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Progress Testing as a Tool to Assess Growth in Applied Dental Knowledge

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Aim: To evaluate the use of progress testing in an undergraduate dental programme in the United Kingdom

Methods: Data were collected for Progress Tests conducted from 2007-2016 involving ten cohorts of Bachelor of Dental Surgery (BDS) students in seventeen sittings. The data were analysed in SPSS version 22.0 (SPSS Inc., Chicago, IL, USA) and R to identify the differences in the performance of students in successive years. Internal consistency of test scores was calculated using Cronbach's Alpha. Analyses were used to identify variations in total scores, correct, incorrect and do not know responses to evaluate growth in applied dental knowledge based on demographic factors.

Results: Data analysis was undertaken for a total of 56 distinct test occasions over nine years. Overall reliability of dental progress tests was acceptable, Alpha= 0.75 (SD±0.09). The dental knowledge of students increases steadily over successive years as expected. The scores and correct responses mirror each other while, "don't know" responses decrease steadily. However, the incorrect responses stay relatively stable. Differences in the performance of students based on age, educational background, ethnicity and any known disability were also evaluated.

Conclusion: Progress testing is a unique assessment tool which permits reliable longitudinal assessment of applied knowledge across the curriculum. There is merit in using progress testing in undergraduate as well as postgraduate dental programmes to assess growth in applied dental knowledge during successive years.