Linear study of medical undergraduate performance

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The examination performance of a cohort of clinical undergraduates has been scrutinized. The cohort was notable for a high failure rate at the university preclinical examinations, but this failure rate did not reappear consistently in all four final clinical subjects. The assaying examinations were not only valid for their objectives, but also measured a range of other attributes. Multiple choice question paper scores detect both quantitative and qualitative differences in knowledge between the high and low risk fail candidates. The effect of A-level grade is variable but is carried up to the final qualifying examinations. High performers tend to have good A-levels. The contribution of the preclinical course to the clinical qualifying examinations was small, varied between the preclinical subjects and also between the clinical subjects and the two streams of students. It is shown that a lack of an adequate standard in science subjects before entry to university is associated with subsequent disadvantage in clinical training. Such disadvantage could be reduce by an introductory premedical course. The contributions made by the differing educational experiences within the cohort could be detected in many of the examinations; in particular, poor performance at the end of first clinical year pathology multiple choice questions paper examination was associated with poor performance at finals. Failure in the first part of finals indicated a likelihood of further failure. Factors such as sex and motivation are shown to affect multiple choice question performance, whilst others such as work-overload do not. The high risk fail candidates can be detected 2 years before finals and might be given special educational treatment designed to improve their chance of first time success, as there is no efficient way of identifying them before acceptance into the medical school.

Note: This paper analyzed a complete cohort of students passing through the entire medical school course, and therefore completed the partial work reported previous.