Gender Differences in Academic Position and Research Productivity within Pediatric Gastroenterology Faculty

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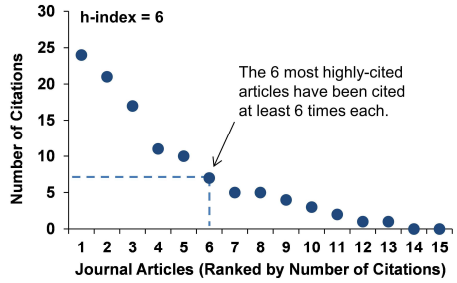
Background & Aim

- As the number of women physicians increases yearly, there has been a global spotlight in promoting gender equality in academic medicine career advancement.
- Among academic programs, research is a component of promotional review with the h-index utilized as a measure of both output and impact of publications.
- Overall, there is a paucity of analysis in publishing career productivity and academic title differences among faculty involved with pediatric programs.

The objective of this study utilized the h-index of pediatric gastroenterologists involved within fellowship programs to further examine the dynamics of scholarly productivity and the relation to gender and leadership roles.

Methods

- Faculty profiles of pediatric gastroenterologists among 64 fellowship programs were collected through department available websites. Biographical data and academic rank was obtained.
- The Scopus database was utilized to obtain each physician's h-index measure, number of publications, and history of publications.



Graph 1: How to calculate one's h-index (courtesy of UBC Library)

Results

	Associate Professor				Assistant Professor			
	Total (n=178)	Female (n=90)	Male (n=88)	p-value	Total (n=346)	Female (n=235)	Male (n=111)	p-value
Average years since fellowship completion	16.7	15.8	17.6	0.193	8.3	8.3	8.4	0.906
Average publication career in years	17.2	15.4	18.9	**0.016***	10.4	9.7	12.2	**0.005***
Number of Publications	26	21.4	30.7	**0.014***	11.3	9.8	14.4	**0.002***
H-index	9.6	8.2	11.1	**0.02***	5	4.4	6.2	**0.002***
Publications per year	1.7	1.6	1.7	0.267	1.3	1.2	1.3	0.433

Table 1: Publication data associate and assistant professors. **P<0.05*

	Division Chair				Professor			
	Total (n= 51)	Female (n = 12)	Male (n = 39)	p-value	Total (n=118)	Female (n=27)	Male (n=91)	p-value
	26	23.2	26.9	0.206	29.6	26.8	30.3	0.144
	28.9	23.5	30.5	**0.022***	30	28.3	30.5	0.435
	108.54	57.6	122.9	0.057	104	75.7	112.4	**0.038***
	29.46	18.4	32.6	**0.012***	28.1	22.8	29.7	0.064
	3.5	2.4	3.8	0.215	3.5	2.6	3.7	0.06

Table 2: Publication data of chairs and professors. **P<0.05*

- No significant difference in average time since fellowship completion within each title.
- Although no difference in years since fellowship, there were significant differences in publication career lengths for both assistant and associate professors. On average a female provider had their first publication while in fellowship, while male faculty had their first publication in medical school.
- In turn, there were significant differences in publication numbers and h-index for junior faculty members.

Demographics

	Women	Men	Total
Division Chair	14	49	63
Fellowship Director	31	33	64
Professor	39	133	172
Associate Professor	107	107	214
Assistant Professor	248	119	367
Total	414	384	798

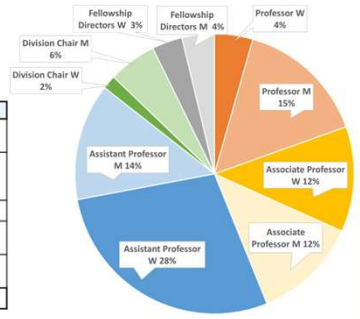


Table 3 & Chart 1: Gender differences among academic titles.

- With over 51.8% of pediatric gastroenterology faculty being women, proportionally fewer hold the title of professor (22.7%), division chair (22.2%), or fellowship director (48.4%)

Conclusion

- Women continue to have growing impact as well as diversifying higher academic positions.
- Early exposure to research can lead to a higher h-index, but although a standardization of publication impact, it may not be an equitable measure.
- Continue to encourage early mentorship for women and under-represented groups in both residency and medical school.
- Numerical values by themselves do not provide a holistic assessment of a physician's impact on the medical field, education, and one's community.
- We hope the measures of this study improve the dynamics and furthers equality when it comes to promotion in the field of pediatrics.