinforce what they had learned in theoretical lessons, 54.5% thought it should be used in other practical lessons, and 64.3% thought it should be used in the future. Whilst peer education did not lead to an improvement in the overall level of students' marks those students who were peer educator themselves did do better in their exams.

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04739-7

## Yesterday I hittapotamus

Source: BMC Medical Education

**In a nutshell:** In this article Natasha Mehta, from Stanford University in California, led a team of researchers reviewing the evidence on how students are prepared for "short-term global health experiences." A group of

students surveyed 66 published global-health curricula and identified aspects of "pre-and-post travel training that were found to be under-addressed." These included:

- Examining power relations associated with neo-colonization between and within countries
- Training for bi-directional learning
- Examining motivations and goals for participating in global health
- Addressing personal resiliency and psychosocial wellbeing related to students' travel
- Reflecting on the challenging aspects of the fieldwork experience

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04606-5

## Blood on the keys and a Monet in the mortuary

Source: BMC Medical Education

In a nutshell: In this study a team of researchers, led by Marta Makowska, from Kozminski University in Poland, attempted to find out. 166 medical students took part in the study which found that the students expected to learn how to communicate with patients and their families, especially about difficult topics. They also expected the classes to be active, stress-free, and "without passing grades." They preferred being taught by a doctor, although a psychologist or "other qualified person," was also popular. "Previous participants in medical humanities courses wer more likely to expect such a course to be compulsory than those who had yet to attend it."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04771-7

#### Searching for the gift of sound and vision

Source: BMC Medical Education

In a nutshell: In this study it was Marko Tolonen, from Savonia University of Applied Sciencees, who led a team of researchers using an RCT to compare different ways of teaching students: live classroom teaching; streamed classroom teaching; an audio recording (podcast); and a video recording. The researchers found that all the methods led to an improvement in the students' test scores but that this improvement was significantly less in the students who learned via a podcast. The researchers concluded that "only video learning is comparable to team teaching in classrooms."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04759-3

## When epidemiology escaped into the community

Source: BMC Medical Education

In a nutshell: In this study Yongming Zhang, from Zhejiang University School of Medicine in China, led a team of researchers investigating the effectiveness of a practical, community-based project at teaching medical students about epidemiology. They found that the group who took part in the community project — as opposed to classroom-based learning — had significantly-higher self-assessment scores in course understanding and clinical-practice skills. They also reported significantly higher interest, stronger learning motivation, and a better mastery of epidemiology. However, the students' test scores and pass rates "demonstrated no statistical significance between the two groups."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04787-z

## Teaching aorta surgery – when models just aren't sexy enough

Source: BMC Medical Education

In a nutshell: A team of researchers led by Weihao Li, from Peking University People's Hospital, decided to augment the 3D model with a dose of mixed reality. 51 doctors doing a rotation in vascular surgery took part in the study. 27 used just the 3D model and 24 used the model and virtual reality. The researchers found that the doctors who used virtual reality got higher total mean scores and higher scores for anatomy/pathophysiology than those who had just used the model. 95.8% of those who had used virtual reality "strongly or somewhat agreed that the mixed reality was adequately realistic and the curriculum helped improve the ability to understanding [sic] aortic diseases.

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04610-9

#### **Nurse Education**

## Tackling prejudice on placements

Source: Nurse Education Today

**In a nutshell:** In this study Anna Caffrey, from the University of East London, led a team of researchers interviewing 24 student nurses and nurse apprentices about their experiences of racism and discrimination while on placement. Three themes arose from the researchers' interviews with the nurses:

- Safety and support in the university space
- Hierarchical treatment in work placements due to intersecting race and "student," identities
- Direct racism by patients and staff in work placements

The researchers recommended "more opportunities within university curricula are needed for student nurses to learn about, reflect on, and gain support for managing experiences of discrimination in the health system."

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.105980

## Keeping nursing students in mid-season form

Source: Nurse Education Today

**In a nutshell:** In this study, a team of researchers, led by Joanne Weinschreider, from Saint John Fisher University in New York, investigated how new nurses acquire "electronic-health-record competency." The researchers spoke to electronic health record educators and found that practising built competency in electronic-health-record knowledge, skills, and attitudes. It was the combination of teaching through modelling, working hard as a new graduate, and understanding the standards for documentation that affected the development of electronic-health-record "competency characteristics."

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.105987

#### Are nurses class-conscious?

Source: Nurse Education Today

In a nutshell: In this study a team of researchers, led by Marieke van Wieringen, from Vrije Universiteit in Amsterdam, attempted to find out by interviewing 15 nursing students in their third and fourth years of training. They found that in the classroom the division of working relationships between nursing students and health-care assistants was very rarely discussed explicitly. However, "teachers and students implicitly and explicitly conveyed that certified nursing assistants have lower status, describing the latter's role as inferior and as assisting to the role of registered nurses." On their placements, when they started working with HCAs the nurses' adjusted their perceptions of them, especially if the HCAs mentored them during their early days. However, as they moved through their training the students started to relate more to the qualified nurses and started to "reproduce the dominant perception and discourse that certified nursing assistants are inferior and supposed to support registered nurses, thereby perpetuating pervasive status differences and inequality."

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.105984

#### Sticks, stones, and sarcasm

Source: BMC Medical Education

**In a nutshell:** In this study Meiyan Qian, from Yangzhou University in China, led a team of researchers examining the "experience of verbal violence among Chinese nursing students in clinical practice." The researchers interviewed 21 nursing students and three themes emerged from their interviews with them which were:

- Multiform verbal violence
- Hurting and impacting
- Struggling or coping

The researchers found that the students were subject to several forms of verbal violence, not only from patients and caregivers, but also from peers such as clinical tutors and doctors. This "not only harmed students' personal health and wellbeing, but may also contribute to the nursing industry's future loss of human resources."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04741-z

## A steaming pile of theses

**Source:** Nurse Education Today

**In a nutshell:** In this study Huayan Lin, from The First Affiliated Hospital of Fujian Medical University in China, led a team of researchers interviewing 16 nursing students and six clinical teachers. Three themes, and a number of subthemes, emerged from the interviews which were:

- Lack of scientific research training
  - Lack of clinical instructors' experience
  - Lack of academic training courses
  - Lack of necessary scientific research resources support
- Poor communication
  - o Excessive workload
  - Poor instructor-student relationships
  - Lack of communication skills
- Lack of support systems
  - Lack of support from other disciplines
  - Negative coping patterns

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.105997

## How critical-thinking are nurses?

Source: Nurse Education in Practice

**In a nutshell:** In this study Reza Nemati-Vakilabad, from Ardabil University of Medical Sciences in Iran, led a team of researchers studying critical-thinking in a sample of 246 nursing students. They found that 63% had a low level of critical thinking, and 37% had a moderate level. "The highest and lowest mean scores between dimensions were related to the intellectual and cognitive and technical respectively."

You can read the abstract of this article at

https://doi.org/10.1016/j.nepr.2023.103814

#### What do nursing students think about AI?

Source: Nurse Education in Practice

In a nutshell: In this study Leodoro J. Labrague, from Loyola University in Chicago, led a team of researchers attempting to find out student nurses' views on this topic. 200 nursing students took part in the study which found that perceived AI use in nursing practice had a significant positive effect on student nurses' attitudes towards AI and their intention to adopt the technology. "Attitudes towards AI partially mediate the relationship between perceived AI utilization [sic] in nursing practice and the intention to adopt AI technology."

You can read the abstract of this article at

https://doi.org/10.1016/j.nepr.2023.103815

#### ... and what do they make of smart glasses?

Source: Nurse Education in Practice

**In a nutshell:** In this study Jiyoung Kim, from Inha University in Korea, led a team of researchers asking 284 students what they made of them. Differences in the positive attitudes towards, and perceived importance of, wearable display technology were observed according to the level of satisfaction with college life, level of satisfaction with nursing major, whether the participants owned a wearable display, and whether they would consider buying one.

You can read the abstract of this article at

https://doi.org/10.1016/j.nepr.2023.103812

#### Is it catheter come home in Kazakhstan?

**Source:** Nurse Education in Practice

In a nutshell: One of the less-cheery straight-line graphs in medicine is the one depicting the awfulness of an illness on one axis, and the unpleasantness of the treatment people are prepared to put up with on the other. A case in point being peripheral intravenous catheters (PIVCs) – tubes stuck into people for the purposes of administering a constant supply of a drug. In this study Jonas Preposi Cruz, from Nazarbayev University in Kazakhstan, led a team of researchers investigating how much 200 paediatric nurses in Kazakhstan knew about PIVCs. They found that the nurses had a poor knowledge of patient assessment, PIVC insertion, maintenance, and removal but they "reported high confidence in inserting and maintaining PIVCs among paediatric patients." The nurses' education, their paediatric nursing experience, and having had PIVC training in the last year were all significant predictors of the nurses' knowledge and PIVC insertion and care knowledge directly influence the nurses' confidence in these procedures.

You can read the abstract of this article at

https://doi.org/10.1016/j.nepr.2023.103816

#### Nursing students and social media

Source: Nurse Education Today

**In a nutshell:** A team of researchers, led by Michell Yan Ni Tan, from the National University of Singapore reviewed the evidence on social media and student nurses and found 26 articles which met their quality criteria. Two main themes (with eight sub-themes) emerged from the research:

- Shaping Student Nurses into Nurses
  - o Personal Development
  - o Professional Development
  - Advocacy
  - Networking
- Repercussions of Social Media Usage
  - o Frustrations
  - Discriminative Feelings
  - Compulsive Feelings
  - o Consequences of Inappropriate Usage

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.106000

## Nurses' spirituality – 40-year-old Talisker, or gripe water?

**Source:** Nurse Education Today

In a nutshell: In this study Wei Wang, from Chengdu University of Traditional Chinese Medicine, led a team of researchers reviewing the evidence on "nurses' perceptions and competencies about spirituality and spiritual care." The researchers concluded that "nurses' perceptions and competencies about spirituality and spiritual care were moderate, and both needed to be improved." "Nurses with no religious affiliation had inferior spiritual care competencies than nurses with religious affiliation," and nurses with more education were more spiritually-competent than those with less education.

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.106006

## Through a smart-glass darkly

Source: Nurse Education in Practice

**In a nutshell:** In this study Charlotte Romare and Lisa Skär, from Blekinge Institute of Technology in Sweden, reviewed the evidence on the use of smart glasses in nurse education. They found that the research fitted into three main categories:

- Situations in which smart glasses have been used in nursing education
- Learning experiences from using smart glasses in nursing education

• User experiences from using smart glasses in nurse education

"Smart glasses were used in different learning situations and were in general positively evaluated by nursing students. Although, drawbacks of using smart glasses were noted which could negatively effect [sic] student learning."

You can read the abstract of this article at

https://doi.org/10.1016/j.nepr.2023.103824

#### Evidence-based practice, or the Four Horsemen? Get your bets on now

Source: Nurse Education Today

**In a nutshell:** In this study Chieun Song, from Nambu University in Korea, studied 133 nursing students to see how their knowledge of evidence-based practice changed over time. Chieun Song found that the nursing students' evidence-based practice self-efficacy increased over time. Nursing leadership, nursing skills, communication, and "nursing process," were all significant factors that affected the changes in evidence-based practice self-efficacy.

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.106008

# The Human Library – overdue improvement or certain reservations?

Source: Nurse Education Today

**In a nutshell:** In this study Hsiao-Yun Chang, from Chang Gung University of Science and Technology in Taiwan, led a team of researchers interviewing 46 first-year nursing students about their experiences with a human library. The researchers found that the participants experienced a significant improvement in their professional commitment, learning motivation, and "learning-career adaptability," after engaging with human books. Four categories emerged from the interviews with the students which were:

- Professed value for nursing
- Motivation to pursue a career in nursing
- Reflection and transformation
- Positive career possibilities and expectations

You can read the abstract of this article at

https://doi.org/10.1016/j.nedt.2023.106010

# **Physiotherapy Education**

Making a trial out of evidence-based medicine

Source: BMC Medical Education

In a nutshell: In this study a team of researchers led by Igor Sancho, from the University of Duesto in Spain, measured the effectiveness of adding a randomized-controlled trial into the mix. Students in their first year of a physiotherapy course who were enrolled in the subject "Introduction to Research Methodology," were invited to take part in a real randomized-controlled trial. During the semester the students had the chance to take part either as researchers or as participants in the trial themselves. 110 students took the course and 85% said that it had a "positive," or "very positive," effect on their critical-thinking abilities with 89% expressing the same sentiments about their ability to assess methodological quality. Most of the students said that taking part in the RCT had helped them learn about placebos, detection of bias, development of critical thinking, and a better understanding of methodological issues in research although "lecturers reported an additional burden that was difficult to reconcile with daily duties."

You can read the whole of this article at

https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04716-0