58. ASSESSING NEUROSURGERY RESIDENCY PROGRAM RANKINGS: A NOVEL APPROACH WITH RESIDENCY AFFILIATED ACADEMIC NEUROSURGEONS (RAAN)

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BACKGROUND: When medical students create their residency rank order lists, they consider a myriad of factors such as program reputation, research opportunities, and geographical location; however, it is unclear whether some factors such as the likelihood of acquiring an academic position, are adequately reflected in established ranking systems. The Doximity Reputation Navigator (DRN) reputation rank methodology is dubious. In this study, we aim to investigate the relationship between ranks of neurosurgical residency program ranks in DRN and Blue Ridge Institute for Medical Research (BRIMR) rankings, to identify potential underlying relationships between academic neurosurgeons and ranks. The primary objective of this study was to assess the relationship between established neurosurgical residency program rankings, specifically those from DRN and BRIMR, and the academic contributions of affiliated neurosurgeons. This was done by developing a new ranking system based on the proportion of neurosurgeons from these programs who hold academic positions. **METHODS:** We conducted a cross-sectional analysis of neurosurgical residency programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). We included 1623 faculty members from these programs, focusing on those with publicly available education and training histories in our analysis. The newly developed ranking system, Residency Affiliated Academic Neurosurgeons (RAAN), was created to rank programs based on the proportion of neurosurgeons in academia. This study involved the development of Residency Affiliated Academic neurosurgeons ranking system, which was then compared to the existing DRN and BRIMR rankings. The correlations between these rankings and academic positions of neurosurgeons were analyzed to identify any significant relationships. **RESULTS:** We find that in our system, the program ranking had a significant correlation with Doximity Residency Navigator or Blue Ridge Institute for Medical Research (R=0.73, p<0.0001 and R=0.45, p<0.001, respectively). The median rank of faculty across Residency Affiliated Academic Neurosurgeons, Doximity Residency Navigator, and Blue Ridge Institute for Medical Research correlated significantly (R=0.83, p < 0.0001, R=0.75, p < 0.0001, and R=0.69, p < 0.0001). Notably, the percentage of legacy faculty (defined as faculty who are appointed at the same location as residency training) had a significant association with Residency Affiliated Academic Neurosurgeons and Doximity Residency Navigator (R=-0.33, p<0.05 and R=-0.38, p<0.001, respectively). **CONCLUSION:** In conclusion, this study developed a novel ranking system based on the output of academic neurosurgeons affiliated with residency programs. Regardless of this ranking system, medical students should utilize a combination of established objective ranking systems that fit their needs to ensure they match at a well-suited accredited neurosurgery residency program.

Key Words: Internship and Residency; Neurosurgery; Students, Medical; Education, Medical, Graduate; Accreditation.