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PRIZES

BEST POSTER PRESENTATION, AS VOTED BY DELEGATES:

Investigating the current attitudes, provisions and unmet needs of UK undergraduate medical students in Digital Health education: Interim results from a national survey

PRESENTED BY: FELECIA D'SOUZA, BENEDICT OSEI-BOADU & JOHNATHAN HIRNIAK

CO-AUTHORED BY: YURI AUNG, ELIZABETH LE, ALEXANDER DEIGHTON, MRUDULA UTUKURI, CONNOR DIBBLIN, CHANDINI CHAND, MAARJA-LIIS FERRY, CHANDINI PATEL, NISHITA GADI, BRIDGET AGBOOLA, ARIANA AXIAQ, MOHSIN ABEDI, MOIRA PITT, BETHAN HARRIS, MATT BYRNE, RAJIV SETHI

ABSTRACT

Introduction

With the adoption of digital health (DH) increasing across the NHS, there is growing need for a digitally literate workforce.¹ Surprisingly, however, there are no national standards or guidelines on DH education for UK medical students.² Consequently, this study sought to assess the current provisions, perceptions and challenges regarding DH education in the undergraduate medical curriculum.

Methods

An anonymous cross-sectional online survey was administered via Qualtrics from March to August 2021, and disseminated to UK medical students via university mailing lists, social media and student representatives. Quantitative and qualitative data were collected pertaining to demographics, attitudes, preferences, and current provisions regarding DH education. Qualitative responses underwent thematic analysis.

Results

Of 541 respondents, 57.4% were female with a mean age of 22.9±3.4 years. All year groups and 37 universities were represented. 93.2% considered DH 'very important' to future clinical practice, while 95.1% were willing to use it. Just 21.3%, however, felt aware of the DH competencies required by doctors, and although 73.9% had received DH teaching, only 30.5% were satisfied with it. Themes for dissatisfaction included inadequate coverage, perceived low prioritisation by medical schools and insufficient preparation for future practice. 84.3% desired greater DH education from their medical schools, with 53.5% preferring mandatory assessment, and 84.3% stated that the COVID-19 pandemic had changed their opinion on DH, predominantly pertaining to greater importance of digital technologies in future practice.

Conclusions

This is the first national survey of UK medical students on DH education. Interim analysis indicated students recognised the significance of DH and wanted greater integration of DH education into the curriculum. Given the likely enduring effects of COVID-19 on clinical practice, it is thus crucial that universities and wider medical education organisations work to improve and standardise DH education.

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POSTER PRESENTATION RUNNERS-UP, AS VOTED BY DELEGATES:

Physical activity in the Lifestyle Medicine and Prevention module at Imperial College School of Medicine: Do we practice what we preach?

PRESENTED BY: YASMIN BAKER & JOSH KOTECHA

CO-AUTHORED BY: DR. AMY BANNERMAN

ABSTRACT

Introduction:

Increasing physical activity(PA) and reducing sedentary time(ST) is beneficial to health and wellbeing(1). The COVID-19 pandemic led to students world-wide sitting behind screens to engage with online learning.

Imperial College School of Medicine(ICSM) introduced the all-new Lifestyle Medicine and Prevention(LMAP) module in 2019 accounting for 15% of the first two years of the curriculum. A five-week, 'StudentShapers' internship funded two students working in partnership with faculty to review the module in relation to ST.

Methods:

The team reviewed relevant literature, utilised data from the ICSM Lifestyle Tracking study, college-wide student experience survey and student focus groups alongside consultation with stakeholders locally, nationally and internationally(2) to formulate co-created, evidence-based recommendations to reduce ST and increase PA for medical students at ICSM.

Results:

As many as 40% of LMAP students did not achieve recommended PA levels to achieve good health(3) despite stating PA improves their wellbeing. Barriers to PA included 'lack of time' and 'busy schedule'. Average journey time to campus was 36 minutes, yet only 38% of students engaged in active travel.

ICSM students spend up to 30 sedentary hours a week engaging with the curriculum, unlike the active lifestyle of a junior doctor(4). Recommendations were made around active travel, active environments and an active curriculum to promote PA and reduce ST in medical students.

Discussion & conclusion:

Whilst students learn about the role of PA in health, the structure and design of the learning environment encourages a sedentary lifestyle, exacerbated by the pandemic; potentially detrimental to health and wellbeing(5). Resources created for an active curriculum are being implemented in the 2021/22 LMAP module with the aim to reduce ST associated with the curriculum.

As we transition towards new teaching approaches, creating a social norm around PA in learning environments should be considered, fostering a culture of prioritising health and wellbeing of students and future clinicians.

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BEST ORAL PRESENTATION, AS SCORED BY OUR SENIOR JUDGING PANEL:

A prospective evaluation of student attitudes towards stereotype perpetuation within the undergraduate medical school curriculum

PRESENTED BY: RICHARD PHILLIPS & OLUWASEYITAN ADELEYE

CO-AUTHORED BY: POOJA RATHOD, AZEEM ALAM

ABSTRACT

Introduction:

In the UK, it is government policy to ensure that Equality, diversity and inclusion (EDI) initiatives are employed in many sectors, including education [1]. These initiatives are designed to ensure that all races, genders, disabilities and minority groups are fairly and accurately represented [2]. As authors, we feared that current medical education resources do not always do this. The aim of this study was to evaluate students' attitudes and perceptions towards the perpetuation of ethnic, gender, sexuality and disability stereotypes within textbooks and question banks to aid diagnosis.

Methods:

An anonymous Google form was distributed via social media to healthcare students. Section 1 of the form ascertained respondents' demographics. Section 2 gauged student perceptions of the aforementioned stereotypes within textbooks and question banks. A modified-Likert scale was used to assess the frequency with which respondents encountered these stereotypes. Furthermore, respondents were surveyed on their preferences regarding how they would like to see stereotypes represented in question stems.

Results:

The results showed that a majority of the 102 respondents had encountered the propagation of ethnic stereotypes (textbooks; 73.5% - question banks) and gender stereotypes (69.6% - textbooks; 68.6% - question banks). Despite this, the majority of respondents continued to want ethnicity and gender to be mentioned in question stems only when aiding the diagnosis (53.9% and 37.25%), rather than featured in all stems. Compared to gender and ethnic stereotypes, far fewer respondents had experienced the propagation of disability stereotypes (37.3% - textbooks; 41.2% - question banks) and sexuality stereotypes (52.9% - textbooks; 52.9% - question banks).

Discussion/Conclusion

Despite most respondents recognising the frequent use of stereotypes in medical education resources, the majority did not want the question stem to change. This could be attributed to the exam pressure of getting the correct answer surpassing the requirement to be politically correct.

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ORAL PRESENTATION RUNNERS-UP, AS SCORED BY OUR SENIOR JUDGING PANEL:

Simulation Suite vs Virtual Reality: which simulated learning environment better prepares final year medical students for emergencies?

PRESENTED BY: DR. MARTIN HAMILTON-FLACK

CO-AUTHORED BY: DR. CESAR ORSINI

ABSTRACT

The ABCDE assessment is accepted by experts to improve outcomes in clinical emergencies. Therefore, medical students must learn this approach and apply it to unwell patients. Literature states students are under confident and underprepared which is detrimental to patient care. To safely practice, Simulation Suites (Sim) have a large evidence base in medical education, however despite Virtual Reality (VR) being used in other professions (aviation, shipping and military) its evidence within medicine is limited and there is no data comparing both formats.

I completed a cross-over study ABCDE of simulated unwell patients in both formats for final year medical students. I aimed to establish which simulation has better outcomes on student confidence and performance, alongside gathering qualitative feedback data regarding the advantages and disadvantages of both simulated learning environments. 18 students were randomised between two equal groups: Green completed Sim first and VR second, Purple did VR first and Sim second. Students self-assessed confidence on a 1-5 scale and I calculated percentage scores from mark-schemes.

Green confidence: Sim first T-test=0.013349, VR second T-test=0.002287, demonstrated significant increases after both. Purple confidence: VR first T-test=0.0805162, Sim second T-test=0.0133491, did not show significant increase in confidence after VR. Green percentage scores: Sim first and VR second T-test=0.003117, showing significant increases in score. Purple percentage scores: VR first and Sim second T-test=0.090423, did not show significant increases.

Analysing quantitative data (above) and qualitative feedback we recommend using these formats sequentially: providing Simulation Suite learning initially before supplementing revision with Virtual Reality to maximise student confidence and performance.

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ORAL PRESENTATION RUNNERS-UP, AS SCORED BY OUR SENIOR JUDGING PANEL:

From applicant to medical student: an insight into the experiences of international medical students in the United Kingdom.

PRESENTED BY: DAISY KIRTLEY

CO-AUTHORED BY: DR. CAROLYN MURRAY, DR. JANE ROWE

ABSTRACT

Introduction

Globally, the number of international students is increasing (1). However, international medical students (IMS) face unique challenges compared to home students (2,3). Previous research has focused on the experiences of IMS at medical school but has omitted the application process. No research to date has focused on the experiences of UK IMS (4). This project aims to explore the journey of IMS, from application through to their current experiences at a United Kingdom (UK) medical school.

Methods

This qualitative project was conducted using a phenomenological approach to gain insight into the experiences of eight current IMS at a UK university. Semi-structured interviews were conducted, followed by thematic analysis, which identified themes and subthemes. Ethical approval was obtained through the University of Exeter.

Results

Four main themes were identified: the effects of qualifications, language barriers, support networks and financial barriers. Within these themes, IMS encountered enablers and barriers that affected their access and experiences at medical school.

Discussion

Financial barriers potentially preventing IMS from lower socio-economic backgrounds from studying medicine in the UK were identified, contradicting widening participation (WP) policies. These financial barriers are set to increase as students from the European Union will begin to pay international student fees, from August 2021 onwards (5,6). Further research into financial barriers and identifying the WP group of IMS should be undertaken. Implications advising how medical schools can amplify enablers and reduce barriers are discussed in our recommendations. These changes could empower medical schools to improve their accessibility and the experiences of IMS.

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ORAL PRESENTATIONS:

Sound financial education is missing from the medical school curriculum

PRESENTED BY: DR. CYRA ASHER

CO-AUTHORED BY: DR. AKASH DOSHI

Most medical students enter medical school as teenagers. They are subsequently thrust into a medical career, with little understanding of how to navigate complex financial decisions they will need to make in their personal lives. This can translate into a lack of confidence in managing financial decisions in the workplace. Many will go on to manage large budgets. With early delivery of strong financial education, financially astute clinicians can enter the workforce with an appreciation of the constraints they are faced with. There is extensive evidence that hospitals led by doctors deliver better care and value. My aim is to provide doctors with a foundation in financial principles that will provide the confidence to reach for those leadership roles.

I delivered 12 weekly webinars starting from the basics of personal finance for doctors and building up to how the NHS is financially run and what clinical coding means to junior doctors. The webinars were delivered via Facebook Live. I also published accompanying articles via Mind the Bleep's website and have collaborated with them to deliver all their financially focussed content.

All 12 webinars have been viewed a combined total of over 7,500 times since inception in June 2021. Feedback has consistently shown an increase from an average 2 out of 5 stars to 4.5 out of 5 stars in the confidence of the viewer in the subject, pre, and post-webinar respectively. I have received correspondence seeking advice regarding clinical audits in coding from across the UK, with feedback indicating that viewers have changed the way they document notes by using more "codable" vernacular.

Medical students and new doctors are receptive to teaching on this subject and have shown strong engagement. A more structured curriculum with resources to tailor learning to the individual would address feedback seeking further examples.

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Quality improvement project (QIP) on improving final year medical students' preparedness for practice during COVID-19 pandemic, to aid transition into the foundation programme (FP)

PRESENTED BY: AASHNI SHAH & ROSHNI PATEL

ABSTRACT

Introduction

Students amongst the 2020-2021 cohort were disproportionately affected by the COVID-19 pandemic (1) with

interruptions to assistantships having had the largest effect on students' confidence and preparedness levels (2). The aim of this QIP was to bridge the gap for final-year medical students transitioning into the FP by designing and implementing a teaching programme.

Methods

A 6-item questionnaire was distributed amongst 12 final-year medical students attending clinical placements at Northampton General Hospital to assess their baseline confidence levels and preparedness for assessing acutely unwell patients, including patients with COVID-19, task prioritisation and hand-over skills whilst working on-call shifts. Two Plan-Do-Study-Act (PDSA) cycles were executed, where the first intervention involved delivering a lecture-based teaching session. Management and prioritisation of scenarios that commonly present during an on-call shift were discussed in this. In the second cycle, an on-call simulation session was delivered where students could practice in a safe environment.

Results

Pre-lecture course questionnaire showed that the students rated their preparedness levels for starting on-call shifts as 30%. Post-course questionnaire results showed that their feeling of preparedness levels improved dramatically to 80%.

Following the simulation session, students reported on average that their preparedness levels for performing their first on-call shift as an F1 was 90%. This suggests that through this 2-part teaching series, all students' preparedness levels increased by an average of 60 percentage points. Students noted that the course helped them improve key skills being measured by this QIP.

Conclusion

Multiple studies, including our research, has highlighted that final-year medical students often feel underprepared for being on-call as an FY1 doctor (3). We believe that this course should be implemented widely for final-year medical students as it enables students to develop the required skills for the transition from student to doctor, which benefits maintaining high-quality patient care.

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Social Media, Surgical Education and Professional Identity

PRESENTED BY: SHARMI HAQUE

ABSTRACT

Introduction

Social media is evolving to be a commonplace where ideas, perspectives and exchange of good practice is exchanged amongst the surgical community. In this study, the exploration of the way in which social media affects surgical education and the surgical professional identity.

Methods

A scoping review will be conducted using the following keywords 'Twitter', 'Facebook', 'Linkedin', "social media", "professional identity" and "web technologies" employing databases including PubMed, Web of Knowledge and other grey literature.

Results

The results demonstrated that social media has a pivotal role in surgical education from medical student to senior clinician level. It plays an essential role in the surgical community in terms of accessibility which is not always possible in the clinical setting due to work commitments. Good practice ideas, perspectives and tip exchange had assisted many surgeons both junior and senior in their daily work. However, the risks of social media need to be highlighted and evaluated especially for patient education.

Discussion/Conclusion

Social media participates in surgical education in a positive way and it enables a sense of accessibility and inclusion which is not always a mainstay feature in clinical practice. Visibility of surgeons on social media can embrace collaboration. For junior clinicians, it provides a platform to supplement their learning and education. For senior clinicians, it provides a way to increase networking and this can in turn can help accelerate their careers. It places problems for patient education and the risks of social media need to be outlined to assist in the professional identity of the surgeon. Further work needs to be orchestrated to incorporate good social media practices to the relevant surgical bodies to evolve with the innovative nature of surgery.

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Difficulties and educational challenges faced by International Medical Graduates in Trust Grade roles in the UK

PRESENTED BY: DR. MELROY RASQUINHA

ABSTRACT

Introduction

With post-graduate training programmes commencing at fixed times every year most International Medical Graduates (IMGs) obtain a non-training job such as a Trust grade (TG) role, when first starting work in the NHS [1]. This transition into a new healthcare system comes with many educational challenges [2]. There is minimal literature on the difficulties and educational challenges faced by IMGs in the UK and even less on the experiences of those who have worked in a TG role. Thus, this study aims to explore these challenges and propose potential solutions where possible.

Method

This study was conducted at a UK teaching hospital in 2020. An online questionnaire, face to face interviews and issues escalated at TG meetings were used to collect qualitative data from TG-IMGs. Responses were recorded electronically and subsequently analysed using a thematic approach.

Results

31 out of 94 that met the inclusion criteria responded to the questionnaire. Two were interviewed and two issues escalated from a TG meeting were obtained. A major educational barrier cited was the lack of understanding of the values and structure of the NHS, clarity in relation to the role of a supervisor, medico-legal and ethical issues, career progression and different learning strategies in the UK. Other issues included, discrepancy in study budget and study leave days with training counterparts and difficulty in communication e.g. complex clinical scenarios (End of Life) or not understanding colloquial terms, thus inhibiting integration

and being able to establish rapport with patients.

Suggestions for improvements included a generic online induction for both supervisors and newly starting doctors and initiation of a buddy programme with senior IMGs to ease the transition process.

Conclusion

Along with educational challenges this study highlighted socio-cultural differences faced by TG-IMGs and proposed solutions where possible. Nonetheless, views of other healthcare professionals should also be sought.

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“The reason I’m where I’m at now”: Medical students’ experiences of comparing themselves to one another.

PRESENTED BY: ALEXANDER FLACH & DANEILLE MURDOCK

CO-AUTHORED BY: SHELLEY FIELDEN, DR VALERIE FARNSWORTH

ABSTRACT

Introduction: As medical degrees are unclassified [1], all junior doctors graduate on an equal academic level and must find other ways to stand out from others. There is currently little research into how medical students experience the phenomenon of setting themselves apart. We aimed to address this, explore any barriers, and consider the impact of comparison on student wellbeing.

Methods: This was an exploratory study designed within the constructivist paradigm. Seven semi-structured interviews were completed on Microsoft Teams with Leeds medical students intercalating and in Years 4-5. Interview transcripts were analysed thematically using Braun and Clarke’s model [2].

Results: Six themes were identified;

- (1) career development includes early CV building
- (2) research and commitment to specialty are seen as most important for standing out from others
- (3) competition fuels motivation and engagement
- (4) Part-time work alongside studies can be a barrier to career development
- (5) Comparison can impact on wellbeing
- (6) COVID-19 may have impacted students’ ability to build their CVs.

Discussion/Conclusion: Participants were unaware or had forgotten about existing careers support, highlighting that more sustained signposting may be required. As medicine is a competitive domain, comparison between students may encourage motivation to stand out. This pressure may stem from the immense competition to get into medical school. This can cause feelings of inadequacy and added stress, on top of an already stressful course. Research publications and demonstrating ‘commitment to specialty’ were seen as vital for standing out. Part-time employment alongside studying can lead to less free time to engage in CV building. Bourdieu’s social theory of capital can be used to explain some of the barriers [3]. Whilst online events during the pandemic were more accessible due to lower costs and travel requirements, the loss of face-to-face clinical exposure may have impacted students’ confidence and career development.

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POSTER PRESENTATIONS:

Teaching British Sign Language to medical students by medical students

PRESENTED BY: DEEYA KOTECHA

CO-AUTHORED BY: PANAYIOTIS LAOURIS

ABSTRACT

Introduction: Over 70,000 individuals in the UK are Deaf (British Sign Language users) yet doctors still report discomfort in communication, a feeling which is mirrored by their patients. Thus, Deaf awareness is an important part of medical education. However, it is not prioritised in the core curriculum. To compensate we created a specifically tailored, online, two-session course, covering the basics of Deaf awareness in medicine, including top tips for communication, with an introduction to BSL specifically tailored to the medical environment. The course was delivered to medical students at the University of Cambridge over a two-week period.

Methods: Prior to the development of the course, we conducted a short online survey of medical students, to determine a range of factors: including their level of knowledge of sign language and Deaf culture, as well as specific areas of interest. These were then used to develop an appropriate course. Following each session, feedback was collected by further online surveys and analysed.

Results: The pre-course survey showed that the most requested topic was 'advice on communicating with Deaf individuals', especially in emergency situations. At the end of the course, 31 students provided feedback. 20 (64.5%) described themselves as beginners, 10 (32.3%) as intermediate and 1 (3.2%) as pro. 22 students (71%) rated the course as 5/5 in terms of its usefulness and 4 (29%) as 4/5. Feedback was also collected on 'what worked well', and 'what could be improved' which was thematically analysed.

Discussion: This course is an opportunity for medical education in Deaf awareness. We present some of our guidance for developing similar courses.

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Cases in Cardiology: The Challenges and Opportunities of Teaching Medical Students during the COVID-19 Pandemic

PRESENTED BY: DEEYA KOTECHA & LARA HEBDON

ABSTRACT

Introduction: The COVID-19 pandemic has resulted in major disruption to medical education with a need to adapt to online teaching¹. We decided to address this need by developing a novel case-based teaching series in cardiology, delivered via Zoom. This covered both core knowledge and gaps identified in our formal teaching. Although initially designed for Cambridge medical students, the popularity and online format resulted in international reach.

Methods: Five teaching sessions were delivered covering a range of high-yield topics such as pulmonary embolism, heart failure and fifth year specialties such as paediatric cardiology. To create a cycle of improvement, we collected anonymised feedback for each session via a 5-point questionnaire. This produced a combination of quantitative and qualitative data which was then reviewed with incorporation of thematic content analysis.

Results: In total, 118 participants attended from countries including the UK and the Philippines. On average, session usefulness was highly rated at 4.7 out of 5. Positive feedback included the clinical relevance, comprehensive approach (with cases covering the full spectrum of the disease from aetiopathophysiology to management) and active recall through exam-style questions and summary quizzes². Points of improvement included technological difficulties, speed of delivery and the level of difficulty (as students were in different stages of their training).

Discussion/Conclusion: Benefits of our online case series included a more environmentally sustainable method of teaching and geographical flexibility for both the teacher and student, allowing for international attendance. Interactivity was also increased through the use of Zoom chat with the private messaging function affording increased privacy. A significant challenge was tailoring content across a range of abilities. To address this, a broader scope of content could be adopted with the use of a traffic-light system to denote difficulty. Finally, smaller group sessions could allow for more individualised teaching.

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Comparing practical surgical skills workshops for surgical conferences by assessing self-reported increases in understanding, confidence and motivation for surgical careers.

PRESENTED BY: DR. MOHINI PANIKKAR

CO-AUTHORED BY: DR DEVANSHI JIMULIA, DR JACK SHARMAN

ABSTRACT

Background and Purpose: Surgical conferences are imperative for undergraduate surgical education. Organising a surgical conference requires efficient use of resources, especially for inaugural conferences or those run by smaller societies. We assessed the most beneficial workshops for the Birmingham Surgical Symposiums 2018/19 by reviewing changes in confidence, understanding and motivation to pursue surgery pre- and post-workshop. It is intended that this data help guide the organisation of future undergraduate conferences.

Methodology: Using 1-5 rating scales, we quantified the average understanding and confidence in nine surgical skills before and after the session. We also ascertained how much each workshop increased an interest in surgical careers, again using a 1-5 rating scale. Dependent T Test in SPSS 26 was used to assess for statistical significance.

Results: All workshops saw statistically significant increases in understanding and confidence in both years. Cyst excision and Z-Plasty consistently ranked within the top three workshops for increasing understanding and confidence, with orthopaedics also scoring highly in both years. Cyst excision and Z-Plasty topped the list of workshops for increasing interest in surgery in both years. The 3rd greatest workshops for promoting surgical careers in 2018 and 2019 were orthopaedics and bowel anastomosis respectively.

Discussions and Conclusions: Cyst excision, Z-Plasty and Orthopaedics seem to be amongst the most valuable workshops to run in a student surgical conference. Plastics-related workshops seemed to score more highly than workshops related to other specialities, though all workshops received high quantitative feedback which may indicate that a variety would be best suited for small or inaugural conferences.

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Exploring the Experiences of the Birmingham Surgical Symposium Organising Committee and Delegates

PRESENTED BY: DR. MOHINI PANIKKAR

CO-AUTHORED BY: DR DEVANSHI JIMULIA, DR JACK SHARMAN

ABSTRACT

Background and Purpose: The Birmingham Surgical Symposium (BSS) 2020 hosted 108 delegates and included talks from internationally renowned speakers, surgically themed practical workshops and a careers fair networking opportunity. Numerous undergraduate surgical conferences exist, aiming to inspire and educate medical students who are considering surgical careers. This paper reflects on the BSS to guide and inform the organisational process that surgical societies adopt when planning future conferences.

Methodology: Data was collected by disseminating feedback forms after the conference. Delegates were asked to rate various aspects of their experience from 1-5 and, in certain circumstances, were given the opportunity to provide free-text responses. Responses were anonymised and Friedman's ANOVA was used to assess for differences between different conference aspects, with Wilcoxon's signed-rank test used post-hoc ($\alpha=0.05$). Informal meetings with committee members were arranged to evaluate the event from the organisers' perspective.

Results: The BSS 2020 averaged 4.8 for overall satisfaction and 4.6 for relevance to delegates' future careers. The practical workshops scored highest for overall satisfaction (4.73.) The relative value of talks from junior and consultant doctors was not statistically significant. Feedback from the organising committee highlighted the benefits of effective time management and group leader allocations for workshops as well as areas of improvement e.g. workshop sizes.

Discussions and Conclusions: Undergraduate surgical conferences are instrumental in inspiring medical students to enter into the surgical field. Imperative considerations when organising surgical conferences

include delegates' levels of prior surgical experience, demographics' areas of interest and delegates' place in various training pathways.

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The impact of Brexit and COVID-19 on the diversity of UK medical school applicants in 2020

PRESENTED BY: SAMUEL LATHAM

CO-AUTHORED BY: AMELLE GEURIM RA, DAVID RYAN

ABSTRACT

Introduction: Increased diversity in healthcare teams is associated with better patient outcomes and financial performance.¹ This retrospective observational study used demographics data from the Universities and Colleges Admissions Service to determine if Brexit and SARS-CoV02 (COVID-19) influenced the diversity of UK medical school applicants in 2020. This study addresses an important research question as these historical world events have posed varying obstacles for medical school applicants depending on their demographics. Furthermore, UK medical schools now have a political mandate to recruit more diverse students and a set timeframe to reach certain objectives.²

Methods: Data from 2015 to 2020 was obtained by using a freedom of information request. Age, gender, ethnicity, disabilities, school type and nationality data were selected for analysis. To compare the 2020 admission cycle to previous cycles, the authors conducted a time series analysis and created linear forecasts with the FORECAST.LINEAR function in Microsoft Excel. The 2020 data that did not fall within the 2020 forecast \pm 95% confidence interval was considered to be statistically significant ($p < 0.05$).

Results: There was a consistent decline in the percentage of UK medical school applicants who were male, white, had no disabilities and were educated in independent schools. In 2020, there were statistically significant increases in applicants who were aged 19, had disabilities categorised as 'other', were educated in grammar schools or sixth form colleges or 'other' school types and had EU/EE nationalities. There was also a statistically significant reduction in applicants aged 40 and over in 2020.

Conclusion: This study suggests that Brexit and COVID-19 have not influenced the diversity of UK medical school applicants in 2020. University faculty and the UK government must continuously make efforts to improve diversity in medical schools to ensure doctors across the UK are fully representative of their patients.

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[Has the COVID-19 pandemic helped to produce better doctors? A review of medical students working as HCAs during COVID-19 across West Yorkshire.](#)

PRESENTED BY: JACK BENNETT

CO-AUTHORED BY: ELLEN THOMAS, LLOYD FINLAY

ABSTRACT

Introduction:

The COVID-19 pandemic presented a unique challenge to medical education when universities were forced to suspend in-person teaching. Many students sought alternative healthcare exposure in the form of HCA work, concerned about the negative impact on their studies and wellbeing (1). With more students working within the role and during an unprecedented time, this study aimed to evaluate their experience both academically and emotionally.

Methods:

A cross sectional survey was undertaken amongst medical students who worked as a HCA or in a similar role. The survey was distributed electronically across social media, support groups and medical societies, within the medical schools in West Yorkshire. It consisted of either multiple choice style questions and Likert scales, exploring the participants perceived benefits and limitations.

Results:

A total of 70 responses were recorded of which 69 were eligible. 98.5% of students rated their overall experience as excellent or good, with 64.7% claiming that within the last 12 months, working as a HCA was more valuable than their clinical placements, in terms of their personal and professional development. 54.4% rated their experience as excellent or good for improving their clinical skills such as venepuncture; whilst 92.7% said their empathy and emotional intelligence skills had greatly improved or improved.

Discussion:

It has long been theorised the benefits of medical students undertaking HCA based placements (2), with some universities starting to include compulsory shifts in their curriculum (3). Working during the COVID-19 pandemic presented a unique learning opportunity and provided an overwhelmingly positive benefit for students in West Yorkshire, ultimately demonstrating the need for a national review of the topic. Assuming the results are reflected nationally, this study confirms the invaluable learning experience that HCA work can add to medical education through unprecedented times, now and in the future.

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[Virtual surgical education for foundation doctors in the United Kingdom during COVID-19 pandemic](#)

PRESENTED BY: CHEUK TUNG KAM

CO-AUTHORED BY: JAIDEEP RAIT

ABSTRACT

Introduction

Foundation training in the UK has been impacted by the COVID-19 pandemic. There have been disruptions and barriers to teaching (low staffing levels, government restrictions and the availability of appropriate facilities and social distancing measures). Medical education as a consequence has been reshaped to combat these barriers. Virtual distance learning has emerged as a feasible and acceptable modality of teaching. Surgical education in particular has been impacted due to the reduced exposure of teaching in theatres and clinics. To combat this waning exposure an online teaching series for foundation doctors, in affiliation with the Royal College of Surgeon Edinburgh, was designed and delivered nationally during the pandemic.

The aim of this study is to assess the feasibility and reception of an online teaching programme to become an integral part of surgical education.

Methods

A series of teaching sessions was delivered live (via Microsoft Teams™/ Zoom™) and recorded and uploaded onto YouTube™. Online feedback was completed by attendees (comprised of foundation trainees) following each teaching session and the results were analysed to understand the patterns and responses.

Results

95% of the trainees felt more confident on the subjects taught and were satisfied with the teaching series. The majority of the trainees (80%) preferred short (30 -60 minutes), held every two or three weeks, delivered by senior surgeons, covering a wide range of surgical specialties and conditions.

Conclusion

An online teaching series on surgical education has been shown to be well received by foundation trainees. There were preferences of live, interactive, video demonstration on procedures, senior-led sessions lasting less than 60 minutes and covering common pathologies in different surgical specialties. This teaching series provide a realistic opportunity to have a blended learning environment for surgical training nationally during the pandemic and the feedback can be used to improve future surgical training.

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Did medical students who volunteered during the first wave of the COVID-19 pandemic experience accelerated professional identity formation (PIF) - examining moments of transition?

PRESENTED BY: SAMSON WOODLEY

CO-AUTHORED BY: SANDRA NICHOLSON

ABSTRACT

Introduction – Professional Identity Formation (PIF) is an important concept in medical education, with some arguing that “the central issue in learning is becoming a practitioner” (Brown & Duguid, 1991). Students becoming doctors is usually presented as a linear journey through medical school. However in 2020, with clinical placements cancelled at the start of the COVID-19 pandemic, thousands of students took a step sideways by taking up adjunctive roles in healthcare (Byrne, et al., 2021). This offered a unique moment to explore what effect transitions, away from the normal trajectory of a medical student to doctor, had on students’ PIF, and also what effect volunteering had on students then returning to learn in a clinical environment.

Methods – Thirteen one to one semi-structured interviews were conducted with medical students in third year or above. The transcripts from these first went under inductive thematic analysis to illuminate how the experience impacted students’ PIF. Then a deductive analysis of the transcripts utilising a cognitive model of PIF as codes – disorientation, reconceptualisation and reprioritisation – was conducted to further explore and understand moments of transition (Wyatt, et al., 2020).

Results – Students embraced their hybrid role, and experienced an acceleration of PIF when they transitioned into their new role. Students pointed to the value of taking ownership of care, feeling part of the team, and being able to develop a greater sense of empathy toward patients. Interestingly, students in transition then took this greater confidence in their professional identity onto the ward when they returned as medical students, feeling more adept to learning on wards and to access learning opportunities across the MDT.

Conclusion – The study therefore highlights that transitions offer an opportunity for students to experience an acceleration of PIF, and that students taking up roles such as healthcare assistants benefited from this transition when returning to learn on the ward as medical students.

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Perceptions on the delivery of an online medical student-led conference

PRESENTED BY: ALEXANDRA CARDOSO PINTO

CO-AUTHORED BY: JUSTYNA GROMALA, HARVEY STEVENSON, DARA MILKOVA

ABSTRACT

Introduction:

COVID-19 restrictions meant that medical education had to adapt to online learning(1). The same was true for student-led extracurricular events. Online learning has several benefits, including minimal costs and reduced travel, but also involves a different kind of preparation to in-person events(2).

The aim of this project is to understand whether an online platform allows for successful delivery of a medical

student-led conference.

Methods:

The Endocrinology Society of Imperial College is a medical student-led organisation, which ran an online conference for medical students, on Zoom. The conference was free to attend and advertised on social media, email and by collaborating with similar organisations in other universities. It included 6 speakers, with talks on various Endocrinology topics. There were 238 sign-ups for the conference. Attendees were sent a feedback survey via MedAll after the conference.

Results:

145 participants answered the survey questions, using a 1 (lowest) - 5 (highest) scale. Mean scores were noted. Overall, confidence in topics covered improved by 1.5 points (to 4.0/5.0). Ratings for engagement and content quality were high (4.5/5.0) and respondents enjoyed the online format of the conference (4.5/5.0). 118 (81.4%) stated they were more likely to attend online than in-person conferences. Free-text questions were analysed thematically. Themes for what went well (n=145) included: presentations, engagement and interactivity, organisation and punctuality, online format; 24 respondents provided unspecific positive feedback. Themes for improvements (n=61) included: timings, engagement and interactivity, student involvement, presentations, technical issues and organisation.

Discussion/Conclusion:

Delivering a conference for medical students online can be an effective method of extracurricular medical education. Overall, survey respondents rated the event positively, with most stating that they are more likely to attend online than in-person events. Confidence in the topics delivered increased, participants found the conference engaging and were satisfied with the quality of its content.

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[A novel method of delivering medical conferences to undergraduate medical students during the COVID-19 pandemic](#)

PRESENTED BY: ANAM CHOUDHRY & ABEER ZAHID

CO-AUTHORED BY: SASHIANANTHAN GANESANANTHAN, NAILAH KHAN, SAHANA MAHESH, HAROON URREHMAN, THIVYA V VADIVELLO, TING YANG

ABSTRACT

Introduction: In June 2021, Cardiff University's Cardiovascular Society launched its first virtual two-day conference that reached over 900 registrants worldwide. The conference included ten Cardiologists based in the UK. In all fields, virtual conferences have found to aid efficiency [1] and inclusivity [2]. The study aimed to evaluate the impact of medical virtual conferences compared with the traditional face-to-face.

Methodology: The conference was delivered using Zoom over two days. A post-conference questionnaire gathered patient demographics and their opinions on both delivery methods and this conference. The responses were analysed using SPSS.

Results: 512 participants (277F v 232M), age (24.21 ± 5.43), from 32 countries responded. The majority (87.5%) of attendees found out about our conference via social media. Session-specific feedback included an increased interest in the speciality (72.9%), an improved likelihood of applying for cardiology speciality training (60.0%) and increased confidence in critical analysis (58.0%). Concerning the delivery, 90.6% agreed that webinars

offer flexibility and convenience, and 46.9% preferred virtual events. However, 23.2% felt that networking opportunities decreased, and 44 (9%) responders felt uncomfortable asking speakers questions virtually.

Discussion: The evidence collected demonstrates that virtual conferences serve an integral role in promoting medical education. They allow for greater international accessibility, a reduced financial burden and logistical ease. Most participants found out about our event via social media, which exhibits the power that social media now holds in today's educational community. This study serves as a model that these virtual initiatives are as successful as in-person events for future medical conferences.

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The experience of medical students' anatomy teaching during COVID-19: From labs to computer tabs.

PRESENTED BY: YAZMIN BAKHTIARI

ABSTRACT

Introduction

Anatomy is considered one of the most fundamental foundations of medicine, essential for good clinical practice (1,2,3). Many consider cadaveric dissection as the gold standard (2). However, with a reduction in donor bodies and high maintenance costs technology enhanced learning is more prominent than ever before (2). With the context of the COVID-19 pandemic, many medical schools worldwide saw the transition of face-to-face teaching to solely remote teaching, inevitably impacting the delivery of anatomy education. Therefore, this study aimed to investigate students' perceptions of online anatomy teaching compared with their lab-based experiences. Perceptions of self-efficacy regarding students' anatomical knowledge was also explored.

Methods

A 17-item online questionnaire consisting of a mix of multiple-choice questions, Likert-style questions, and open-ended questions was designed. The questionnaire link was distributed to all medical students of the 2020/2021 Year 2 cohort at Queen Mary University of London and 45 participants were recruited.

Results

Data analysis reveals no statistical difference in student satisfaction with online experiences. Thematic analysis depicts wide-ranging perceptions towards online experiences including enhanced collaborative learning with opportunity to participate anonymously whilst others struggled in the virtual learning environment. 93% of students did not believe anatomy could be transferred to solely online teaching. Students believe exposure to cadaveric material and opportunity to complete practice questions is essential to anatomy learning and is associated with higher feelings of anatomical self-efficacy.

Conclusion

Our results suggest that online learning is quite a polarising experience and support findings in literature whereby technology should not replace face-to-face instruction. However, results are limited to one cohort of students from one medical school. Moving forward, the results provide an opportunity for educators to rethink how instruction is delivered. Perhaps online platforms can be the primary teaching modality supplemented by exposure to cadaveric specimens, to address a range of educational needs.

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Evaluating Preclinical Medical Student's Perceptions and Performance in Single Best Answer Question-based Teaching versus Non-Single Best Answer Question-based Teaching

PRESENTED BY: SAHANA MAHESH

CO-AUTHORED BY: ANAM CHOUDHRY, RAVANTH BASKARAN, SRINJAY MUKHOPADHYAY

ABSTRACT

Introduction: Single Best Answer (SBA) questions are a well-established method of assessment in Medical Schools [1]. Whilst some note SBAs to be useful in mimicking authentic situations facing doctors, others find them to offer students a false sense of competence [2]. Utilising SBA questions in teaching, rather than assessment, is a research area with limited exploration that this project seeks to evaluate.

Methodology: Students' perceptions of SBA vs non-SBA teaching (confidence, anxiety, and usefulness for exams) were evaluated using 5-point Likert scales, while their knowledge of the content was assessed using 12 standardized SBA questions. Questions were distributed via Google™ forms at the start and end of each session.

Results: 324 survey responses (mean age:19.7, median year: 1) were collected in the non-SBA sessions while 320 responses were collected in the SBA sessions (mean age:20.2, median year: 1). Students who attended the non-SBA sessions felt no improvement in their conceptual understanding compared to the SBA sessions [median: 3 (IQR:3-4) vs median:4 (IQR:3-5), $p>0.0001$]. There was no significant change in anxiety in both session categories [median:3 (IQR:2-4) vs median: 4 (IQR:3.75-5), $p>0.0001$]. Students felt that SBA sessions were significantly more useful in preparing for exams [median:3 (IQR:2-3) vs median:5 (IQR:4-5), $p<0.0001$]. Additionally, they were significantly more likely to pay attention in an SBA session [median:3 (IQR:2-4) vs median:5 (IQR:4-5), $p<0.0001$]. The non-SBA session resulted in a 1.88% increase in the average quiz score compared to a 12.5% increase in the SBA session.

Conclusion: Upon preclinical knowledge testing, SBAs improved student performance. Whilst students reported that SBAs didn't improve their conceptual understanding or alleviate their anxiety, our findings suggest that preclinical students are more likely to remain engaged and pay attention to teaching, feel better prepared for exams and subsequently score higher when these question types are incorporated into their teaching.

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[A toolkit for undergraduate medical students to implement pedagogy in near-peer teaching.](#)

PRESENTED BY: TANIA USMAN

CO-AUTHORED BY: HAFSA HAMMID, SAHEEL MAHMUD, HAFSAH GOUAALLA

ABSTRACT

Introduction:

Near-peer teaching (NPT) has become increasingly popular during the COVID19 pandemic considering the shift to remote learning and reduced clinician-led teaching, creating a unique opportunity for medical students to take on a pedagogical role. Whilst medical students demonstrate enthusiasm for NPT, they report a lack of guidance on designing and delivering NPT. Improvements in the guidance provided to tutors has been suggested(1), however, few studies specify the exact methods of improving NPT and are subject specific(2). We created a toolkit aimed to improve the effectiveness of NPT across subject areas within the medical curriculum.

Methods:

A scoping review was conducted to understand the pedagogical principles underlying effective NPT, which were used to create a toolkit consisting of an electronic guide of practical steps. Version 1 (V1) was introduced to 29 volunteer medical student tutors. Data was collected on the number of times tutors consulted the toolkit as well as learners' confidence in the following parameters (P): tutor's knowledge (P1), teaching ability (P2), level of engagement (P3), comfortability of the tutorial environment (P4), and overall quality (P5). Following feedback-driven modification, Version 2 (V2) of the toolkit was redistributed to 28 tutors in a subsequent tutorial series.

Results:

From 61 tutorials over 8 months, we found the toolkit was accessed twice on average per tutor. For toolkit V1, there was a positive correlation between P2, P3, P4 and P5, and the frequency of toolkit use. However, P1 showed a negative correlation with toolkit use. For toolkit V2, all 5 parameters showed a further percentage improvement compared to V1.

Discussion/conclusion:

Considering the lack of guidance for effective NPT, our toolkit shows promising improvements in the quality of NPT by medical student tutors. Next steps include improving the toolkit to facilitate growth in tutor's knowledge in the tutorial topics.

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[Exploring Medical Students' Perceptions of the Objective Structured Clinical Examination](#)

PRESENTED BY: DR. JAKE OUGHTON

ABSTRACT

The Objective Structured Clinical Examination (OSCE) has become a dominant feature of undergraduate medical education in the UK, as a near-ubiquitous method of assessment of clinical performance. Assessment drives learning in medical education(1,2); therefore, learners' perceptions of assessment methods may influence their approaches and motivation towards clinical learning. As key stakeholders in any assessment, learners' perceptions of an assessment will also contribute to defining its acceptability(3). Educational impact and acceptability are key variables in defining an assessment's utility(2). However, literature concerning medical students' perceptions of the OSCE is limited, particularly in the UK, and largely confined to survey-

based research.

This study adopted a qualitative approach, to explore students' perceptions of the OSCE with a greater degree of depth and flexibility, using semi-structured interviews to elicit the perspectives of six medical students in their 4th or 5th year of study. Interviews were transcribed and analysed using thematic analysis.

Three main themes emerged. 'Ticking Boxes' outlines how perceptions of 'checklist' scoring systems appeared to give rise to the protocolisation of clinical skills, and adoption of repetitive rehearsal methods, in students' approaches to OSCE preparation. 'Inconsistency and Injustice' describes how students' experiences of inconsistency during OSCEs provoked doubts concerning their fairness. Finally, 'Self-confidence and performance' describes the perceived impact of stress, self-doubt, and self-confidence on students during OSCEs.

Whilst limited by the small study sample, the findings illustrate how medical students' approaches to clinical skills learning may be influenced by their experiences and perceptions of the OSCE, and how this influence on learning may be unpredictable, and not necessarily positive. The study also provides insight into issues concerning acceptability. Despite academic consensus that OSCEs hold favourable reliability(4) and widespread acceptability(5), students may perceive the OSCE to be unacceptably unfair or stressful, on the basis of significant personal experiences of inconsistency, anxiety, or distress.

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Cold Calling: Superior Schooling or Super Scary?

PRESENTED BY: MAYA SIRIWARDENA

CO-AUTHORED BY: CHARLOTTE BLACKMORE

ABSTRACT

Introduction: Active student participation in teaching sessions aids learning. As an educator, have you tried improving participation using group discussions? What if some students don't contribute? Is it cruel to call them out? As students, we know the fear the 'cold-call' can instil but must it be this way?

Method: The role of cold-calling in university teaching was investigated using a scope of relevant literature and a cold-calling workshop at TEALfest 2021. Participating Warwick University staff were asked about their cold-calling experiences.

Results: Discussion revealed how negative cold-calling experiences as learners may discourage use as teachers. However, the literature scope identified three main benefits. Firstly, cold-calling increases voluntary participation in discussions without decreasing attendance or discomfort (Devers, Devers, & Oke, 2018). Secondly, cold-calling improves inclusivity by encouraging participation from underrepresented groups, particularly female and BME students (Dallimore et al., 2019). Thirdly, by removing the barrier between "I am thinking" and "I volunteer to share", cold-calling helps more students to contribute and stops conversations

being dominated by 'hand-raisers' (Lemov, 2016).

Conclusions: Cold-calling can increase participation and inclusivity in teaching sessions, but is under-used due to fear of provoking anxiety. To reduce anxiety, we suggest six tips for good cold-calling; (1) Prepare students with necessary materials and expectations for participation – e.g., cameras on, (2) Avoid questions with binary answers – e.g., ask for opinions, (3) Allow time to prepare or discuss thoughts – e.g., 'breakout rooms', (4) Show interest in answers and follow up with questions – e.g., "why do you think that?", (5) Create a safe learning environment where mistakes are accepted, (6) Give students the right to say 'I don't know'. At our workshop, we identified the need for further research into how cold-calling could be used in areas where there is a correct answer (e.g. maths) and in online learning sessions.

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[Evaluation of coaching skills training for school pupils from widening participation backgrounds who are considering healthcare careers](#)

PRESENTED BY: HAMZA IKHLAQ

CO-AUTHORED BY: ARTI MAINI

ABSTRACT

Introduction:

School pupils from widening participation backgrounds experience barriers to entering healthcare careers. These may include institutional initiatives not adequately addressing students' uncertainty regarding their own abilities and prospects (1,2). Coaching is a field that emphasises personal agency and is based on the premise that people are resourceful and best placed to identify the solutions that will work for them (3). We developed and evaluated a coaching training workshop for 16-17 year old school pupils from widening participation backgrounds to support them to navigate the process of applying for and pursuing healthcare careers.

Methods:

A one-hour online interactive workshop on solution-focused coaching approaches was developed and delivered to school pupils enrolled onto the Imperial College London Widening Access to Community Careers in Healthcare (WATCCH) programme. The workshop incorporated opportunities for pupils to practice coaching skills using their own real-life issues. Pupils completed an online survey (n=15) to evaluate the workshop on completion. Survey responses were thematically analysed.

Results:

All pupils 'strongly agreed' the workshop was useful, with 80% of students agreeing that they would apply coaching skills to their daily life and 93% agreeing these skills would be useful for future healthcare careers. All pupils felt coaching skills were beneficial to learn while at school. Several pupils felt that learning coaching approaches had enabled them to develop a greater sense of self-awareness and control, better communication skills and increased appreciation of their own resourcefulness. Pupils felt able to draw on coaching approaches in the future to resolve dilemmas and navigate challenges independently.

Conclusion:

Our evaluation findings suggest that training school pupils from widening participation backgrounds in coaching skills may support them to develop solution-focused approaches and increase their sense of agency in navigating challenges and opportunities when applying for and pursuing healthcare careers, as well as in life more generally.

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[“A drive to make change”: exploring the views and experiences of medical students engaging in advocacy](#)

PRESENTED BY: MEHIKA SOOD

CO-AUTHORED BY: DR DAVID BLANE, DR ANDREA E WILLIAMSON

ABSTRACT

Introduction: Advocacy is a recognised competency for medical graduates.[1-3] Many medical students engage in advocacy, but research on this topic is limited. This study aimed to explore the views and experiences of medical students engaged in advocacy.

Methods: Qualitative study using semi-structured interviews.[4, 5] Nine medical students from advocacy organisations were recruited by purposive sampling. Thematic analysis was used to generate codes that were applied to the data to develop themes.

Results: There were five themes: triggers and enablers; barriers and disablers; knowledge, skills, and attributes; advocacy in the role of health professionals, and future aspirations; and teaching and assessment of advocacy. Triggers and enablers for medical students’ advocacy included internal drivers (e.g. personal experience of injustice), and external drivers (e.g. role models and sense of community). Obstacles included lack of institutional support, personal challenges, discomfort around politicisation and legality, and professionalism of advocacy. Student advocates enhanced their knowledge of social issues, developed communication skills, and gained deeper insight into the patient experience. Advocacy activities had a strong influence on students’ future plans. Most agreed that advocacy is an important topic in medical education, suggesting teaching it in early years of medical school via small-group, discussion-based tutorials, and experience-sharing by role models. Assessment of advocacy is challenging, but a reflective portfolio-style approach was preferred over written exams.

Discussion/ Conclusion: Medical students’ engagement in advocacy has complex facilitators and barriers, and the relationship between advocacy and professionalism requires clarity. Benefits of advocacy include fostering empathy and other transferable skills required of future doctors. A limitation of qualitative research is that it is shaped by its context, and other lessons may be learned from different settings. Advocacy teaching was welcomed by students in this study, with suggested approaches proposed. The optimal learning and assessment strategy remains uncertain, and further research is needed.

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A comprehensive analysis of the experience of curriculum-based oncology teaching in UK medical students.

PRESENTED BY: JAHNAVI KALVALA

CO-AUTHORED BY: KATHARINE LYNCH-KELLY, ADRIEL FUNG, JESSICA HAREWOOD, EMMA KHOURY, ABEERA DEVASAR, CHARLOTTE WEST, ROSS GRAY, ROSS TULLOCK, AIDA ABDELWAHED, CAROLA MARIA BIGOGNO, SOPHIE HERITAGE

ABSTRACT

Introduction

The British Oncology Network for Undergraduate Societies (BONUS) surveyed undergraduate students who attended an oncology revision day to determine their views on the current quantity, quality, and type of curriculum-based oncology teaching they have experienced.

Methods

Students attending two BONUS revision days received a questionnaire assessing their experience of oncology teaching within the medical curriculum, and interest in pursuing a future career in oncology using a 10-point Likert scale. Data was collected with informed consent to be used for research and anonymised. Student demographics and qualitative and quantitative data about experiences in medical education were analysed.

Results

A total of 451 students registered to attend the revision days. After removal of duplicates, non-responders and non-UK participants, responses from 153 students, studying across years 1-6 at 22 UK Medical Schools were included in the analysis.

The median quantity of oncology lectures students had received was 6.5 hours, the median quantity of clinic/ward round based oncology teaching was 4 hours. 90 (62.1%) of the 145 students who responded to a question regarding receipt of specialist teaching had received specialist oncology teaching. Students who had received specialist teaching reported a statistically significantly higher mean quality (6.06 vs 4.95 $p=0.004$) and quantity (5.19 vs 4.35 $p=0.03$) of oncology teaching compared to those who had not received specialist teaching.

Discussion/Conclusion

Other studies have found that medical students rank oncology teaching poorly compared to the teaching they have received in other specialties (Bravery et al 2020). Variations in oncology teaching experience have been found to influence the confidence of newly qualified doctors when treating cancer patients (Cave et al 2007). Our analysis provides quantitative evidence to support the value of specialist oncology teaching within the medical school curriculum in improving student-reported experience.

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An eight-minute online method to boost medical student knowledge of dystonia: An interventional cohort study

PRESENTED BY: SANA KHAN

CO-AUTHORED BY: NINA SOWEMIMO, JANE ALTY, JEREMY COSGROVE

Introduction: Most doctors have a limited knowledge of dystonia. This is associated with diagnostic delay and poor quality of life for patients. Educating medical students about dystonia could improve this problem.

Methods: We conducted a systematic review of medical students' knowledge of dystonia, and the impact of video-education. We created an eight-minute educational video on dystonia and invited medical students at the University of Leeds, UK, to complete a questionnaire comprising 15 multiple choice questions, before and after watching the video. Students also completed the same questionnaire one month later. The project was entirely online.

Results: 87 students completed the baseline questionnaire; 77 (88.5%) completed the immediate-recall questionnaire and 40 (46.0%) completed the delayed-recall questionnaire. 75.9% had never received any teaching on, seen a patient with, or heard of dystonia. The mean score of the 40 students who completed all questionnaires increased from 7.7 (out of 15) at baseline to 12.5 on the immediate recall ($p < 0.001$) and 10.1 on the delayed recall questionnaire ($p < 0.001$). 75.9% of students initially rated their confidence in recognising dystonia low, whilst 78.3% rated their confidence as high after the intervention.

Conclusion: A short video-education intervention improved knowledge and awareness of dystonia in our study. Brief online video-education could be incorporated into busy medical curriculums to increase recognition of dystonia by doctors in the future, and this has potential to reduce diagnostic delays for patients.

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What is educational debriefing as used in prehospital medicine?

PRESENTED BY: MARIA AHMAD

CO-AUTHORED BY: MICHAEL PAGE, DANĚ GOODSMAN

ABSTRACT

Introduction

Educational debriefing is used following simulated scenarios and is central to learning and development in fields ranging from aviation to emergency medicine. (1,2) However, little research into educational debriefing in prehospital medicine exists. This qualitative study explored the facilitation and effects of prehospital educational debriefing, and identified obstacles to debriefing, using the London's Air Ambulance Pre-Hospital Care Course (PHCC) as a model.

Method

We conducted ethnographic observations of moulages and debriefs over two consecutive days of the PHCC in

October 2019. We made detailed contemporaneous field notes which we analysed thematically. Subsequently, we conducted seven one-to-one, semi-structured interviews with four PHCC debrief facilitators and three course participants to explore their experiences of prehospital educational debriefing. We transcribed and thematically analysed interview data.

Results

We identified four overarching themes: approach to facilitation of debriefs, effects of debriefing, facilitator development, and obstacles to debriefing.

The unpredictable debriefing environment was seen as both hindering and paradoxically benefitting educational debriefing. Despite using varied debriefing structures, facilitators emphasised similar key debriefing components including exploring participants' reasoning and sharing experiences to improve learning and prevent future errors.

Debriefing was associated with three effects: releasing emotion; learning and improving, particularly participant compound learning as they progressed through scenarios; and the application of learning to clinical practice. Facilitator training and feedback were central to facilitator learning and development.

Several obstacles to debriefing were identified, including mismatch of participant and facilitator agendas, pressure and time.

Conclusions

Educational debriefing in prehospital medicine is complex, requiring a safe learning environment, an understanding of participant agendas, and facilitator experience to maximise participant learning. Continually incorporating these aspects will enhance prehospital debriefing. Despite few study participants, we noted aspects unique to prehospital educational debriefing, including the unpredictable debriefing environment, and the paradoxical benefit of educational obstacles for learning, which require future research.

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Effectiveness of Near-Peer Virtual MOCK OSCE

PRESENTED BY: LABIB SAYED

CO-AUTHORED BY: TUFAYL A HANNAN, RAYAH AHMED, HUNAIZA ANSARI

ABSTRACT

Introduction:

COVID-19 caused disruption to medical education which has led to new innovative ideas to be developed. We have seen literature evolve and propose new methods to continue to drive medical education in these challenging times (1). Peer to peer teaching has been influential throughout medical school, enabling students from younger cohorts to gain additional support from senior students(2). However, due to COVID-19 and social distancing protocols, it proved difficult to conduct near-peer teaching sessions such as mock objective structured clinical exams (OSCE). Medical schools have taken a novel approach using a mixture of virtual and in-person stations to assess formative OSCEs.

Aims/Objectives:

To assess the effectiveness of our virtual mock OSCE in candidate confidence and competency, and to determine if medical schools are providing sufficient support for students to adequately prepare for hybrid type OSCEs.

Methods:

A 15-station virtual mock OSCE was constructed which involved a mixture of communication, history taking and examination skills over Zoom. Candidates consisted of fourth year medical students. Breakout room function was utilised to simulate 8-minute stations with candidates being moved automatically through each station.

Results:

Thirty participants were involved the virtual mock OSCE. 96% of participants found the virtual mock OSCE useful in assessing their current skills with 83% reporting in increased confidence and 80% feeling more competent in. However, 93% of participants felt that the medical school could have provided more formal support in preparation for virtual examinations and consultations.

Conclusion:

With social distancing requirements, online virtual mock OSCEs are a viable and useful teaching method to assist students to assess their current skill levels. Students can gain more confidence and competencies in their communication and virtual examination skills. However, medical schools lack teaching resources to help students to adequately prepare for virtual examinations.

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Comparison of medical student and junior doctor perceptions of a career in surgery and T&O

PRESENTED BY: KEEGAN CURLEWIS

CO-AUTHORED BY: BROOK LEUNG, LAURA HAMILTON, DAVID RICKETTS, BENEDICT ROGERS

ABSTRACT

Introduction: Women and minority groups are underrepresented within surgery and Trauma and Orthopedics (T&O) especially. Currently 57% of medical students are women, yet only 11% of orthopaedic trainees and 7% of consultants are women[1]. T&O has the lowest number of female consultants of all surgical specialties[2]. The aim of this study was to assess how attitudes of medical students and trainee doctors towards a career in T&O and surgery changed after having direct experience in the specialties and determine if there was any difference in attitudes between gender or race.

Methods: Ethical approval was obtained for two online mixed-methods surveys conducted between 2019-2021. Attitudes regarding T&O and their perceptions of surgeons were collected. Quantitative and qualitative data was analysed.

Results: 110 medical students at United Kingdom (UK) and international medical schools, and 32 trainee doctors at a large NHS Trust completed the surveys. T&O was a popular career choice. No significant differences in perspectives of T&O were found between gender or race in both groups. The hidden curriculum, defined as perspectives learnt separately from the formal curriculum (such as the surgical stereotype) [3] was not found to influence medical student or junior doctors career choices. Qualitative data revealed three key themes surrounding a surgical career: concerns regarding the training pathway, positive direct experiences, and comments from other specialties.

Discussion/Conclusion: Our study shows that interest in T&O improves with direct experience. This is likely because the hidden curriculum is negated and outdated stereotypes of T&O surgeons are disproven. Despite high interest amongst both genders, future studies are required to understand why numbers of female T&O surgeons remains low.

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UCLH Health Play Specialists

PRESENTED BY: SUMMER CHAN

CO-AUTHORED BY: NIK THEOLOGIS, KATHERINE QUINAN, ANNA BURFORD, LOUISE SUTHERLAND, CHLOE DAVIES

ABSTRACT

Introduction

Health play specialists are a vital part of the Paediatrics clinical team. Their work in play alleviates the uncertainty of the alien hospital environment for the child (HPSET 2015). Medical students have often not encountered them before, thus our poster aims to educate them about their role and the learning opportunities they can provide. Highlighting such opportunities to students will help them in directing their learning during their Paediatrics placement (van Houten-Schat, et al 2018).

Method

Semi-structured interviews with health play specialists at University College London Hospital (UCLH) in May 2021 about their roles, where and how medical students can shadow them. We additionally reviewed accredited websites Healthcare Play Specialist Education Trust and National Association of Health Play Specialists. All photos on the poster were kindly given with the permission of the health play specialist team at UCLH.

Results

A colourful, engaging poster was developed to be used for medical students' induction prior to their paediatric placement at UCLH. It has four key sections; what health play specialists do, the impact of COVID-19, types of environments they work in and opportunities for medical students.

Discussion & Conclusion

Health play specialists at UCLH work in a wide variety of settings including the paediatric wards, emergency department and in theatres. Play is important in preparation and distraction for procedures, and also benefits parents. In addition, COVID-19 has impacted their work and would continue to, in particular, limit shared play between patients. A limitation of this poster is that it is specific to the team at UCLH. It will require information on the health play specialists across other teaching hospitals to benefit other students as well.

Ultimately, shadowing health play specialists teaches medical students how to interact with children of all ages. This is invaluable in developing their confidence in history taking and examination skills of paediatric patients.

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Experiences, perceptions and expectations of medical students and junior doctors in training regarding virtual medical education during and after COVID-19 Pandemic.

PRESENTED BY: VINA SORAN

CO-AUTHORED BY: FATEMA REZAI, RACHEL NIRMAL, KATRINA NASH, JYOTI BAHARANI, PUNITH KEMPEGOWDA

ABSTRACT

Introduction

The transition from face-to-face to virtual learning platforms during COVID-19 pandemic ensured continuity of medical education for both undergraduate and postgraduate medical trainees (1,2). However, evaluating learners' end-user experience of virtual education and their expectation for future activities is key to developing sustainable models. This study aimed to evaluate perceptions, experiences, and expectations of virtual learning during and after the COVID-19 pandemic amongst medical students and junior doctors.

Methods

Medical students and junior doctors in West Midlands were invited to complete an anonymised 26-item online survey from January to May 2021. Data was analysed using SPSS v27.0 (IBM Corp, 2021). Categorical data are compared using Chi-Squared test and results are presented as proportions and median and interquartile range (IQR) where appropriate.

Results

A total of 290 (170 medical professionals (Age: median (IQR)- 35 (32-39), male: female ratio-1.23:1) and 120 medical students (Age: median (IQR)- 21 (19-22), male: female ratio-3.72:1) responses were received. 54 (45.0%) students and 127 (74.7%) junior doctors agreed that virtual learning aided with clinical and community practice. However, 87 (72.5%) students and 65 (38.3%) disagreed that virtual learning provided the same quality of teaching as in-person teaching. Poor connectivity (98 (81.6%) students and (82 (48.3%) junior doctors) was the most common technical issue reported in the survey. Medical students reported better experience with Zoom compared to Microsoft Teams and vice versa by junior doctors. majority preferred blended approach (95 (55.9%) of junior doctors and 82 (68.3%) of medical students) for future medical education activities.

Discussion and Conclusions

Our findings indicate that whilst virtual-learning is beneficial for theoretical learning, participants did not favour virtual-learning platforms for learning practical skills. A combination of face-to-face and virtual sessions was preferred by both medical students and junior doctors for future medical education.

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Shared Decision-Making Training in General Practice: A Rapid Review

PRESENTED BY: TAONA NYAMAPFENE

CO-AUTHORED BY: HAIDER MERCHANT

ABSTRACT

Introduction

Shared decision-making (SDM) is key to providing patient-centred care. However, SDM is lacking in primary care. Although training can address this problem, the literature on SDM training for general practitioners (GPs) is limited. Identifying training methods which effectively facilitate SDM in general practice can inform the development of SDM training programmes for GPs and contribute to improving patient-centred care. This review aimed to evaluate GP SDM training methods, and their outcomes.

Methods

MEDLINE, EMBASE and CENTRAL were systematically searched. Literature addressing GP SDM training was included. Study quality was appraised using the Medical Education Research Study Quality Instrument (MERSQI). The results were synthesised narratively.

Results

Seven studies were identified, with study participants comprising of GPs and GP trainees. Study quality was high, with a mean MERSQI score of 17.2/18 (range=16-18). SDM training was delivered in context, and most commonly included teaching on 'assisting patients in evaluating options' (n=7). Theory/presentation was the most prevalent training method (n=6), in combination with other teaching methods. Two studies observed positive changes in patient outcomes. Two further studies positively impacted clinicians' behaviour in practice.

Conclusions

There is limited evidence on SDM training methods for GPs. Whilst SDM training improved GP behaviour, the effects on patient outcomes were inconclusive. The most common teaching methods were didactics in combination with instructional guidance, and collaborative teaching, though these had varying outcomes. Practical and active teaching methods observed positive findings, though their prevalence was lacking. Hence, further research into the use of these methods, and cost-effectiveness, are needed.

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From training to practice: a qualitative study of GPs' shared decision-making experiences

PRESENTED BY: TAONA NYAMAPFENE

CO-AUTHORED BY: JOANNE BUTTERWORTH, MIKE EATON

ABSTRACT

Background

Shared decision-making (SDM) is key to delivering patient-centred care. However, general practitioners (GPs) find applying SDM in practice challenging. Although SDM training is undergoing development by health organisations, including the Royal College of General Practitioners, GPs' perceptions of the delivery of SDM training in general practice remain largely unexplored.

Aim

This study explored GPs' perceptions of teaching methods in SDM training.

Design and Setting

A qualitative study of GPs with teaching roles at the University of Exeter Medical School was conducted.

Method

Purposive sampling recruited 14 GPs, who became fully qualified between 1986 and 2019. Semi-structured interviews explored their SDM educational experiences. Data were analysed using thematic framework analysis.

Results

Three main themes were identified. The GPs described learning SDM through many approaches, though most learning was implicit. Role-play, receiving feedback, and on-the-job learning positively informed the GPs' SDM in clinical practice. The GPs valued learning from knowledgeable individuals and using realistic patient cases. To impact SDM performance in practice, the GPs identified facilitators, such as training which targets their learning needs.

Conclusion

This study can inform the development of SDM training for GPs and research on this topic. Adding to existing knowledge, this study recommends that SDM training should explain the potential benefits of SDM on consultation outcomes; and incorporate the uncertainty and challenges that are present in general practice consultations. This can promote SDM training to have a lasting effect on GPs' SDM in clinical practice and contribute to the provision of patient-centred care.

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ECG Interpretation for Surgical Trainees

PRESENTED BY: DR. MOHINI PANIKKAR

CO-AUTHORED BY: RAMA KARRI, SUMAN KUNDU, JACK SHARMAN

ABSTRACT

Introduction:

Electrocardiogram interpretation plays an essential role in peri-operative care for the majority of patients (Alegria-Barrero and Alegria-Ezquerro, 2021). In 2010, Raheel et. al compared surgical trainees' ECG interpretation abilities with their medical counterparts. Surgical trainees' accuracy in ascertaining rate, rhythm and diagnosis was considerably weaker. Few studies exist to provide objective comparison between surgical and medical trainees to highlight need for intervention and areas of weakness. This closed loop audit aims to address this issue.

Methods:

50 junior doctors (below consultant level) were asked to complete a 12-part multiple choice anonymised questionnaire. They also gave information regarding their level of training, specialty, confidence in interpreting

ECGs and managing the pathology. Participants were also asked to give details about what learning resources they would benefit from. A teaching powerpoint was then developed and distributed amongst trainees within the trust. A post-intervention questionnaire assessed improvement in these skills (41 responses).

Results:

Medical trainees were significantly better at diagnosing a PE with the aid of an ECG (23.4%, $p=0.034$.) Medical trainees significantly improved their ability to interpret post-operative ECG abnormalities following the intervention however surgeons saw no statistically significant difference(19.4%, $p=0.015$.) Confidence levels in interpreting ECGs for all trainees improved significantly post-intervention (3.6, $p<0.0001$.)

Conclusions: Overall, this audit has highlighted the need for further teaching resources in order to improve ECG interpretation amongst surgical trainees.

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edPSA: a roadmap for peer-based e-learning

PRESENTED BY: JESSICA BOYLE

CO-AUTHORED BY: FLORA JARDINE, THOMAS CLOUSTON, ANNA WIJNGAARD, SIBO WAN, EDPSA COLLABORATIVE

ABSTRACT

Introduction:

The GMC recognises that developing the broad range of skills required to support one's own learning and the learning of others is integral to modern medical curricula¹. COVID-19 has made developing these critical skills more challenging, thus the use of e-learning resources has increased. E-learning is shown to be as valuable to the end-user as traditional teaching methods and leads to increased student satisfaction².

Methods:

15 undergraduate medical students responded to the challenges of the pandemic to design, create and distribute an online e-learning video series on the Prescribing Safety Assessment (PSA), under the expert guidance of physicians, to ensure clinical accuracy and relevance. This resulted in the creation of the edPSA YouTube and website (<https://www.edpsa.org>).

Results:

The videos have amassed nearly 15,000 views cumulatively, with a broad outreach, including numerous universities throughout the UK and the Republic of Ireland. Our resource was beneficial to users, with a 93% positive response rate ($n=139$), and 100% of feedback ($n=38$) agreeing that it acted as a valuable aid to their revision, and that it promoted a better understanding of the PSA. Comments included "a really great revision tool", "a great resource", "comprehensive and useful" and "great videos, really helped a lot". One key finding was that of those who gave feedback ($n=38$) all believed that such a resource benefitted from being pre-recorded and online, as opposed to an in-person taught course.

Conclusion:

This project highlighted the benefits of e-learning resources. Not only do they allow for greater accessibility and outreach, but they also result in high student satisfaction and educational benefit, with all agreeing this was as a direct consequence of it being virtual. This is a vital consideration for future teaching, as with the increasing use of e-learning technology, it is likely to remain a core method of teaching.

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Evaluation of an online, undergraduate medical course during COVID-19: A single centre mixed methods study

PRESENTED BY: MAHSA KABULI

CO-AUTHORED BY: AMIR REZA AKBARI, GILLIAN PINNER

ABSTRACT

Background: The University of Nottingham (UoN) medical school provided an online course which substituted clinical placements cancelled due to Coronavirus. This course was delivered utilising both synchronous (real-time) and asynchronous (self-directed) methods (1). This study aims to evaluate student performance and perceptions of this new, online course (2).

Methods: A mixed methods approach was adopted using convenience sampling of 364 third year medical students at the UoN (2). Data was gathered on results of weekly progress tests which consisted of multiple-choice questions to measure student performance on pathologies taught. Pretests prior to, and posttests after teaching were conducted. A feedback survey provided qualitative data from open-ended questions and quantitative data from drop-down responses. A normality test determined the statistical procedure. Quantitative data was analysed using SPSS. A Wilcoxon-signed rank test determined if progress-test improvement was significant, whereas Cronbach's alpha measured the reliability of these tests (3). Qualitative data was interpreted using thematic analysis (4).

Results: Most students (78.5%) had a positive perception of the course, with several areas for improvement identified. Furthermore, online teaching significantly increased performance in posttests (Md 12.67 – 14.00) compared to pretests (Md 7.00 – 9.00); with Z scores ranging from -13.68 to -10.07 and all P values <0.001. However, reliability of progress tests was not encouraging (Alpha = 0.31- 0.67). Additionally, thematic analysis of the qualitative data identified five themes grounded in student perceptions of the course.

Conclusion: Most students had a positive online learning experience, however, there were differing opinions on teaching methods used. Furthermore, low reliability of tests may be due to the small number of questions (3); this should be revised for future students. Although performance significantly improved after online teaching, this may be due to repetition of questions. Further research is required to explore the relationship between memory and progress test improvement.

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Learn, Teach, Reflect, Repeat: A Novel Microteaching Course Disrupting Peer-Teacher Training

PRESENTED BY: SYED MAQBOOL

CO-AUTHORED BY: IDIL HUSSAN, AMINAH MIRZA, VANESSA RODWELL, AISHA KEKERE-EKUN, SU'AD TAKAR, MARIAM OMAR, KERRY DOBBINS

The GMC states teaching is vital to good medical practice(1). However, only a fraction of medical schools offer formal peer-teacher training(2) and even fewer offer practice under observation(2). Teaching in the Spotlight is a novel, peer-teacher training course developed in partnership with the Leicester Learning Institute. It addresses the aforementioned gaps through microteaching, an effective teacher training method little explored in medical education(3).

Teaching is improved through active learning which includes practice, feedback and reflection. Teaching in the Spotlight incorporates these central concepts into our adaptation of microteaching whilst educating participants on pedagogical theory. Our course, delivered by trained peer-teachers, is divided into an introductory course followed by a core course. The introductory course teaches participants the foundations in planning, delivering and evaluating teaching sessions. This enables them to confidently practise teaching thereafter. Each core course session consists of three sections: teaching, feedback and learning a new teaching format. Participants subsequently apply their learning the following week in the teaching section of the session, which they orchestrate. Throughout this, participants are supported by an assigned peer-teacher.

Due to our course's novelty, we aim to determine its effectiveness in training future medical educators. Data has been collected through pre-post questionnaires, participants' written reflective logs and focus groups. Mixed methods analysis is being implemented to evaluate a multitude of factors, including participants' opinions and overall development.

Preliminary results are promising. All participants improved across all self-reported variables; participants felt the course met their expectations and facilitated them in achieving their goals. Comments have been positive from both participants and their attendees, with an average attendance of 80 students within the participants' teaching sessions.

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Improving Ultrasound-guided Peripheral IV Access Skills and Knowledge among Foundation Doctors and Medical Students

PRESENTED BY: ABDULRAHMAN MOHAMED

CO-AUTHORED BY: JOSEPH JERMY, NEHA PASSI

ABSTRACT

BACKGROUND

Peripheral Intravenous access (PIV) is a common procedure undertaken by foundation doctors (FDs) and

medical students. Chronic medical conditions, dehydration, obesity and recurrent intravenous access can make the traditional visual-tactile approach to PIV challenging (1). Lack of IV access can lead to missed doses of time-sensitive medications such as antibiotics. Ultrasound (US) guidance can aid identification of suitable blood vessels and improve the success rate of PIV (2).

METHODS

We undertook a QIP aimed at improving US-guided PIV skills and knowledge among Foundation Doctors and Medical Students at our trust. Nine participants (FY1s, FY2s, Year 5 medical students) took part in a combined didactic and practical training session lead by a consultant anaesthetist. Self-reported confidence and competence were assessed using pre- and post-training questionnaires.

RESULTS

Sixty-nine percent of participants had no prior training in US-guided PIV. Following the implementation of a combined didactic and practical teaching session, 100% of participants reported improvements in their confidence and competence in operating an ultrasound machine, and 66% in obtaining PIV under US guidance. All participants reported being more likely to try to obtain US-guided PIV on the wards as a result of this session.

CONCLUSIONS

PIV can be difficult and can lead to missed doses of medications. Many FDs and medical students receive no training on the use of US. This QIP demonstrates that they can be trained successfully in the use of US as an adjunct to PIV.

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Preparation for FY1: Still Thrown into the Deep End

PRESENTED BY: WENDY TAN, ELLIE BRITT & CYRA ASHER

CO-AUTHORED BY: AKASH DOSHI, VICTORIA HEBBLETHWAITE, ELLENA COTTON

ABSTRACT

Introduction

Student assistantships, shadowing and trust inductions have been introduced to help final-year medical students transitioning into junior doctors. However, many questions regarding the practicalities of junior doctor life remain unanswered.

Aim

Our aim was to identify aspects of foundation year doctor life for which medical students and international medical graduates (IMGs) felt under prepared.

Methods

An initial survey was obtained from final-year medical students and IMGs, asking them how the curriculum could have better prepared them for practice.

Based on this, a 'Prepare for FY1' booklet was created and distributed online as a low-cost intervention. This was accompanied by a second survey, gauging the recipients' feelings of preparation for foundation years, and any questions which remained after reading the booklet. Having collected and analysed this feedback, we distributed an updated booklet.

Results

The main topics found in the initial survey to be lacking in the current curriculum were the day-to-day of a

junior doctor, communication skills, career planning, ARCP, and pre-work preparation such as indemnity, rota allowances, pay and tax.

The survey accompanying the first booklet found that 87% of responders felt unprepared for foundation years before reading the booklet. On a scale of 1-5, respondents rated an average of 1.41 on their knowledge on the practical aspects of the job.

Feedback on the design and content of the subsequent, updated booklet has been 100% positive.

Conclusion

Overall, there were vital areas where graduates lacked confidence when starting work. We hope our findings and guidebook will inform and support junior doctors embarking on their careers. Beyond this intervention, knowledge of these topics could be improved via other diverse teaching methods, such as webinars or podcasts, providing greater outreach.

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Comparison of Subjective Student Confidence Following Virtual Case-based Teaching and Simulation Training

PRESENTED BY: ROSHNI VINDA & FATIMA BRAIMAH

ABSTRACT

Introduction

The COVID-19 pandemic has provided the field of medical education with a challenge to adapt teaching methods and maintain operational resilience. One of the most effective forms of virtual education has been the development of interactive virtual clinical teaching. Concerns regarding lack of direct patient care and loss of feedback from clinicians remains a barrier to the progression of student competency. We compare medical students' subjective confidence levels before and after participation in virtual case-based discussions (CBDs) and simulation training.

Methods

A teaching programme was designed for third-year medical students undergoing their clinical placement. The programme incorporated seven virtual CBDs and seven face-to-face simulation sessions. Subjective confidence scores ranging from 1 to 5 (least to most confident) were obtained before and after each session. A total of 219 student responses were received.

Results

The average student confidence score prior to virtual teaching (3.2) over all topics covered, improved significantly following delivery of the sessions (4.4, $p < 0.001$). Improvement in confidence scores was also seen following delivery of face-to-face simulation sessions (2.6 to 4.0, $p < 0.001$). When comparing virtual and simulation teaching, a statistically significant difference was not found between the improvement of confidence scores for each teaching method. ($p > 0.05$).

Discussion/Conclusion

In exceptional times of COVID-19, evidence suggests that virtual teaching is effective and enables continuation of medical education. Acquiring medical knowledge and being able to apply it are key elements required to develop student competence. Here, we demonstrate the value of virtual and simulation teaching as part of the

medical curriculum. Further insight of COVID-19's long-term impact on medical trainees' subjective confidence and objective competence would aid the development of an integrative medical curriculum.

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A newly-formed student-led medical education society: OSCE revision series for fourth year medical students delivered by final year medical students

PRESENTED BY: DR. SIRAT LODHI

ABSTRACT

BACKGROUND: Although knowledge acquired during clinical placements remains fundamental for completing medical student objective structured clinical examinations (OSCEs), peer-led teaching is a recognised supplement to learning.[1] This has fuelled the creation of student-led medical education societies.[2] We describe an OSCE revision series for fourth year medical students delivered by the newly-formed Manchester Medical Education Society.

METHODS: Weekly 1.5 hour-long lectures were delivered over 3 months at a teaching hospital. Sessions were planned based on questionnaires assessing desired topics. The application of knowledge was encouraged using case-based scenarios. Eight final year medical students volunteered to be tutors and tutees signed-up to sessions.

RESULTS: 196 responses were collected across 12 sessions (average of 16 per session). On average, session content was rated as 9.54 and teaching style as 8.78 out of 10. 180 responses “agreed” or “strongly agreed” that the session improved knowledge. Average pre-session confidence was 2.10 and post-session confidence was 4.21 (1=very unconfident, 5=very confident). All tutees requested further teaching and 88% preferred society-led sessions over alternative student-led initiatives.

DISCUSSION/CONCLUSION: The revision series was effective in improving tutee knowledge and confidence. Most students preferred our sessions over alternative student-led teaching initiatives, supporting the use of formal near-peer teaching programmes. The success of our OSCE revision series for fourth year medical students has led to the development and delivery of virtual peer-led teaching on a national level. Through our peer-led teaching sessions, we hope to overcome some of the challenges associated with enabling equal access to medical education during the COVID-19 pandemic. We are in the process of collecting and analysing virtual teaching session data.

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How useful is the placement supervision group feedback tool? A survey of foundation doctor opinion

PRESENTED BY: STEVEN BROWN

CO-AUTHORED BY: ANGELA BURTON

ABSTRACT

Introduction

The Placement Supervision Group (PSG) tool, introduced in the 2012 UK Foundation Programme curriculum, allows the clinical supervisor (CS) to identify senior clinical team members and receive formal written feedback

on the Foundation doctor's (FD) performance. Previous studies have shown PSG to be useful in identifying FDs needing additional support, advising its wider use(1). The FP Curriculum 2021 now mandates at least one satisfactory PSG feedback summary for Annual Review of Competence Progression, however FD opinion has never been sought.

Methods

A survey was distributed to all FDs across 4 UK Foundations Schools to capture opinion regarding PSG feedback utilisation. This was a combination of likert-scale responses and free-text. Qualitative data was analysed thematically.

Results

220/700 respondents received PSG feedback and rated this as useful or very useful for the following:

- Confirming level of current clinical performance (93.6%)
- Evidencing good clinical performance (91.4%)
- Identifying areas for development (91.4%)
- Providing portfolio evidence at ARCP (87.7%)
- Evidencing achievement of curriculum outcomes (75.5%)

Of those that did not receive PSG feedback, 70.8% believed they could derive benefits from it. The following themes regarding PSG utility emerged:

- Identifying specific areas for development and valuable feedback on progress in these areas
- Where the FD had little contact with the CS or worked in fast-changing environments
- For reassurance and encouragement as new doctors
- Limited engagement from PSG members can hinder feedback quality and usefulness
- Potential for duplication of work already undertaken through other multi-source feedback tools.

Conclusions

Most FDs rated the tool as useful for their personal development. Those that had not received feedback anticipated significant benefits. The PSG is currently used to corroborate concerns, though awareness of its capacity to aid FD progress is limited. Pitfalls are similar to those identified in similar tools(2), therefore supervisor training should reinforce FD opinion and encourage engagement.

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[The effectiveness of a national virtual research bootcamp to increase research knowledge in medical students](#)

PRESENTED BY: EMILY HEPPENSTALL

CO-AUTHORED BY: KARISMA SHARMA, ANNA MARTIN

ABSTRACT

Background

For medical students to become competent future doctors, it is imperative that they can proficiently understand and apply research findings(1,2). This is key for future clinical practice and an integral aspect of GMC outcomes. Students For Global Health ran a virtual research training course for over 100 medical students. In using a standardised curriculum, our aim was to offer an alternative source of education and provide an accessible and equal platform for students to learn important skills. The purpose of this study is to assess the effectiveness of this initiative in improving knowledge of basic research competencies in medical students.

Methods

Ten sessions ran by experts in the field were delivered to participants. The competencies were adapted from the International Federation of Medical Students' Association's Basic Research Competencies Framework (BRCF). Each competency had predefined learning objectives as stated by the BRCF. Questionnaires pre- and post- sessions were circulated to measure participants' confidence with objectives. Survey results were analysed using Microsoft Excel and SPSS.

Results

100 students were accepted from 22 UK medical schools, ranging from first to final year. 54 different learning objectives were covered. A significant improvement ($p < 0.01$) in confidence was calculated for all learning objectives from pre- to post- session. When asked if research is essential to medical education and beneficial for their career, both statements scored an average of 9/10 on a Likert scale. When asked if they feel supported to engage in research in their university, the average score was 6.5/10.

Conclusion

This study supports the need for improved research skills education for medical students. Student run initiatives could be effective in addressing this need and improving research competencies. However, this needs to be addressed in medical schools as part of the core curriculum to ensure all students have access to research education.

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[Simba as an adjunct to small group teaching: a pilot study to improve undergraduate medical education](#)

PRESENTED BY: ADITYA SWAMINATHAN

CO-AUTHORED BY: KASHISH MALHOTRA, ISSY ALLISON, GEORGIA MORGAN, FATEMA REZAI, JESSICA MCVEIGH, ELIN CROCKETT, MERI DAVITADZE, EKA MELSON, PUNITH KEMPEGOWDA

ABSTRACT

Introduction

Problem-based learning is provided after lectures via small-group teaching (SGT) allowing medical students to solve cases in a group (1). Simulation via Instant Messaging - Birmingham Advance (SIMBA) is a novel simulation-based learning approach using WhatsApp to increase participants' confidence in their approach to various clinical scenarios (2). This study aimed to investigate whether SIMBA resulted in similar outcomes compared to the SGT.

Methods

Following endocrine-based lectures (adrenal and reproductive endocrinology) and an SGT, Year 2 medical students participated in two SIMBA sessions. Each SIMBA session involved an online simulation of real-life cases via WhatsApp, followed by a discussion with a specialist doctor. Post-SGT and post-SIMBA surveys captured the participants' attitudes using a Likert scale and knowledge via multiple-choice questions (MCQs). Stata 16.0 was used to anonymously analyse data for knowledge, effectiveness, and acceptance quantitatively. Responses from open-ended questions were reviewed and combined in a thematic analysis.

Results

43 SIMBA attendees and 42 SGT attendees were included in analysis. Significant improvements in MCQ scores

were seen in those who attended SIMBA sessions than SGT alone ($P=0.047$). Attendees strongly agreed/agreed that SIMBA was more engaging (100% vs 84.8%), increased understanding (100% vs 87.9%), improved preparation (97.7% vs 57.6%), promoted new knowledge (97.7% vs 87.9%), stimulated interest in endocrinology (90.7% vs 75.8%), and created a friendly environment for questions (97.7% vs 81.8%), compared to SGT. 91% of SIMBA attendees strongly agreed/agreed to have SIMBA as an adjunct to the usual SGT. Thematic analysis indicated that the major strength of SIMBA over SGT was providing individualised, structured, and engaging sessions.

Conclusions

SIMBA proved to effectively conduct engaging sessions to increase the knowledge of undergraduate medical students while using minimal resources. To explore the effectiveness of SIMBA as an adjunct or replacement for SGTs, further large-scale studies are required.

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Releasing OSCE titles in advance: student and faculty perspectives

PRESENTED BY: ELIZABETH VACHER

CO-AUTHORED BY: DIKSHA BHAGAT, KELLY WANJI, GIL MYERS

ABSTRACT

Introduction: The Objective Structured Clinical Examination (OSCE) is a significant component of clinical assessment and is associated with high stress levels (1). Last year, as UCL Medical School students could not be safely sequestered, OSCE station titles were released 48 hours in advance, due to concerns that some students may seek an unfair advantage by gaining advance knowledge of OSCE stations from their peers (2).

No published evidence exists on the impact of universities releasing OSCE titles in advance of the exam. This study aims to evaluate the views of students and faculty on this topic including impact on stress, performance and patient safety.

Methods: We conducted an online questionnaire to assess medical students' opinions on OSCE titles being released in advance. We considered how releasing OSCE titles in advance was perceived to have affected various parameters, including stress levels, performance and revision strategies. A separate questionnaire was sent to members of faculty involved in the OSCEs. We carried out statistical and thematic analysis of the questionnaire results, as well data analysis of previous OSCE performance data.

Results: 207 students responded to the questionnaire. 86% said that OSCE titles should be released in advance. Reduction in stress was reported as the strongest factor in favour of this decision. Of the 34 members of faculty that responded to the questionnaire, 71% were in support of releasing OSCE titles in advance. 81% of students thought releasing OSCE titles in advance did not affect patient safety, compared to 94% of faculty.

Conclusion: At present, a limited number of UK Medical Schools choose to release OSCE titles in advance. The majority of students and faculty thought that OSCE titles should be released in advance. Further studies are needed to explore the impact on student performance, both in their OSCEs and in their later career.

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Identifying the developments required to improve the standard of surgical education for medical students.

PRESENTED BY: PRISCA SINGH

CO-AUTHORED BY: DR. RAKHI KAKAD

ABSTRACT

Introduction

Surgical education is found to be lacking among medical students.(1,2) Surgical education encompasses a field of knowledge vital to future practitioners, including basic surgical safety – which is inadequately taught at UK medical schools.(3) Indeed, the skills identified by the World Health Organisation and Department of Health as surgical safety considerations are only taught in 17.4% of medical schools, with some additional teaching from student-run surgical societies across the country.(3) This highlights the need for a national effort to outline core surgical knowledge for undergraduates, ensuring all students graduate with a base level of surgical competence. This article aims to identify the developments required to further surgical education at an undergraduate level, through a review of the extant literature.

Methods

We conducted a search on PubMed, identifying 23 papers for inclusion in the review. We used combinations of the following terms: “undergraduate surgical education”, “components of surgical education”, “surgery”, “medical student”, “undergraduate”, “curriculum”, “teaching”, “deficiency” and “gap”.

Results

An analysis of the literature shows that key techniques that can be integrated into undergraduate teaching include surgically-oriented simulations, surgical videos, technology-enhanced learning such as virtual reality, journal papers and more. Data suggests that simulation, for example, can support the development of technical and procedural skills, as well as improving patient outcomes.(4)

Discussion

Medical education has long focused on the traditional apprenticeship style of learning, but with advances in technologies and the requirements for practitioners, developments to the curriculum are necessary.(5) Key techniques for improving education range from simulation to improvement of in-theatre teaching. The population of some of the included studies is small, and the field would benefit further investigation. However, the present literature suggests that through incorporation of the above educational resources into the undergraduate curriculum, surgical teaching can be enhanced, improving the competency of the future workforce.

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Evaluating the Impact of a National Virtual Surgical Teaching Series for Medical Students

PRESENTED BY: ASVENY RAJANANTHANAN

CO-AUTHORED BY: APURVA JAIN, EMILY BLIGH

ABSTRACT

Introduction

Due to the recent COVID-19 pandemic, there has been disruption in surgical education resulting in a decrease in confidence and perceived knowledge amongst junior doctors and medical students 1, 2.

Methods

We devised a surgical e-learning teaching series, composed of 14 webinars, given by clinicians working within those surgical specialties from August to December 2021. All of which were advertised by Sheffield SurgSoc's Facebook and Instagram and attracted a national audience.

This allowed students to learn about the common pathologies. after which the lecturers facilitated a Q&A session.

We aimed to improve confidence and knowledge in medical students from years 1 - 6 and foundation doctors (FY1-2) (n=127), from Dundee to Plymouth who attended to bridge the gaps created by the pandemic.

Each attendee filled in a feedback form evaluating their confidence on a scale of 1-10 in the topic prior to and after each webinar; 1 being not confident at all and 10 being extremely confident. There was additional space for open text for any other feedback.

Results

The results showed that average perceived improvement in confidence was 2.22 on the Likert scale.

Analysis of open text showed that students found the series valuable to their education, enabling them to feel more prepared for placement and summative exams.

Conclusion

Our study found that a teaching series was a useful adjunct to medical education to improve confidence amongst medical students and junior doctors.

The programme has many advantages in as it is inexpensive, replicable and available to all students.

We recommend that regional teaching series' should continue to be carried out in the future as an adjunct to medical education.

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Utility and efficacy of digital academic webinars on the competency of ECG interpretation

PRESENTED BY: NIRAJ S KUMAR

CO-AUTHORED BY: HARROOP S BOLA, THARUN RAJASEKAR

ABSTRACT

Background: ECGs are a vital tool in clinical cardiological diagnostics, required as core competencies for Junior Doctors [1]. However, with COVID-19 restrictions, in-person ECG training has not been possible. Hence, we evaluated webinars, previously shown to be an effective and accesible method of education, as a medium to teach ECG interpretation to UK medical students [2,3].

Methods: Students were invited to two webinars hosted by the British Indian Medical Association. The webinars were designed by a foundation doctor, and outlined clinical cases and key ECG interpretation skills. An online questionnaire was distributed to the students pre- and post-webinar, evaluating the student's learning and the impact of COVID-19 on their education, and statistical and qualitative analysis was conducted.

Results: In total, 212 students participated in the study, 129 in session 1 and 83 in session 2. Student confidence in ECG interpretation rose significantly across both sessions ($p < 0.001$). Qualitative analysis of feedback showed students preferred remote teaching to in-person, 47.5% and 54.2% in sessions 1 and 2 respectively, with convenience and accessibility as key reasons. Students found medical school teaching harder to engage with, as 61.5% of students preferred peer-teaching. Qualitative analysis revealed a majority of attendees were limited by a lack of in-person exposure to clinical ECGs, with a lack of practice, face-to-face teaching, and clinical application to real patient ECGs being reported across both sessions. Furthermore, participants reported inadequate support from online medical school teaching, with a lack of interactivity, lack of ability to ask questions, and academic challenges with self-directed learning.

Conclusions: This study demonstrated the webinar format to be effective, resulting in improved confidence and student engagement towards clinical learning, which was especially useful in the context of the COVID-19 pandemic given significant challenges to in-person ECG teaching.

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[Everybody Counts: A mixed method case study exploring female representation in anatomy education.](#)

PRESENTED BY: AMY FULLER

CO-AUTHORED BY: CATE KENNEDY

ABSTRACT

Introduction

With a growing legal and societal emphasis on equal representation, there grows a paralleling responsibility of educators to recognise and provide appropriate educational material that does not directly or indirectly discriminate against any of the protected characteristics set out by the Equality Act (2010). However, despite this, evidence continues to demonstrate the underrepresentation of the female body throughout both historic and contemporary anatomy teaching materials (Morgan et al., 2014; Parker et al., 2017).

Considering this phenomenon, the study aimed to explore the extent of female body representation within undergraduate medical education at the University of Dundee, School of Medicine.

Methods

Through a mixed-method case study, researchers employed a quantitative content analysis of anatomy images featured in PowerPoints used in anatomy lectures, in addition to qualitative in-depth interviews with students who recently completed years 1-3 at the University of Dundee, School of Medicine. Data collection was then followed by a conceptual analysis of the empirical data and then a thematic analysis of the students' perspectives.

Results

The study found female bodies were represented to a lesser extent than male bodies, particularly in the context of non-sex-specific anatomy education. Overall, males were represented 8% more than females, however when excluding reproductive anatomy teaching this margin significantly increased to 28%. Moreover, the students perceived a male standard within both anatomy educational material and broader medical culture.

Discussion/Conclusion

In conclusion, female bodies were represented to a lesser extent than male bodies throughout the anatomy images evaluated. Ultimately, the study supports the existing literature and indicates the existence of a

perpetual male standard and subsequent underrepresentation of female bodies within anatomy teaching materials (Martin et al., 2016). By both analysing teaching material and evaluating students' perspectives, the study helps to build a deeper, holistic understanding of modern female body representation in anatomy education.

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Development of Breast Disease Teaching in the Developing World

PRESENTED BY: *MAGD NOJOURM*

CO-AUTHORED BY: *ELIZABETH J MACASKILL, MUDHER AL-KHAIRALLA, SHATHA MUQBIL*

ABSTRACT

Background & Purpose: In Iraq, breast cancer is the most common cancer.¹ It is the cause of the highest number of new cancer cases (22.2%), and the highest number of cancer-related deaths (15.3%) in 2020.² The World Health Organisation identifies key skills required for early diagnosis as: recognition of signs and symptoms of breast disease, performing a good examination and history.³ Nevertheless, there is insufficient knowledge regarding breast cancer by senior medical students in developing countries.⁴ This project aims to assess the role of e-resources in undergraduate curricula and, and the challenges of delivering a breast curriculum in Iraq.

Methodology: A primary web search of available online resources covering breast disease was conducted. Next, senior medical students from Iraq were contacted for semi-structured interviews regarding their study experiences of breast disease (n=15). A thematic analysis of these transcripts were conducted using a two-cycle approach, utilising descriptive and pattern coding respectively.

Results: In the web search, a total of 33 e-resources were identified that met predefined criteria. 8 senior medical students attending Iraqi medical schools were interviewed, including (n=4) males and (n=4) females. Key themes identified included 1) resourcefulness in a pandemic 2) didactic teaching styles 3) limitations of e-learning 4) breast as an overlooked topic 5) barriers to breast examination.

Discussion & Conclusion: Students in developing countries experience many barriers to learning, and whilst clinical experience is key for developing skills; e-learning may have a role in the delivery of medical education in Iraq. Limitations of this study include a small sample size, but this is intended to provide a snapshot of the situation and provide scope for further research exploring the development of breast disease in low-income countries.

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Faculty development programs in online, e-learning skills for healthcare professionals: A systematic review

PRESENTED BY: AKHIL BANSAL

CO-AUTHORED BY: ILONA ARIH, KIRSTEN BLACK, ANNETTE BURGESS

ABSTRACT

Within medical education, there has been a sustained shift towards online, e-learning. This transition has been accelerated due to the COVID-19 pandemic. In tandem with the increasing role of e-learning in healthcare curricula, it is important to identify and evaluate faculty development programs focused on developing e-learning skills. This systematic review describes and evaluates the existing programs in e-learning for health professionals. A comprehensive literature search was performed, and after relevant inclusion and exclusion criteria were applied, a total of seven articles were included in this study. Overall, this review identified several key results; firstly, it found that e-learning programs currently evaluated are geographically concentrated and single-site programs at academic centres. Secondly, there is significant heterogeneity in the structure, length and learning outcomes of e-learning programs that currently exist. Further, e-learning programs did improve the perceived confidence and skills of clinical educators in using online learning tools. However, there are limited programs evaluated in the field, and more robust program evaluation is needed.

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Student perceptions on asking questions in an online lecture compared to a face-to-face lecture

PRESENTED BY: NISHAANTH DALAVAYE

CO-AUTHORED BY: VINCENT NG, RAVANTH BASKARAN, ALLEN-JOSSY MATTHEW, SRINJAY MUKHOPADHYAY, MOVIN PERAMUNA GAMAGE

ABSTRACT

Introduction

The COVID-19 pandemic shifted many domains of medical education to an online platform, including lectures(1). One of the perceived benefits of online lectures is the increased opportunity for interaction between students and lecturers using modalities such as the chat function(2). As part of these interactions, student questioning is a crucial aspect of an effective learning experience(3). To assess the impact of online lectures on student questioning, we evaluated student perceptions on asking questions to a lecturer in an online environment compared to the traditional face-to-face environment.

Methods

A cross-sectional survey, which consisted of 5-point Likert questions and free text boxes was created on Google Forms. The form was disseminated to all attendees of an online event titled, 'Hepatology for Finals' by OSCEazy.

Results

63 survey responses (mean age: 25.4, female: 65.1%) were collected. The majority of participants feel it is very important to ask questions to a lecturer [median: 5 (IQR:4-5), $p < 0.0001$]. Participants feel more confident to ask questions in an online lecture compared to a face-to-face lecture [median: 4 (IQR: 3-5) vs median:3 (IQR: 2-4), $p < 0.0001$]. During an online lecture, the majority strongly agree that it is easier to ask questions using the chat function rather than speaking directly to the lecturer [median: 5 (IQR:4-5), $p < 0.0001$]. 76.2% of participants agree that being anonymous to other attendees is a factor that increases their likelihood of asking questions in an online lecture.

Conclusion

The perceived ability to ask questions to a lecturer is an important aspect of student's learning. Online platforms such as Zoom can allow student anonymity and make it easier for students to ask questions to a lecturer, particularly through the use of the chat function. Further studies, using a larger sample size, should be conducted to further evaluate student perceptions.

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Bridging the Gap in Anatomical Education: A Blueprint to Enhance Deep Learning

PRESENTED BY: SYED MAQBOOL, SHALYN D'SA & ROHAN MEHRA

CO-AUTHORED BY: VANESSA RODWELL, NIROMIE SRIDARAN, RIA PRAJAPATI, TERESE BIRD

ABSTRACT

The latest pandemic has had a profound impact on medical education, with student satisfaction severely affected. Pre-COVID, most medical students often resorted to either surface or strategic anatomy learning, partly due to the sheer volume of content. Unfortunately, the assessment of anatomy learning has remained the same despite drastic teaching adaptations for lockdown. Thus, medical courses may no longer be constructively aligned, exacerbating student anxiety and further driving them towards surface or strategic

learning.

This needed addressing; through our virtual, innovative Musculoskeletal CrashCourses, we developed an interactive substitute to mastering anatomy. The CrashCourses, Lower Limb and Upper Limb, each comprised of two, six-station circuits over two days. Thoughtful division of the anatomy across the stations utilised a constructivist approach to enhance deep learning and engagement. 3D anatomical models provided multimodal learning, substituting cadaveric prosections. Bespoke prompt sheets containing key questions and anatomy pointers ensured our trained peer-tutors delivered a uniform, high standard of teaching.

Preliminary results of our mixed-methods analysis (questionnaires and focus groups) reveal over 40% of our students developed increased motivation and comprehension, whilst 70% developed a boosted confidence in tackling time-pressured exam questions. Ample positive feedback was received from our cohort of over 100 students. Students preferred peer-teaching that "wasn't a top down approach", where "tutors highlighted what was most relevant". Our combined use of effective learning tools, including clinical questions and 3D models, "helped strengthen...connections in [their] brain" and kept students "engaged".

Post-Covid, over 60% of our students agreed the virtual MSK CrashCourses should continue to be delivered, with half of them preferring a blended approach to MSK revision. Our sustainable solution is ready for deployment within all medical schools, particularly due to it having been delivered by the student cohort. This pedagogical approach is both high-yield and accessible, providing a much-needed safeguard for anatomical education.

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[Fake it 'til you make it – combining simulated ward activities with clinical shadowing to safely prepare final year Medical students for Foundation Years.](#)

PRESENTED BY: LEO GRADWELL

CO-AUTHORED BY: LAUREN DAY

ABSTRACT

Introduction:

It is recognized that newly qualified doctors feel unprepared for starting work . The COVID-19 pandemic has highlighted how vulnerable medical students are to burnout and the subsequent effect this has on their resilience . Recently, students have been unable to learn vital skills in clinical environments due to safety concerns. To address this, we designed an Assistantship Programme, combining simulated clinical activities with shadowing to help prepare students for working life, whilst minimizing the risk to both students and patients.

Method:

The program saw students participate in a combination of clinical shadowing, tutorials, and simulations designed to mimic situations junior doctors are often confronted with, such as ward rounds, on-calls, the medical take and assessing unwell patients. Students were expected to answer bleeps, prioritise their jobs list, and handover their patients at the end of their "shifts." Tutorials were designed to address commonly reported areas of little experience such as managing rotas, checking work schedules and interpreting pay slips. Questionnaires distributed before and after the assistantship assessed student's confidence and perceived competence in a range of tasks related to work as an FY1 doctor using a modified Likert scale. These were paired with quizzes designed to quantitatively measure competency.

Results:

Feedback received was excellent, with students consistently reporting increased overall confidence to start

FY1 and an average increase in perceived competence after successful completion of the Assistantship. Initial analysis of the quantitative data suggests an overall improvement in clinical competency. Although some issues with fidelity were reported, a follow up survey after starting FY1 indicated the Assistantship was beneficial.

Discussion:

Assistantships were reported by students as beneficial to their education during the COVID-19 pandemic . Our Assistantship Programme offers an adaptable and worthwhile opportunity for final year students, regardless of the availability of clinical learning environments , .

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The importance of clarity in maximising training opportunities

PRESENTED BY: DR. MELROY RASQUINHA

ABSTRACT

BACKGROUND

Most trainee doctors in the UK are expected to complete a life support course as part of their Annual Review of Competency Progression (ARCP) requirement [1]. However, the type required varies dependent on the specialty and stage of training[2]. Staff members at the postgraduate education centre (PGEC) of a UK teaching hospital reported that they were unclear on what courses trainees need to provide to meet their ARCP requirements. As a result, they felt limited in being able to provide adequate training opportunities or addressing any queries trainees had. The latter was also highlighted by trainees at the trust. Lack of clarity led to a need to consolidate this information on one platform.

METHOD

The entry and ARCP requirement for each specialty was reviewed and the required life support course was mapped accordingly. This information was then shared within the trust and views of PGEC staff and trainees were explored.

FINDINGS

PGEC staff were able to gain more of an insight into the type of life support course required for trainee doctors. With this perspective and knowledge, the staff reported that they felt better prepared to provide or create relevant training opportunities and address any queries trainee doctors had. Additionally, trainees working at the trust also reported it had offered them clarity enabling early career planning.

CONCLUSION

The variation in the type of life support course required for trainee doctors in the UK, may lead to a lack of clarity amongst educational staff members potentially resulting in limited training opportunities. Consolidating this information on one platform can help rectify this issue as it can act as a point of reference. Moreover, its understanding can also help promote early career planning for doctors. Nonetheless, training requirements may change with time and thus regular updates must be ensured to maintain validity.

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Skills and drills: a novel programme to improve foundation trainees' confidence in managing the acutely unwell patient

PRESENTED BY: DR. PAIGE MITSON & DR MELISSA HARTLEY

CO-AUTHORED BY: DR HASANTHI GOONERATNE

ABSTRACT

INTRODUCTION:

One of the main competencies for foundation doctors is the management of acute presentations and developing procedural skills. Whilst foundation doctors will undertake an Advanced Life Support course, the COVID-19 pandemic has caused delays in enrolment. Foundation doctors have fed back about a lack of confidence in certain key practical aspects of managing acutely unwell patients¹. We therefore identified an unmet need and produced a programme designed to familiarise trainees with the skills and knowledge to manage the acutely unwell patient.

METHODS:

We applied our experiences of the Foundation Programme to identify essential skills we had received limited opportunities to practice. The programme comprised of 4-hour small group sessions. Each session begun with a brief presentation where participants were encouraged to explore their experiences. This was followed by a skills demonstration and opportunity to practice. Finally, simulation was used to consolidate learning by providing an opportunity to integrate the skills in a clinical scenario². Sessions covered 'Airway and Breathing', 'Circulation and Ultrasound-Guided Cannulation', 'Cardiac Arrest' and 'Escalation to Intensive Care'. A range of skills were taught from bag-valve-mask ventilation to cardioversion. Participants were asked to complete feedback forms following the sessions.

RESULTS:

Sessions were rated as good or very good with 100% of attendees noting that the sessions improved their confidence and knowledge. All attendees agreed that the sessions were at the right level for their training and were enjoyable. Feedback highlighted that they would like more time covering the management of common medical emergencies as well as more simulation-based training.

CONCLUSION:

Our teaching programme improved trainees' confidence in the performance of clinical skills required in managing the acutely unwell patient. The format of small group focussed skills and drills sessions enabled foundation doctors to consolidate and practice these skills. The project continues to evolve to meet the need initially identified.

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'I don't really feel like I've ever had anyone tell me what they really think' An exploration into student perceptions of peer feedback within Leeds' MBChB

PRESENTED BY: RUBY O'LOUGHLIN

ABSTRACT

Aims & Objectives: Peer feedback/Peer assessment can support learning, improve reflective practice and is an important tool in medical education (Maas et al, 2014; Sandars, 2009). Despite literature citing benefits of its use, students perceive barriers to engagement such as not wanting to affect a peer's grade (Shue et al, 2005). This study aims to answer the following questions:

- What barriers to providing meaningful formative peer feedback do Leeds MBChB students perceive?
- What benefits to providing meaningful formative peer feedback do Leeds MBChB students perceive, if any?

Methods: A qualitative design was chosen. Leeds students from 3rd - 5th year including intercalating students were recruited due to their completion of the full IDEALS module. 9 students volunteered for two focus groups. Focus groups were conducted online via Microsoft Teams, recorded, then transcribed. Big 'Q' thematic analysis produced codes then subsequent themes (Braun and Clarke, 2019).

Results: The results consisted of four main themes 1) limited understandings of peer feedback 2) Lack of confidence in giving and receiving feedback 3) Peer relationships as a potential limitation in the early years 4) When is peer feedback valued? Students discussed seeing constructive feedback as negative feedback. Younger students didn't value receiving feedback from someone with no expertise whilst older students valued the use of peer feedback. Students felt they lacked confidence in giving peer feedback however confidence was seen to increase in older years.

Conclusion: Students agree that there is a positive feedback culture at Leeds. Peer feedback is perceived to be beneficial in preparation for exams and informally in a clinical setting. However wider issues surrounding student's confidence need to be addressed for students to reap the benefits of peer feedback. Based on my findings there needs to be a culture shift to view peer feedback as constructive rather than negative.

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Philosophy within obstetrics and gynecology in north west

PRESENTED BY: ZINAL SALIAN & LAURA HORNE

ABSTRACT

Medical educators will each have their own unique 'philosophy' which is their approach to education based upon their previous experiences, expectations and ambition. Broad categories to classify their philosophical approaches can help us identify themes within these approaches. Within this research, the authors explore the

spread of educational philosophies amongst obstetrics and gynaecology (O&G) consultants within the North-West.

A survey was conducted asking consultants where they trained and to subjectively classify the educational philosophy statement with which they most strongly related.

The anticipated survey audience was approximately 90, 33 responded giving a response rate of 38%.

The majority (66%) of O&G consultants considered themselves to have a constructivist philosophy, 16% reported themselves to be progressivists, 9% existentialists, 6% behaviourists and 3% existentialists.

Interestingly no consultants reported themselves as perennialists.

Constructivists emphasise the importance of developing independently motivated and independent learners.

Within the field of obstetrics and gynaecology trainees must develop an ability to adapt to new scenarios whilst developing a vast amount of skills, such as instrumental deliveries and caesarean sections. Interestingly, despite this, no consultants self-reported to be perennialists; a philosophy with emphasis of the transfer of knowledge and skills from one generation to the next.

Further research will include exploration of trends in educational philosophies amongst individual units and correlation with National Trainee Survey results to explore potential links between educational philosophy and learning culture.

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David Sadkar - inventory of philosophies of education
Philosophy of education

Evaluating the Impact of COVID-19 on Medical Student Interest in Careers in Anaesthetics and Critical Care: an international survey

PRESENTED BY: APARNA POTLURU

CO-AUTHORED BY: EMMA JANE NORTON, AMINA KADDOURI, JOYCE IRA GO, STEFFY GEORGE THENGUMPALLIL, OLIVER DALY

ABSTRACT

Background. The impact of the COVID-19 pandemic on career planning is understudied compared to its impact on medical education as a whole. The influence on student interest towards intensive care medicine (ICM) is unknown and recruitment faces significant challenges due to a lack of clinical exposure. Online educational resources and media attention given during COVID-19 offer hope for inspiring the next generation of intensivists. This study aims to clarify the impact of the pandemic on the medical students' perceptions of careers in ICM, motivating factors and how to best support students moving forward.

Methods. This cross-sectional, multi-centre study distributed an online survey evaluating students' experience of ICM during COVID-19 and the impact of this on interest and career planning. Ethical approval was gained from the University of Edinburgh Research Ethics Committee.

Results. 462 participants spanned 11 countries, 90 medical schools and all years of study. 89.2% reported disruption to medical school ICM teaching, with 91.4% partially or completely delivered online. 90.1% reported disruption to extra-curricular ICM events, with 91.0% partially or completely online. Despite 68.6% reporting the pandemic influenced their decision to either pursue or not pursue a career in ICM, no significant difference was seen between motivation pre-pandemic and at the time of survey distribution ($p=0.7924$). Exposure to ICM within the curriculum, extra-curricular events and in the media were positive motivating factors. Accessibility and global networking potential of online events were commonly cited benefits. Students reported online events to be less engaging and unable to replace clinical exposure. 'Hands-on' experience and discussions with practising clinicians about work-life balance, training structure and opportunities were listed as additional resources desired before committing to a career in ICM.

Conclusion. This study demonstrates no decrease in medical student interest in ICM due to COVID-19 and switch to predominantly online exposure. Online resources allowed exploring areas of clinical interest without the scheduling and financial limitations of face-to-face events. They are a powerful tool to supplement, but not replace, the safe reinstatement of clinical experience and face-to-face career discussions

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Dragon Bytes Basics: Podcasts as a platform for Pediatric Medical Education for healthcare students

PRESENTED BY: SIENA HAYES

CO-AUTHORED BY: BEYNON F, HARRIS S, JAVAID AA, KNIGHT A, RICHARDS A

ABSTRACT

Introduction:

Virtual learning platforms are becoming increasingly popular in demand among healthcare students following the recent changes to education during the COVID-19 pandemic. Dragon Bytes is a podcast in Wales targeted at all paediatric healthcare professionals, with a prospect to create a medical education podcast for students. The aim of this study was to determine the interest, and assess the potential target audience, for a paediatric podcast aimed at healthcare students.

Methods:

Data was collected via a qualitative survey, using Likert scales, which was distributed to all medical students at Cardiff and Swansea Universities from 20th July to 20th August 2020. A database was compiled including student demographics, interest, pre-existing knowledge of paediatrics and suggestions for podcast topics. Statistical analyses were performed using SPSS software. Chi-squared tests were used for binary answers and $p < 0.05$ was considered statistically significant.

Results:

203 students responded, 45 from Swansea University and 158 from Cardiff University, representing 10% of the total cohort in each medical school. The male to female ratio was 1:2.74. 73% of respondents already use podcasts as a form of medical education and 88% agreed that podcasts are useful for their learning. Furthermore, 97% mentioned that they would listen to the podcast and highlighted key topics for production. The 3 most popular suggested topics were Cardiology, Child Development, Respiratory.

Conclusion:

There is a keen interest among students for the development of a paediatric podcast as a platform for virtual medical education. In response to this study, Dragon Bytes Basics has been developed, a podcast series aimed at students, to support learning of the child health curriculum. Further study will determine whether this platform has achieved its outcomes in improving medical education, by evaluating student knowledge and confidence with paediatrics, following the podcast series.

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Evaluation of an informal near-peer teaching programme delivered virtually – implications for the future

PRESENTED BY: JACK FILAN, REHAAN KHOKAR & ROBERT BAIN

CO-AUTHORED BY: HADEEL TABAQCHALI

ABSTRACT

Background: Near-peer teaching (NPT) involves students being taught by more senior students and draws on the theory of cognitive congruence.(1-3) Informal near-peer teaching is delivered without faculty intervention, and has a more limited literature base than formal NPT.(3)

Newcastle Medical Education Society is a student-led group which provides an informal NPT programme for all stages of medical students. We aimed to evaluate our existing programme for Stage 1 medical students in the context of COVID-19.

Methods: Ten teaching events for Year 1 students were delivered during the 2020-2021 academic year. All events were delivered virtually due to COVID-19. All Stage 1 students were invited to complete a survey to gather their views on our programme and NPT in general. The survey utilised scale-based and free-text questions.

Results: 247 unique respondents (female=152, male=90) participated with a median of 3-5 events attended. The mean overall rating of the programme was 8.57/10.

Responses indicated the ideal length for a session to last was 1 hour to 1 hour 30 minutes. Advantages of NPT included teachers having knowledge of important topic areas and knowledge/experience of university examinations, the quality of teaching provided, focusing on a student perspective, and student teachers being more approachable/informal.

Suggested improvements included the date and timing of events and reducing technical difficulties. Student opinion was split on whether future events should be delivered in-person or virtually, with some requesting a mixed format.

Discussion: Students gave excellent feedback regarding this programme despite the virtual delivery and described similar advantages to NPT to those established in the existing literature.(2-4) It is noted students have a split opinion on session delivery format, therefore we have introduced live-streaming for in-person events. This evaluation is applicable to others delivering student-led NPT programmes for medical students and junior doctors and demonstrates the effectiveness of virtual NPT.(5,6)

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The Young and the Younger: Med-Ed Intercalators Teaching Junior Students

PRESENTED BY: KEERTHENAN RAVEENDRA

CO-AUTHORED BY: BILAL SAJAD, ANDREW MN WALKER

ABSTRACT

Introduction: As part of the modified cardiology strand of the Year 1 MBChB course at University of Leeds School of Medicine, medical education intercalators were given the teaching responsibility of leading clinical symposia. Peer-to-peer teaching provides improved knowledge acquisition and retention, “academic performance”, and “socialization”¹. Given the unique challenges of pandemic-situated virtual instruction, it was felt that peer-to-peer teaching was a worthwhile endeavour.

Methods: Following the three clinical symposia in February-March 2021, a mixed questionnaire was disseminated to Year 1 students by the strand leader. Anonymous responses were collected.

Results: As of June 01, 2021, 225 responses had been collected (83% response rate). The vast majority of students found the programme beneficial (92%) and adequately-paced (88%), and felt sufficiently prepared by pre-work (94%). Many students (63%) were taught by intercalators, with the rest taught by clinicians. Nearly all (96%) found teachers knowledgeable. In the open-ended survey of which aspects students enjoyed, interactivity and engagement (54/~200 responses) were reported, along with flipped learning. Many students (47%) did not indicate constructive feedback was necessary, but suggestions included pairing senior students with clinicians (1+1), reducing redundancies, and further functionalizing online modules. Students reported two major advantages to peer teaching: 1. teaching was “most relevant” and “clear and concise”, and 2. participation hesitancy was far lower.

Discussion: The symposia were well-received, so core aspects of the symposia should be continued. Student feedback on teaching and participation reflected the idea of “cognitive [and] social congruence” reported in the literature regarding peer teachers². At the same time, narrative feedback affirmed that clinicians had superior clinical insight. A future iteration should therefore pair clinicians with student teachers. Moreover, future work could involve stratifying students' strand test performance by type of instruction. Going forwards, student teachers represent a potent addition to any medical school's teaching arsenal.

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