The Impact of a Scholarly Concentration Program on Pediatric Medical Student Research

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BACKGROUND & OBJECTIVE

- Promoting pediatric research is key to improving children’s health
- A benefit to medical student (MS) research includes promoting interest in future scientific inquiry
- Productivity resulting in a publication is one desired outcome
- Objective: Study factors impacting manuscript publication rates from MS researchers in Pediatrics versus non-Pediatric departments in the University of Wisconsin School of Medicine & Public Health (UWSMPH) MS scholarly concentration program (SCP)

RESULTS

- Publication rates did not differ between Medical Students in Pediatrics versus other departments, though having an experienced mentor did improve publication rates.

<table>
<thead>
<tr>
<th>Publications</th>
<th>Overall n (%)</th>
<th>Pediatric MS n (%)</th>
<th>Non-Pediatric MS n (%)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Publication</td>
<td>186 (17%)</td>
<td>16 (16%)</td>
<td>170 (17%)</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Any Publication</td>
<td>380 (34%)</td>
<td>38 (37%)</td>
<td>342 (34%)</td>
<td>p&gt;0.59</td>
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</tbody>
</table>

METHODS

- The Shapiro Endowment was primary funder of summer SCP at UWSMPH
- IRB deemed program exempt as quality improvement
- Prospectively collected dataset from 2002-2017 in SCP where students self-select projects & mentors
- Data from:
  - Medical students (n=1108 total, n=102 Pediatrics)
  - Primary mentors (n=422 total, n= 37 Pediatrics)
- PubMed search identified joint student-mentor research publications within 2 years of student graduation
- Publication Rate Variables
  - Mentor Experience
  - Mentor Degree
  - Research Field
- Statistical Analysis
  - Summary statistics and rates determined, Chi², ANOVA performed, p<0.05 significant

CONCLUSIONS

- Little is understood about what makes a SCP effective in enhancing medical school education & future career choices
- Using publication rates as a proxy for research productivity allowed us to evaluate SCP variables
- Experienced mentorship is the leading factor improving medical student publication rates
- Medical Students in Pediatrics selecting more Public/Global Health projects reflects the American Academy of Pediatrics goals of improving Pediatrician Advocacy efforts

FUTURE PLANS/ACKNOWLEDGMENTS

Future Plans
- Evaluate if medical student publication rates correlate with choosing a future career in academic medicine
- Increase mentor training to improve research learning & productivity in medical students

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