Academic Productivity of Craniofacial Surgery Fellowship Faculty

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INTRODUCTION: The Hirsch index (H-index) is widely recognized as a reliable measure of academic productivity. While previous studies have applied the H-index to various surgical disciplines, none have analyzed craniofacial surgeons. This manuscript aims to examine the applicability of the H-index to craniofacial fellowship faculty to determine its utility as a measure of academic output for this group.

MATERIALS AND METHODS: A list of fellowship programs was obtained from the website of American Society of Craniofacial Surgery (ASCFS). Faculty demographics and institution characteristics were obtained from official program websites. H-indices for each faculty member were calculated using the Scopus database (Elsevier, USA). Data was assessed using bivariate analysis (Kruskal-Wallis and Mann-Whitney tests) and multiple linear regression models to determine the relationship between independent variables and total publications, career H-index and 5-year H-index (H5-index) of each faculty.

RESULTS: A total of 102 faculty members from 29 craniofacial fellowship programs were identified to meet inclusion criteria. Faculty demographics reflected a median age of 48 (IQR 13), a predominantly male sample (88/102, 89.7%) and the rank of assistant professor being the most common among faculty members (41/102, 40.2%). Median career publications per faculty was 37 (IQR 52.5) and median H-index and H5-index were 10.0 (IQR 13.75) and 3.5 (IQR 3.25) respectively. Multivariate analysis based on the significant independent variables demonstrated that age, male gender, FACS membership, higher academic title and academic program affiliation with a ranked research medical school were significantly associated with higher H-indices.

CONCLUSIONS: Variables associated with seniority (age, years of practice after fellowship, and academic appointment were positively correlated with the H-index. Given the increased use of bibliometrics in academic medicine, these results show that H-index is a viable tool which can be used to assess research quantitative and qualitative productivity among academic craniofacial surgeons.