Anatomy learning and retention among students in a graduate-entry medical course


Abstract

Anatomy forms the basis of clinical examination and is integral to today's medical curriculum. Yet, increasingly evident in the literature is feedback from clinicians and surgeons about the perceived lack of anatomical knowledge among recent medical graduates. To understand the issues surrounding student learning and retention of anatomy, a mixed-methods design was utilized to explore medical students' anatomical knowledge throughout their Bachelor of Medicine and Bachelor of Surgery (MBBS) degree. Students enrolled in the four-year graduate-entry MBBS course at Monash University participated in the study. Participants from the preclinical (Year A) and clinical years (Years B, C and D) sat an online assessment consisting of 60 clinically relevant anatomy multiple-choice and extended-matched questions whose objectives had been previously covered in the preclinical teaching. Altogether, 136 students participated in the study. The results revealed that knowledge of anatomy declined over time and this was significant in the final two clinical years. The drop in anatomical knowledge was not uniform. The regions of anatomy better retained were associated with frequent exposure and reinforcement in the clinical years. Participants cited an intense and time-constrained curriculum, poor integration in the clinical years and rare opportunities for revising and testing anatomy as reasons for the decline of knowledge. The results of this study highlight the need for conceptual coherence at the time of teaching; the importance of vertical integration in providing students with frequent learning opportunities in the clinical years; and, the value of formatively testing students' knowledge of anatomy throughout the clinical years.

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Learning anatomy is like trying to drink from a running firehose. The main logistical barrier to acing anatomy is not understanding, it is recall. If you do not have an efficient system to help you remember, all your one-time effort is useless. In fact, you’re worse off than the student who never studied it before, because you will be tired and depressed by the fact that you remembered so little, while he will be fresh and eager to learn something completely new. I use two programs to help me retain information with minimum effort. Anki and Habitica. Anki is a spaced repetition flashcard program... Unlike physiology or biochemistry, where one can rely on the ‘flow of events’ in a particular topic as an aid to memory, there is very little scope for the same in anatomy. Coming to your question Most seasoned anatomy students will agree that when it comes to the question of how to study anatomy, flashcards are an indispensable resource. How do they work? On one side of a card, you’ll see an anatomical structure. In a nutshell, active recall helps you to learn more efficiently through testing your memory just as you’re about to forget the material you’ve learned. An undergraduate course means you enter your chosen course straight away i.e. you commence studying medicine at university straight out of high school. A graduate course means that you must first complete an undergraduate degree in another area of study, such as science. Then, assuming you have: • maintained a high enough GPA • scored highly on the GAMSAT • scored well in an interview (usually a multiple mini interview (MMI)) then you will obtain entry into medicine and will be able to begin your medical degree. In general, the graduate pathway is longer and more expensive than the undergraduate... • How many students from that course go on to practice medicine in highly sought after specialties? This has resulted in considerable disquiet among physicians and surgeons with regard to the anatomical knowledge of newly qualified doctors, and also amongst students. This study aimed to assess the perceived student need for anatomical teaching packages to support clinical attachments in the later years of the undergraduate medical... CONTINUE READING. View on Wiley. Anatomy learning and retention among students in a graduate-entry medical course. M. Machado. Psychology.