Virtual MB ChB Education Conference, Friday 26th June 2020

Abstracts

Please note that the programme is currently draft and may change. For the most up-to-date version, please visit: https://warwick.ac.uk/MBChBEducationConference

Session 1: Opening plenary

Topical Issues for GEM

Professor Colin Macdougall

Session 2: Student initiatives supporting learning and teaching medicine

S1. Supporting Students in Their Teaching: Warwick Medical School's Peer Education Teaching Programme

Clarissa Brierley

Warwick Medical School

Catherine Bennett, University of Warwick; Kate Owen, University of Warwick; Emily Reid, University of Warwick

The development of peer assisted learning (PAL) at medical schools has increased steadily in recent years. Its success is broadly attributed to the 'cognitive congruence' between peer-teachers and their students, suggesting that as the knowledge base and learning environment is generally a shared experience, it allows language and explanations of concepts to be pitched at the correct level.

At Warwick Medical School (WMS) there was no formal training in place for many students engaging in peer-assisted learning, with limited incentive to seek feedback and improve and hone teaching skills.

We therefore developed a new three-level 'Teaching the Teacher' certificate through a student-staff partnership, aiming to provide student-teachers with a toolkit to develop and enhance their skills. Teaching staff from across the medical school led different sessions with topics including small group teaching as well as the giving and receiving of feedback.

Designed to dovetail with the WMS curriculum, it caters to the students' already packed timetable. The programme is assessed at each level, with requirements including attendance and feedback on a set number of teaching hours.

The programme's staff-student committee ensures ongoing leadership and longer-term sustainability, which will be key to its continued success in the time of Sars-Cov-2.

The course has been fully subscribed, with thirty students completing the inaugural run of the foundation certificate in November 2019. Feedback has been universally positive, with 100% of respondents of the course evaluation showing interest in enrolling in the intermediate teaching certificate, and initial results from the course evaluations showing a significant difference in confidence

regarding teaching a teaching session (n=16, scale of 1-5, mean pre-course = 3.19, mean post-course = 4.06, p-value = 0.019) after course completion compared to before.

In summary, we have developed a sustainable partnership between staff and students to coordinate and enhance the delivery of PAL.

S2. Has the Warwick NeuroSoc impacted medical student attitudes towards clinical neurosciences?

Mark-Joel Clovis

Warwick Medical School

Jessica Blickwedel, Warwick medical school

Background: It is well documented that many medical students and doctors feel that neurosciences are particularly challenging and confusing. In this study, we sought to quantify the levels of neurophobia in medical students and to determine if the Warwick NeuroSoc was having an impact on these attitudes.

Methods: Three successive cohorts of first-year medical students completed a questionnaire from 2017 to 2018 to 2019, n = 98, 224 and 103, respectively. We asked if they felt that the neuroscience teaching at Warwick Medical School (WMS) was strong and also if they felt that they had sufficient neuroscience knowledge. Additionally, we asked about the impact that the NeuroSoc had had on their desire to pursue a career in clinical neuroscience.

Results: From 2017 to 2019, the belief that the neuroscience teaching at WMS was strong went from being held by 97% of the population to 100% (p=0.014). Similarly, the belief that students had sufficient neuroscience knowledge rose from 14% to 32% (p=0.002). Finally, the % of medical students believing that the NeuroSoc had strengthened their desire to pursue clinical neurosciences rose from 2% to 10% (p=0.017).

Conclusions: Whilst causation has no specifically been proven, these results suggest that the phenomenon of neurophobia is declining amongst WMS first-year students. In light of this study and strong positive feedback on educational events organised by the NeuroSoc, it is likely that a combination of improved teaching by WMS and the NeuroSoc has resulted in increased knowledge of neurosciences and more students considering a career in them.

S3. MedGuide: Lessons Learned from a Year of Online Peer Support

Daniel Mercer

Warwick Medical School

Jonathan Loomes-Vrdoljak, WMS

Background:
As medical students, we make extensive use of online resources. These resources address learning needs across multiple medical curricula. By necessity, these are blunt tools that cannot capture the bespoke Warwick curriculum.

Approach:
We sought to enter this niche via an online workbook allowing active recall of lecture content through various modalities. However, the use of this material necessitated considerable up front costs on the part of students while smaller, interactive quizzes online provided immediate feedback and were accessible to all. Hence MedGuide, a student-led question bank, was born.

Rising to the Challenge:
Firstly, education resources must be reliable. At the urging of our team and faculty, we instigated peer-review training and standardised quality assurance processes.

Secondly, they must be engaging. From continuous feedback, MedGuide has evolved attributes to increase appeal and uptake. We found that no more than 12 questions per set was the most attractive for authors, editors and students. Another hurdle was addressing student fears of demoralisation if they struggled with answering the questions. To support students we therefore introduced a grading system of difficulty.

The project has evolved in step with the needs of its users. It now features online video tutorials alongside MCQs furthering our aim to be an always-accessible base for peer-led student teaching.

The Future:
MedGuide is designed to evolve with the needs of its users in mind. New requirements include responding to a curriculum that is being changed due to the unprecedented pressures of a pandemic. We must also develop effective processes to support the clinical years with both the current, and UKMLA, format in mind. Meeting diverse, shifting needs presents a formidable challenge. Our goal is to achieve this while improving usability for all users and maintaining quality assurance.

Session 3: Keynote presentation

What do we know about teaching clinical reasoning?

Nicola Cooper
*Dr Nicola Cooper is a Consultant Physician based at the University Hospitals of Derby & Burton NHS Foundation Trust. She is also a Clinical Associate Professor in Medical Education, teaching on the Masters in Medical Education at the University of Nottingham, and is part of a team researching clinical decision making and how best to teach it. Nicola is a training programme director, supervisor, teacher and author. She co-edited the ABC of Clinical Reasoning (Wiley, 2018) and is the chair of the UK Clinical Reasoning in Medical Education group (*www.creme.org.uk*) which has representation from over half of UK medical schools.*

Thinking and decision making in clinical practice (a.k.a. clinical reasoning) has been the subject of a vast amount of research over the last 40 years. While medical schools and postgraduate training programmes teach knowledge, skills and behaviours required to practice medicine, there is a consensus that explicit 'diagnosis education' is missing from curricula. This is a problem, because diagnostic error is a major patient safety issue, and most diagnostic errors occur due to failure to synthesise all the available information - for various reasons. This plenary will give a brief overview of what we know about teaching clinical reasoning and highlight a few key areas to illustrate how what is taught, how it is taught, and when it is taught can facilitate clinical reasoning development more effectively within existing curricula.

Session 4: Students researching medical education

S4. Could the UKFPO training post allocation process result in regional variations in the quality of Foundation Doctors? A discussion on our repeated cross-sectional study.

Christopher Beck

Warwick Medical School

Dr Celia Brown, Associate Professor of Quantitative Research, Warwick University

Presentation Aims:
1. Discuss our findings with those that this directly affects, namely medical students (who are to be allocated) and medical educators (preparing students for allocation).

2. Suggest areas for further research which might build on the work we have done to the wider academic community.

Presentation Outcomes: A greater understanding for participants of the allocative UKFPO system and the potential inequalities for patient care in different areas of the UK.

Study Objectives: To compare the performance of UK graduates allocated to each UK Foundation School according to three metrics: Educational Performance Measure (EPM), Situational Judgement Test (SJT) and Prescribing Safety Assessment (PSA).

Design: Repeated cross-sectional study using UK Medical Education Database.

Participants: 33,730 graduates from UK medical schools in the period 2014-2018 (inclusive) starting Foundation Training in August 2018 or earlier, excluding those allocated to the Academic Foundation Programme or Armed Forces Deanery.

Results: There was a significant difference between Foundation Schools in the Educational Performance Measure (F=401, p<0.001), Situational Judgement Test (F=213, p<0.001) and Prescribing Safety Assessment (F=95, p<0.001). Tukey-Kramer pairwise comparisons between Foundation Schools showed a very high percentage of statistical significance (78%, 402/513 comparisons). The Cohen's d effect size for the difference in means and Tukey-Kramer 95% confidence intervals between the Foundation Schools with the highest (North West Thames) and lowest (West Midlands North) means were 1.92 (1.77 to 2.07) for the EPM, 1.59 (1.44 to 1.73) for the SJT and 0.94 (0.79 to 1.09) for the PSA.

Conclusions: There is a statistically significant difference between the quality of doctor (as measured by the metrics used) entering the Foundation Programme in different Foundation Schools. It is less clear whether this has an impact on patient care and thus is unfair from the perspective of the patient. We suggest this as an area for further research.

S5. WHY DO MEDICAL STUDENTS REFUSE THE INFLUENZA VACCINE AND WHAT CAN BE DONE TO IMPROVE VACCINATION RATES?

Georgia Gray

Warwick Medical School

Jan Cooper, Associate Professor, Warwick Medical School

The annual flu vaccination is recommended for all frontline healthcare workers in the UK and is a crucial way of reducing morbidity and mortality for vulnerable patient groups in flu season. However, to date the UK government has never explicitly monitored annual vaccine uptake in medical students. This is important to ascertain, as students regularly move between clinical areas and are both a perfect vector for the spread of influenza and at an increased risk of contracting flu themselves. Students also spend time in long term care facilities, where they pose the greatest risk to vulnerable patients.

This service evaluation collected data about medical student uptake of flu vaccination in Warwick Medical School for the 2018/2019 vaccination cycle. 251 students in different course stages completed paper questionnaires, answering questions on vaccination status and Likert scale 'belief' questions to assess the subjective reasons behind vaccine refusal.

The results revealed a substantial difference between year group cohorts (approximately 20%), with older year groups having a significantly lower vaccination rate than younger cohorts and below the UK government 75% vaccination target. Further to this, two key significant negative predictors of vaccination status were found (p<0.001), related to scepticism over the effectiveness of the vaccine and lack of convenient access to the vaccination itself. Results indicated that integrating information about the flu vaccine into the first-year curriculum would reduce lack of knowledge over the mechanism and

efficacy of the vaccine. Furthermore, the centralisation of vaccination programmes at mandatory learning events based at the university, would mitigate against the problem of diversity of vaccination locations with differing vaccination programmes and lack of central accountability.

The results of this service evaluation provide significant predictors of vaccine status for Warwick medical students and potential occupational health interventions to improve vaccine uptake in this group.

S6. How do medical students experience and respond to unprofessional behaviour in the clinical environment?

Jonathan Loomes-Vrdoljak

Warwick Medical School

Anne Slowther, WMS

Background: There is a growing awareness in medical education of the 'hidden curriculum'; that is, the behaviours and attitudes developed by medical students through their socialisation within the clinical and educational environment. Many, if not all, aspects of the hidden curriculum will relate to professional values and behaviours.

Aim: Consolidate existing research into medical students' experiences of unprofessional behaviour in the clinical environment to identify the types of behaviour witnessed, how students respond and the motivations behind those responses.

Methods: A systematic literature review was conducted for qualitative and quantitative papers published since 2000. Qualitative data was thematically analysed and quantitative data was pooled and used to provide additional insights into the identified themes.

Results: 32 papers met the inclusion criteria. Students encountered a broad range of unprofessional behaviours in the domains of teaching, care of patients and professional responsibilities. There were widespread examples of disrespect and inappropriate interactions. Students also recognised their own unprofessional behaviours. Students could respond at the time of the incident or after the fact by deciding how they engaged with the unprofessional behaviour. Students could also challenge the perpetrator, support the victim or raise concerns. They also reflect about incidents, either alone or with others. The decision to respond is influenced by a number of factors including the relationships students have, the perceived consequences of their actions, the specifics of the situation, their capability to respond and motivational factors related to their individual identity.

Conclusions: Most medical students will experience or witness unprofessional behaviour during their clinical training but how they respond is influenced by several factors. Understanding these influences is important, not only in designing appropriate support structures and training. These factors also influence the type and nature of unprofessional behaviour students report, thereby affecting medical schools' abilities to accurately monitor the problem.

Posters

P1. Critical Digital Pedagogy vs remote learning

Cath Fenn

WMS | MB ChB

Exploring the curious journey to developing effective digital teachers and what that means for students who are remote learning. Acknowledging that pedagogical approaches have undergone an uncomfortably rapid review and change over recent months. Exploring some of the lessons learned and

pedagogic frameworks that have been found useful. Reflecting on how our remote learners have responded and adapted to the shift. What lessons can we learn around how best to support them as they spend more of their time remote learning?

P2. Evidence guided COVID-19 driven changes to Acute Simulation teaching

Elizabeth Wall

UHCW

Abdur Raoof-Sheik, Hannah Potter, Momen Ali, Sam Jack, Alex Tebbett, Sandra Navas, Christine Walker, Katie Phillips

Background: we provide 9 clinical simulation scenarios to final year Warwick medical students on their acute block. The pre-COVID model consists of 2 sessions with a pre-brief, introduction to the simulation room, 10 minute scenarios and 20 minute debrief in a high fidelity simulation suite.

What we did: COVID-19 changes: Sessions were redesigned to incorporate social distancing and infection control measures. To minimise contact between students, the 9 scenarios will be delivered in one full-day session. New videos for pre-brief and introduction to the simulation room were created as pre-course material. We produced 10 technical factsheets to supplement technical learning. We will provide additional optional remote debriefing sessions. Additional peer and mentor support is being built into the block.

Why we did it: Pre-COVID student and faculty feedback highlighted that students find simulation helpful and enjoyable. Some students did not like the ASPiH style of debrief and focus on non-technical learning outcomes. Debriefers reported focusing on the non-technical issues challenging. Some students felt handouts would help consolidate knowledge and learning. A full day session will be more demanding for students and faculty, with danger of information overload. These measures provide the opportunity to process the experience and then seek additional support.

How we did it: We produced a series of factsheets, which comprise of a single a4 page for each clinical scenario. National and local guidelines were used as references. The factsheets were peer reviewed by faculty. Drop in sessions will be provided by teams, alongside additional general mentor meetings. The success of the measures will be evaluated in a process of ongoing evaluation and continuous quality improvement.

P3. Simulation teaching for Acute block: 6 months of changes driven by quality improvement

Elizabeth Wall

UHCW

Katy Harris, Sam Jack, Hannah Potter, Susanne Anver, Abdur Raoof-Sheikh

Background: Simulation teaching is a complex learning event where students manage medical emergencies in a team in a safe high-fidelity setting. Learning and reflection is encouraged in the collaborative group debrief. We provide 9 simulation scenarios over 2 sessions for medical students in their acute block. Baseline data in 2019 revealed that although feedback is positive, some students felt dissatisfied with the ASPiH style of debrief. Faculty reported that providing non-judgmental, non-didactic feedback was challenging. It was difficult to focus on non-technical skills when technical skills needed addressing.

Aim Statements: Improve the ASPiH standard debrief experience for students and faculty

1. Offer additional debrief sessions
2. Initiate regular peer review of debriefing (POD)
3. Alter the way debrief is introduced in the sessions to manage expectations
4. Adjust the content of one simulation scenario to ensure desired learning objectives were met

Methods: We conducted 2 PDSA QI cycles for the simulation teaching for acute block from September 2019 to February 2020. We reflected as a faculty on the student evaluation after every session. A block summary of multiple sources of verbal and written faculty and student feedback evaluated effectiveness of intervention, identified new issues and guided long-term strategy.

Results: We analysed 180 student evaluation forms from 40 simulation sessions since August 2019. Feedback of debrief improved following changes around how it was introduced, and also after redesigning one of the simulations to allow focus on specific learning objectives. Faculty engagement with the POD was positive and resulted in productive reflection. Students did not engage with the additional debrief opportunities despite requesting it on their written feedback.

Conclusions: Evaluating simulation is complex. Simple interventions were followed by improved student and faculty feedback. However, there are multiple reasons for this. The process of continuous quality improvement and reflection will continue.

P4. The Resuscitation of Medical Disciplines (RMD) Warwick Basic Life Support Course - Uptake, Progression, and Feedback

Vrinda Ohri

University of Warwick

Dr. Christopher Smith, University of Warwick
Dr. Helen Watkins, University of Warwick
Hannah Morgan, University of Warwick

Background: RMD Warwick is a student-led, peer teaching initiative which works closely with faculty partners. The RMD Basic Life Support (BLS) course aims to teach students BLS with CPR/AED and first aid. A successful pilot course was run at Warwick Medical School (WMS) in 2018. Subsequently, four courses were offered in the 2019-20 cycle.

Aims:

- Educate first year medical students and life sciences students in BLS and first aid
- Analyze the number of students successfully progressing through the course
- Gather student feedback regarding the course structure and content

Methods: The course was primarily advertised to first year medical students. Life sciences students were given the opportunity to sign-up once all interested medical students had done so.

The RMD BLS course is a four-week training programme, with students required to attend all sessions and to pass the final exam in order to be certified as BLS competent by the European Resuscitation Council (ERC).

At the end of the course, students were asked to complete feedback forms on their instructors, course content and structure, and overall feedback.

Results: Overall, 277 students signed up (237 medical students and 40 life sciences students) but 83 students (47 medical, 36 life sciences) withdrew prior to the course beginning or shortly after the first session. The remaining 194 students all passed their final exam.

Course feedback was consistently positive, with many students expressing an interest to join RMD Warwick as instructors. Common pieces of feedback included:

- Friendly instructors
- High-quality teaching
- Increased confidence in BLS and first aid skills

Conclusion: Considering the 100% exam pass rate and positive feedback, it appears that students have been satisfactorily educated in BLS and first aid and have found the course useful. An almost complete uptake of students also indicates a clear interest and need for the course to continue.

P5. Minding Bloom's taxonomy while delivering e-learning during COVID era

Momen Ali

University Hospital Coventry and Warwickshire

Abdur-Raoof Sheikh, Hannah Potter, Elizabeth Wall, Alexandra Tebbet; University Hospital Coventry and Warwickshire

Aim: To improve the learning experience as well as the performance of the final year medical students.

Description of the innovation: Technology enhanced learning (TEL) was found to lead to better students' performance compared with conventional face to face learning (Means et al., 2009). We aimed to adapt to COVID circumstances and utilize the advantages of TEL in achieving better learning experience for the final year medical students.

Moreover, Bloom's taxonomy is considered a model that provides educators with an educational framework. This framework can be used to create learning materials that helps students' cognitive thinking to progress from low-level (memorizing facts) to higher-level (analyse and judge) thinking

While planning and creating online learning materials, we aimed to create a package of interactive learning resources including quizzes and interactive case based e learning. When students use these materials, they will have the chance not only to apply their knowledge but also to analyse the clinical scenarios as well as to critique and judge certain interventions.

For example, in a case of gastro-intestinal bleeding, student is told that his colleague suggested prescribing Telipressin for the patient, then the interactive question is (Do you think your colleague's decision was right or not and why?), then the right answer will be revealed after the student submits his answer.

Expected outcome: By minding Bloom's taxonomy while creating the interactive e-learning, it will improve students' learning experience as well as their performance.

P6. Producing an educational podcast: a learning experience

Elizabeth Wall

University Hospital Coventry and Warwickshire

Dr Sam Jack, clinical teaching fellow, UHCW. Dr Hannah Potter, clinical teaching fellow, Dr Abdur Raoof Sheikh, clinical teaching fellow, UHCW, Dr Momen Ali, clinical teaching fellow, UHCW, Dr Alex Tebbett, clinical teaching fellow, UHCW.

What we did: We produced 'Paediatric Cases', a collection of clinical cases for phase 3 medical students, delivered via different distance-learning formats. As part of this, we produced a bespoke podcast series. Each episode is a brief case-based discussion between the clerking SHO and supervising SPR set in a clinical area. They showcase an authentic clinical case and the clinical reasoning involved in the assessment and decision-making process. We have produced 5 episodes to date and obtained peer feedback.

Why we did it: Medical schools are redesigning clinical placements to account for the COVID-19 pandemic. Students will experience reduced time on placement, restricted access to certain clinical areas and will see a different selection of clinical presentations compared to before the pandemic. We aimed to simulate these clinical learning encounters and showcase and encourage clinical reasoning skills.

How we did it: We examined the evidence base for podcasts in medical education and applied evidenced recommendations and our own reflections to the production process. We plan to evaluate our learning package in pre- and post- block student feedback.

What we learned: Despite the growing popularity of medical podcasts, the evidence base underpinning 'best practice' is scarce(Cho, et al., 2017). Advantages of podcasts are cited as portability, accessibility, flexibility and convenience (Sandars, 2009; Cho, et al., 2017; MacKenzie, 2019; Malecki, et al., 2019). Successful podcasts were short, used an interview format rather than a monologue, and had a strong emphasis on good storytelling (Hu, 2016; MacKenzie, 2019; Malecki, et al., 2019). Good sound quality was possible using inexpensive microphones and Microsoft teams. Our more successful podcasts were 10-15 minutes long, had a clear, conversational flow and a key message. To achieve this, we learned that careful consideration of the clinical case, phase 3 learning objectives, key messages and storyboarding was required.

P7. Virtual Mentor Groups - to support, encourage and educate

Alexandra Tebbett

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Abdur-Raoof Sheikh, University Hospital Coventry and Warwickshire
Elizabeth Wall, University Hospital Coventry and Warwickshire
Momen Ali, University Hospital Coventry and Warwickshire

Medicine is learned not only in formal teaching, but also in the informal discussions that arise in the university canteen, in the car driving to hospital or over a drink together in the evening. Much is discussed on coffee breaks between tutorials, in small groups whilst waiting for a lecture to start, or with a clinical partner during a clinic or theatre list. This is all lost when formal teaching is switched from the classroom to the dining table, and there is now a lone student on the wards, not a group.

Peer support and encouragement is also an important aspect of coping with the stressful situations being a medical student entails, particularly during these difficult times. It would not be surprising if post

Covid-19 increased levels of stress and burn-out amongst medical students is found, which we know is detrimental to mental and physical well-being as well as academic achievement.

To try and combat this, all students returning to the Acute Block will become a member of a virtual peer support and mentor group. Students will meet in virtual groups of no more than 5 students and one mentor (a clinical teaching fellow) weekly during their block, to discuss what they've seen, learn from each other's experiences and debrief over any difficult situations they faced. If required, the student can also schedule a one-to-one meeting with their mentor afterwards for a more private discussion. This is a simple scheme that can be taken up by other blocks or trusts to better support our students through this difficult time, using platforms such as Microsoft Teams of Zoom.

P8. Learning through assessing- changing roles in these changing times

Alexandra Tebbett

University Hospital Coventry and Warwickshire

Elizabeth Wall, University Hospital Coventry and Warwickshire
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Momen Ali, University Hospital Coventry and Warwickshire

Delivering a practical session, such as how to perform an A-E assessment, entirely online is a challenging endeavour. A powerpoint lecture or e-learning module does not give the students the opportunity to watch each other and learn from the mistakes their peers make. Without these opportunities there is a real risk the students make these mistakes not in a teaching session but with a sick patient, possibly with serious consequences.

To give the students an opportunity to learn from these mistakes safely, three videos were created. The videos each show an A-E exam performed by a teaching fellow, playing the role of a junior doctor. Each video includes a serious omission that was previously seen regularly in student practice. The student's task is to watch these videos in their own time and mark the A-E assessment using a downloadable tick-sheet, to identify what was done well and what aspects could be improved. If correctly completed it not only highlights to the student all the required steps in an A-E assessment, but also the serious omission made by the doctor in the video.

After the student completes their assessment the video is resumed to show the doctor learning about their mistake. This way if the student misses the learning point as part of their assessment they will learn about the doctors (and now their) omission anyway, securing the learning. The students then meet virtually in a small group with a facilitator a few days later to discuss the videos. Here they can ask questions about the omissions, the videos and the A-E assessment in general, to better prepare them for returning to the wards. This switching around of traditional roles could be used to teach other practical skills, as long as the learning is secured.

P9. Teaching Palliative Care skills to Medial students and Foundation Doctors using simulation within the educational tool of COMET (Clinical observed medical education tutorial)

Andrea Wilkinson

George Eliot Hospital

Justine Whitmore (GEH); Kristy Clayton (GEH); Michele Gutteridge (WMS)

Palliative care is a challenging area of medicine that all junior doctors will be exposed to in their early career on the wards. Despite this, teaching and education around it is often minimal and limited to a theoretical form.

COMET (Clinical Observed Medical Education Tutorial), is a well-established, interactive, high fidelity teaching tool to educate students in their ability to care for a patient with a specific condition. The stations are similar to OSCE stations but in addition are designed to mimic the sequential journey of a patient.

We utilised COMET as an educational tool to teach palliative care to final year Warwick medical students. This included the use of a simulation actor to play the role of a patient in their last few days of life and gave the students the opportunity to practice communicating in a safe setting with specialist palliative care nurses observing in order to give feedback.

The stations included an introductory station where we ensured that there were no pastoral care issues. Station 1 focused on prescribing, station 2 was the communication station, station 3 included the paperwork around the dying patient and then a feedback station at the end consolidated the ongoing assessments that had taken place and served to also check that the students were not distressed. This was a multidisciplinary endeavour and faculty included doctors, palliative CNS's, Clinical Skills Tutors and Resuscitation Officers.

Overall, the mean level of confidence prior to commencing the COMET for all students was 24 (out of a total of 50 which would have been the maximum confidence). After the COMET the mean confidence score was 35.1. The feedback was excellent and suggested that this was a well received and acceptable method of teaching palliative care and its associated communication.

P10. Medical student peer support with clinical skills practitioners, the perceived benefits for phase 2, phase 3 students and the clinical skills practitioners

Linda Crinigan

UHCW NHS Trust

Georgia Gray

Aims: We propose that peer support by senior students has four main benefits:

1. It reduces the tutor to student ratio, thus benefitting future patients as there is greater supervision of the skill in a practice setting before attempting the skill on real patients

2. It benefits the senior students themselves. It enables students to hone the practical skills themselves and practice their teaching, which is of benefit to all medical students throughout their education and beyond into their medical careers

3. It strengthens relations between the clinical skills team and senior students

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4. It enables junior students to ask questions they may deem 'silly' (for example they have already been told the answer in that session) and certain students may feel more comfortable asking senior students rather than clinical skills tutors themselves.

Methods: 96 second year medical students were due to be taught peripheral intravenous cannulation over 4 x 3 hour sessions, 24 students per group which was twice the number we normally prefer and aim for. We asked 8 competent year 3 and year 4 students if they would be interested in supporting the second years during these sessions. The clinical skills practitioners delivered a lecture, a demonstration of the skill and played a video of the skill on a loop for all students to see and follow. Assessment sheets with a step by step method were available at every cannulation station.

The rooms were set up to allow all attendees to have 1 simulated arm between every 2 students.

Results: 96 students were all trained and 4 more senior medical students attended each session to support the practical element. This made a tutor ratio of 6 per group of 24, a final supervision ratio of 1 to 4 rather than the original 1 to 12.

Six recommendations resulted.

P11. The Effects of Therapy Dogs on the Mental Health and Wellbeing of Medical Students

Harriet Shuker

Warwick Medical School

Shirley Rigby, Warwick Medical School

Background: The prevalence of mental health problems in medical students is higher than their peers of the same age. This is a concern due to the potential consequences of this including compromised patient care, poor academic achievement and most worryingly suicide. Medical schools need to find ways to maintain their students' wellbeing and prevent mental health problems from developing. One such programme of wellbeing is therapy dog sessions. These have been widely implemented in many universities across the world and there is an increasing evidence base that demonstrates the benefits of this. However, there have been no published studies demonstrating the benefit of these sessions to UK medical students specifically.

Aims & Objectives: To assess the effects of therapy dog sessions on improvement of medical students' stress, anxiety and mood - all components of mental health and wellbeing. This was carried out using validated mental health assessment tools to assess mental health and wellbeing before and after a therapy dog session and to analyse these results for statistical significance.

Methods: Medical students at Warwick Medical School self-selected to take part in the study, which involved a brief (15-20 minute) interaction with a qualified Therapy Dog. Three validated tools were used to analyse the effects of these sessions - the Current Anxiety Level Measurement, Positive and Negative Affect Schedule and a Stress Visual Analogue scale.

Results: Overall 84 students participated in the study. A significant improvement in participants' mood, anxiety and stress levels immediately after a therapy dog session was demonstrated. Qualitative thematic analysis revealed common themes, for example the participants found the sessions relaxing and enjoyable.

Conclusions: This study has demonstrated that therapy dog sessions are of benefit to medical students' mental health and wellbeing and adds to the growing evidence in this field of research.

P12. Incorporating technology into teaching practice: the interactive video

Karen Romain

Coventry and Warwickshire Partnership Trust

As technology grows as do new opportunities for incorporating this into medical education. One such new technology is the interactive video. This allows for content to be developed in an audiovisual format but takes this further by allowing learners to more fully engage. For example, questions, explanations and links to other resources can be included.

The aim of this resource is to support the learner to utilise the higher learning skills of analysis and evaluation. During development key learning strategies such as asynchronous communication have been incorporated. There has also been a key focus on allowing for accessibility with audio content for example being provided additionally in text form to support learners with hearing difficulty.

At present the interactive video content produced has been targeted to medical students during their psychiatry block. Within both this context and the wider MBChB curriculum there is significant potential for this type of resource to support learning.

P13. Innovation in clinical skills: Using interactive videos as an educational resource

Dr. Qasim Malik

Warwick Medical School

Dr Laura McDonaugh, Dr Emily Unwin, Dr Samantha Robinson

Warwick Medical School

Aims:

- Showcase the innovation the clinical skills team have used in designing interactive clinical skills examination videos for 1st year medical students.
- Give examples of planning interactive content related to teaching objectives.
- Demonstration (video) of designing interactive content.
- Discussion on the feasibility and utility of interactive video as an educational resource.
- Discussion of the perceived barriers to creating interactive content and how to overcome these.

Relevance to MBChB curriculum: COVID-19 has brought opportunities for innovation in resources or online teaching, some of which has been by necessity. In response to student feedback, the clinical skills developed an interactive video for knee examination as a form of blended learning and to integrate a 'flipped classroom approach'. Students had requested resources before face-t-face teaching to enhance knowledge of the examination, aid with interpretation of clinical signs and help understand the relationship between pathology and examination. Interactive videos with multimedia overlay (gifs and images) allowed self-assessment with constructive feedback, a to help students test their pre-existing knowledge and integrate learning from other themes in the MBChB curriculum.

The interactive video was easy to access using familiar student learning platform. The videos encouraged a learner centred approach allowing for greater exploration of depth. The clinical skills team found that feedback from students was positive. Conversely, many tutors found creating interactive video content

daunting, citing lack of ease, time pressure and unfamiliarity of the concept due to lack of training which culminated in hesitation of creating such a resource.

Expected outcomes for participants: Participants will be encouraged to reflect on an innovative teaching and learning resource that has been designed in response to student feedback. We expect that participants will gain exposure and knowledge of the feasibility and ease in planning and designing their own interactive video content, giving them confidence in utilisation of this tool.

P14. Use of simulation and video technology to orientate and introduce final year medical students to the intensive care unit.

Elizabeth Adamson

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During the current Covid-19 pandemic, vast changes have had to be made to the way the current curriculum is delivered to medical students. This has involved using many new and innovative methods to ensure learning outcomes are still met, despite the difficulties faced due to social distancing rules and consideration for the health and wellbeing of students.

During their final year, medical students at the University of Warwick complete an Acute Care block. This six-week block offers teaching and ward experience in different areas of medicine including an opportunity to do shifts on the busy intensive treatment unit (ITU). Due to the current restrictions, students are unable to spend time on ITU for the foreseeable future.

We decided to create a video that would act as an introduction to ITU. It would provide an explanation of how a typical ward round is conducted, including systems based daily review of patients. We would use the simulation suite to make things as realistic as possible. We were fortunate to be able to incorporate ITU staff and demonstrate the unique multidisciplinary team working nature of the department. We would also include an overview of some of the complex equipment used within the department. We believe that this video provides a great introductory resource to allow a seamless start to the students' ITU experience.

Other online, interactive resources will also be incorporated to meet the learning outcomes.

Students will be able to feedback on the video which will serve as a method to make adjustments and improvements for future learners.

P15. The Virtual Round

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MBChB students are returning to shortened rotations and a new virtual learning environment. Their ongoing education may be very different and orientating themselves to the online environment is an important skill that needs to be developed.

There may be limited exposure and patient contact during their shifts in the Acute Care special clinical placement. Inspired by an industry example, we are introducing the 'virtual round'. This collaborative learning experience has two aims; firstly to improve orientation and comfort in the virtual environment (Microsoft Teams) and secondly to improve clinical reasoning, focus and steer self-directed learning.

In groups of five, students will meet with their tutor for a virtual round. Students bring one learning point from the previous few clinical sessions; an interesting presentation, a new drug, an unfamiliar investigation. A short presentation on the topic is followed by a roundtable style discussion of the topic. The tutor is there to facilitate the analysis of the experience and help direct students to identify knowledge deficits and strategies to address them over the week ahead.

We will assess how students feel this approach helped them become more comfortable in the online meetings and what impact it had on improving their focus and confidence in identifying learning opportunities in the clinical setting.

P16. Use of mannequins in assessment to ensure safe clinical practice with social distancing

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Assessment in medical education plays an integral role in maintaining standards of medical knowledge, patient care, professionalism, communication and interpersonal skills, practice-based learning and improvement, and systems-based practice. Commonly, assessment of clinical competence and evaluation of trainee's skills in clinical interaction is assessed via Objective Structured Long Examination Record (OSLER) and/or mini-CEX (Clinical evaluation exercise) using real patients. However, Covid 19 has had significant effect on medical education and therefore innovative; socially distanced methods are required to teach and assess clinical skills and competencies to maintain clinical standards.

Mannequin based learning has gained popularity in the last decade. It provides a safe platform to practice skills and learn from mistakes. We suggest using mannequins rather than real patients for assessments, to reduce the risk of infection whilst providing means for assessing MBChB students' skills and competencies with minimum resources.

We trialled mannequin's usage in our end of block mini-CEX assessments of final year medical students in the pre-Covid period. The examiner role-played as the patient to answer all required questions, whilst examinations were performed on the mannequin. Patient notes, drug Kardex, observations and investigations if essential were provided. Introduction of mannequins in these assessments helped identify mistakes in a safe environment using minimum resources. The overall student feedback was also good. We have since then risk assessed and amended our protocols to reduce risk of infections during Covid. This includes social distancing, cleaning mannequins in between assessments, using gloves and encouraging handwashing. This will ensure safety to further limit infections.

Use of mannequins for assessment can help maintain social distancing and allow safe environment for assessment using minimum resources. This will ensure continued evaluation of MBChB students' skills in safe environment to maintain good clinical practice and patient safety.

P17. Can virtual problem-based learning (vPBL) sessions replace bedside teaching?
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Background: Traditional bedside teaching methods have been popular in clinical education as they improve patient communication, teamwork, clinical diagnostic and reasoning. It is widely used across medical schools and instils medical ethics and professionalism in medical students. Covid Pandemic has affected medical education across the nations. The current social distancing requirements pose a challenge to continue bedside teaching. Therefore, alternative methods are required to ensure good clinical practice and patient safety.   **Aim:** We suggest use of virtual Problem based learning (vPBL) sessions instead of bedside teaching sessions in our practice to continue teaching clinical reasoning and diagnostics with social distancing.   **Method:** These vPBL sessions include 60 minutes virtual teams' sessions facilitated by senior clinician by using anonymous real-life cases. The session will run like an interactive small group teaching virtual class with objectives identified at the start of the session. Case will be introduced by the facilitator who will later act as a patient. Tasks will be divided amongst student, with access to patients notes, drug Kardex, observations and investigation results. Students will then be provided with time to analyse findings. Facilitator will then initiate discussion of differentials and probable diagnosis. General feedback and evaluation will follow, and students will be signposted to further reading materials.   **Preliminary results:** We are currently trialling the session and so far, the feedback has been positive. It will be rolled out to MBChB students at Warwick Medical School rotating through acute medicine at UHCW NHS trust.   **Expected outcomes:** vPBL can provide a safe platform to integrate knowledge, improve clinical diagnostics and assess clinical reasoning through a hypothesis derived approach. This will ensure professionalism, empathy, good communication skills and clinical reasoning in medical students.
P18. Converting for COVID-19: On Online Journey
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The medical profession has a long history of evidenced based practice and medical education is no exception. During this unprecedented global pandemic medical student education has rapidly turned to the virtual environment. This transformation has not been without its difficulties. Whilst there has long been a culture of Free Open Access to Medicine (FOAM), resources are of variable quality and lack peer review but can be innovative and form a source of inspiration. Can a small group teaching session be transferred into a new online format or does there need to be an alternative package of resources?

We explore the challenges faced by local teaching fellows in converting a MBChB course module which, prior to the Covid-19 pandemic, was principally delivered through high-quality face to face teaching into the online environment; what technical difficulties were faced and how these have been overcome, what innovative approaches have been taken to ensure engaging distance learning and what we, as teaching fellows, have learnt so far.

P19. The making of a virtual patient - what can we learn from the GP longitudinal patient pilot ?

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The longitudinal virtual patient simulates real life general practice encounters, developing students' clinical reasoning skills over time.

It provides a framework for curriculum integration across all phases and themes.

In this poster, we discuss early evaluation of the GP longitudinal patient pilot and the process of planning and creating an episode of a virtual patient that supports the learning outcomes of a theme, phase or speciality.

Relevance for MBChB students: Virtual patients (VPs) simulate real life scenarios. VPs develop students' clinical reasoning and decision making skills, with outcomes very close to real patient contacts. This is especially relevant during COVID-19, where real patient contact may be limited and high-risk.

This virtual patient goes beyond the usual 'single contact' format and provides students with a longitudinal relationship with the patient across all 3 phases. This longitudinal nature of the VP supports a 'real-time' simulation of general practice care, allowing students to take responsibility for follow up on investigations and referrals and explore the dynamics of a long term doctor-patient relationship. The format provides a framework for horizontal, vertical and spiral curriculum integration across phases and themes.