United Kingdom

A great variability exists in the clinical exposure of neurosurgery across all academic years in UK medical schools, although the effects of this on knowledge level and confidence in referring cases appropriately to specialists have not been reported.

A cross-sectional study was carried out involving students in years 1-5 across nine British medical schools. An electronic questionnaire was sent out which consisted of questions concerning the teaching of the subject; and questions assessing the knowledge of basic neurosurgery through mini clinical scenarios testing which specialty should receive a referral.

Of 417 participants, 60 were excluded due to incomplete participation. Senior years outperformed students in junior years for correctly answered questions on five neurosurgical scenarios (mean score: years 1-3 (184/357) = 3.33/5, years 4-5 (173/357) = 3.79/5, $p < 0.05$). Participants in years 1-5 with prior clinical exposure in neurosurgery scored higher than participants who had no exposure (mean score: exposed (247/357) = 4.21/5, not-exposed (110/357) = $3 \cdot 50/5$, $p < 0.05$). Sixty-one percent prefer receiving neurosurgical teaching via increased exposure to operations. Students in years 4-5 with exposure in both classroom and operating theatre scored higher than students with classroom-only experience (mean classroom (69/131) = 3.62/5, mean classroom and operating theatre (62/131) = 4.21/5, $p < 0.05$); 33.3 % of final-year students reported difficulty in identifying patients that require neurosurgical referral.

Students with exposure to an operating theatre outperformed those students exposed to just classroom teaching. Students indicated an increased preference for teaching through the operating theatre scene. One in three final-year medical students had difficulty identifying the need for a neurosurgical referral.If neurosurgical teaching were further enhanced at medical school, it could lead to increased confidence and efficiency in junior-year doctors when facing the neurosurgical referral process. Increased exposure to clinical neurosurgery may significantly improve the ability of future doctors to tackle neurosurgical scenarios [1)].

Academic Productivity of Neurosurgeons Working in the United Kingdom: Insights from the H-Index and Its Variants

Neurosurgical consultants working in the United Kingdom were identified using the Society of British Neurosurgeons' Audit Programme website. Baseline data collected included year of entry to specialist register, academic position and award of higher degree. Google Scholar was used to compute a range of academic metrics for each consultant including the h-index, hi-norm, e-index and g-index. Non-parametric tests were used to compare median results. RESULTS: Median metrics for the whole cohort were: h-index (5), hi-norm (3), g-index (10.4) and e-index (9). The top 3 units based on h-index were Addenbrookes (13), Great Ormond Street (12.5) and Queen's Square (11.5). The h-index correlated with academic position [Prof (17.5), Senior Lecturer (10.5) and non-academic (5); $P < 0.0001$], higher degree [PhD (10), MD (6) and none (4.5); $P < 0.0001$] and consultant experience [> 10 year (7), < 10 years (4); $P < 0.0001$]. No difference was found based on gender [male (5), female (4); $P = 0.12$]. The same trends were seen across the following other metrics: hi-norm, e-index and g-index. DISCUSSION: This study details the academic impact of United Kingdom-based neurosurgeons through the analysis of a number of citation metrics. It provides a benchmark bibliometric profile and we advocate future comparative assessments as a means to assess impact of and guide academic policy [2)].

Hospitals

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1)
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