Retaining Talent in Academic Medicine: the Impact of Professional Development Programs for Women Faculty

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Introduction
For nearly two decades, the Association of American Medical Colleges (AAMC) and Drexel University College of Medicine (DUCOM) have sponsored professional development designed to address the underrepresentation of women in academic medicine. The four-day AAMC Women in Medicine (WIM) Faculty Professional Development Seminars (Early Career and Mid-Career) and the year-long Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) program at DUCOM are highly sought after by women medical faculty across ranks, and considered to be a positive force in building academic careers. These career development programs (CDP) have not yet been systematically evaluated for their impact on retention of women faculty in academic medicine.

Purpose
To evaluate whether participation in professional development training for women offered by AAMC and DUCOM was associated with longer retention of women in academic medicine faculty compared to women and men counterparts.

Methods
Data Resources: AAMC Faculty Roster database, AAMC WIM and ELAM participant lists
Study Participant Groups: 3710 CDP participants matched to 24,683 women and 56,152 men faculty by home institution, degree type, and first year of appointment in the same academic rank of the CDP participant at time of participation
Survival Analysis
• Unadjusted: Kaplan-Meier survival curves and log-rank tests were used to compare retention in academic medicine over time of groups.
• Adjusted: Cox Proportional Hazards Models were used to estimate risk of departure from academic medicine for groups. Where proportional hazard assumptions were not met, time-dependent variables were used in order to estimate risk of departure accurately over time.
• Retention, switching and attrition: 10-year rates were calculated for women participating in CDPs from 1989 to 1999 and their counterparts.

Results
Unadjusted retention in academic medicine of CDP participants and same career-stage men and women faculty

<table>
<thead>
<tr>
<th>Academic rank</th>
<th>CDP vs. men</th>
<th>CDP vs. non-CDP women</th>
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</thead>
<tbody>
<tr>
<td>Full Professor</td>
<td>0.49 (0.42-0.56)</td>
<td>0.76 (0.67-0.85)</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>0.51 (0.42-0.60)</td>
<td>0.76 (0.67-0.85)</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>0.54 (0.45-0.63)</td>
<td>0.79 (0.70-0.87)</td>
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Conduction
Women who participated in CDP were significantly more likely to remain in faculty positions in academic medicine compared to women and men at the same institutions, academic rank, and degree. This was true for all academic ranks and for all programs (ELAM, p=0.0002; WIM programs, p<0.0001).

Discussion
While it is not clear whether longer retention was due to skill development at the time of participation, advantage gained in institutional visibility as a result of being selected, or increased engagement in professional activities following the program, it appears quite clear that the career development programs offer an advantage to retaining women within academic medicine.

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