

10 EVIDENCE IN ACTION

¹Ayo Akande, ²Andrew Neves, ³Justin Collis, ³Mohsen Rafii, ³Bharathy Kumaravel, ¹Samantha Gale. ¹University of Buckingham, Milton Keynes, UK; ²University of Buckingham, Milton Keynes, UK; ³University of Buckingham, Milton Keynes, UK

10.1136/bmjebm-2019-EBMLive.91

Objectives Evidence based medicine (EBM) is the integration of clinical knowledge with evidence and patient values in medical practice.¹ Evidence has shown blended learning models improve student attitudes towards EBM versus traditional didactic learning.² The University of Buckingham Medical School is committed to improving student attitudes towards and engagement with EBM curriculum, so students appreciate the relevance of EBM in clinical practice. In 2018 the University held its first EBM conference when students in their first year of clinical practice were invited to submit educational prescriptions, where they presented a scenario from their clinical placements and demonstrated how they applied EBM in clinical decisions. Out of the 60 students invited there were 25 submissions with some students submitting in groups rather than individually. The aim of this study was to evaluate the effectiveness of peer mentorship in improving medical student's engagement with the EBM assignment.

Method In 2018, students were invited to submit abstracts based on a clinical question that arose during their placements. Student finalists were encouraged to be creative in designing a video and short presentation at the EBM conference, role play the process taken to research the best evidence for the clinical question, as well as emphasise the significance of EBM to patient care.

Feedback from students at the conference, the finalists were then asked to be peer mentors for their juniors. Their role included meeting with previous conference organizers to discuss challenges they faced with abstract submissions and making any recommendations for improvement. An online platform was developed and an online tool with prompts for the educational prescriptions was created. Subsequent to these interventions a comparison was made of the submission numbers between 2018 and 2019 conferences. Junior students were also given a questionnaire to obtain their perspectives of the peer mentorship

Results In 2019 there were 60 submissions compared to the 25 submissions in 2018. In addition to the increment; it was also noted that a smaller percentage of submissions were in groups for the 2019 conference-40% of submissions in 2018 were in groups compared to around 1% of submissions in 2019- suggesting that students were possibly more confident of the assignment. Twenty-five junior students completed the questionnaires distributed. 72% of the responded that the examples from the previous year helped them the most to structure their submission for this year; however, some students felt like they would have preferred to have more examples provided online. Over 70% of the students were satisfied with the support provided by the peer mentors

Conclusions The implementation of a peer guided mentoring in the medical school led to the greater engagement of students with the assignment. Although it was difficult to isolate what had the most influence on students' submissions. 90% of the students preferred to have submitted online rather

than via email or paper copy so therefore happy with our intervention. It appears what mattered most to students was the opportunity to view other medical students' submissions and presentations. It was also highlighted that some would have preferred to have a formal talk on which the mentors could have given them tips and shared their experiences as students. These findings show providing students with an opportunity to learn from their peers is of great importance, perhaps this is because peers are able to present things in a relatable way

REFERENCES

1. Sackett D, Rosenberg W, Gray J, Haynes R, Richardson W. Evidence based medicine: what it is and what it isn't. *BMJ*. 1996;312(7023):71-72.
2. Ilic, D., Nordin, R., Glasziou, P., Tilsen, J. and Villanueva, E. (2015). A randomised controlled trial of a blended learning education intervention for teaching evidence-based medicine. *BMC Medical Education*, 15(1).

11 TEXT MINING STRATEGY FOR GUIDELINE DEVELOPMENT

AGuadarrama-Orozco Jorge, Jesús Ojino Sosa-García, José Alejandro Martínez Ochoa. National Center for Health Technology Excellence, Ciudad de México, Mexico

10.1136/bmjebm-2019-EBMLive.92

Objectives The increasing rate of publications in medicine is a current concern. Find relevant and precise information with impact in patient care decision became complicated, making the process of relevant knowledge extraction difficult and time-consuming. In the guideline creation process the information overload synthesis is the core step in the process. In Latin America countries there is need for more efficient tools which enable the quality-based discovery, the extraction, the integration and the use of hidden knowledge in the publications, due to the limited trained personal. Text mining tools helps to cope with the interpretation of these large volume of data. To include the raw data in the publications and convert them to a format feasible of data mining could decreased the analysis time. This strategy should improve the actualization of the recommendations with instant review of the data.

Method We conduct a pilot study comparison in a guideline develop (neonatal Sepsis) process for data extraction with the traditional strategy (using research algorithm, manual review and GRADE pro tool) versus Data mining strategy (PubMed Reminer, Trip database tool, GATE, Tabula 1.2.1, Meshy, Weka and free existing tools) and comparing resources, time (learning and implementing) and with the guideline recommendations as measurable results.

Results There was a consistency in results during the evidence extraction process, but increased discrepancy in the data extraction between the traditional strategy and the text and data mining strategy ($Kappa < 0.20$)

Conclusions Significant efforts are being made to personalize information retrieval and ranking process steps during a guideline creation. The use of text mining tools could reduce the costs and error in handling information. Nowadays the free tools are insufficiently precise in the extraction of text and data that does not replace the traditional method of conducting a clinical practice guide.