LETTER TO THE EDITOR

A reflection on Evidence-based Medicine undergraduate training by junior doctors in the COVID-19 pandemic

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To the Editor,

Evidence-based medicine (EBM) has become the gold standard for clinical decision-making and customary practice over the last few decades. As recently qualified junior National Health Service doctors, the COVID-19 pandemic has highlighted the practical relevance and importance of developing the skills of effective literature search and critical appraisal to be able to utilise it in our daily clinical practice.

This letter is to bring to your kind attention our own reflection of training opportunities we had in relation to EBM and public health in our undergraduate curriculum. This training has helped us to survive our initial clinical years, made even more challenging by COVID-19 and ever-evolving medical knowledge. As per Meats, Heneghan, Crilly and Glasziou (2009), there is significant variation in EBM undergraduate teaching in medical schools in the UK and although core EBM topics are taught in theory, relatively few medical students gain the opportunity to practise or assess such skills.

As medical students at the University of Buckingham Medical School (UBMS), we formed a group called ‘UBMS Public Health Crew’. We were able to go into community lunch clubs and conduct one-to-one interviews with the elderly ethnic minority communities to gain their perceptions and possible barriers they face regarding influenza vaccination uptake. We also had the annual EBM conference conducted by the medical school where we were able to submit our reports of concise and efficient implementation of EBM on clinical questions we formed during our clinical years. These were then showcased as posters, with the best examples also being presented with
a prize of EBM champion for the best presentation. To our knowledge, student initiatives surrounding the clinical application of EBM is unique to University of Buckingham.

The culmination of this training resulted in us continuing to incorporate EBM into our clinical practice and with the onset of the COVID-19 pandemic, it showed how EBM became almost a necessity in our clinical practice. During the initial wave, many junior doctors were redeployed to COVID-specific wards. Clinicians caring for these patients were eager to learn more about the disease. As a result, at our hospital, a journal club was setup to critically analyse recent publications on COVID-19. A topic that was discussed was fluid administration in these patients. An initial management strategy had been to restrict fluid administration to these patients to avoid causing an acute respiratory distress syndrome. However, as more evidence emerged it became clear that this had potentially harmful effects. This led to the advocation of judicious fluid management. Our early exposure to the practical application of EBM has nurtured a dynamic approach to clinical medicine in a profession where what is best for the patient today is not necessarily the case tomorrow.

In addition to our clinical application, we have also continued our research on EBM teaching for medical students. By presenting our research with posters and publications we are continuing to expand our research on this field with further opportunities.

In conclusion, having formal modules on developing EBM skills as well as having interactive and real-time opportunities for medical students to expand on their EBM interests such as having community-based EBM projects and implementation of EBM in clinical practice are imperative to ensure future clinicians deliver scientifically sound clinical care that is in line with ever evolving medical research and to deal with unprecedented medical challenges.

Sincerely,

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