Impact Of Gender Diversification In Dentistry On Dental Services Delivery

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ABSTRACT

Objectives: The objective of this study was to evaluate the differences by gender among dental professionals in service delivery, including perception of practice busyness, patient volume, and characteristics of patient population.

Methods: The study used data from the 2017 Survey of Dental Practice collected by the American Dental Association. The survey collected information about characteristics of dentists in private practice and their patients in 2016, the previous year of practice. The study analyzed gender differences in practice and service delivery using descriptive and multivariable statistical methods (Chi-Square test and multilevel Poisson regression model) in SAS v9.4.

Results: Among the 2,258 professionally active dentists in private practice who responded to the survey, 585 (25.8%) were female and 1,673 (74.1%) were male. Female dentists were significantly more likely to report being overworked or too busy to treat all patients (27.9% vs 23.5%, P=0.076) and/or experiencing an increase in patient volume in the last year than male dentists (44.9% vs 31.1%, P=0.0056). Notably, while more female dentists were among those 46-55 years of age, female dentists were more likely to provide care to patients aged <18 years (P=1.53, 95% CI=1.44-1.63) compared to male dentists. Similarly, in the 36-65 years cohort and particularly in the 56-65 years-old cohort, female dentists were more likely than their male counterparts to treat patients covered by public insurance (P=1.80, 95% CI=1.66-1.97).

Conclusions: The study findings suggest that female dentists assume a larger proportion of female dentists reported an increase in their practice volume in the past year.

METHODS

Data Source: 2017 Survey of Dental Practice (SDP) collected by the American Dental Association (ADA)

Data Analysis:

• Descriptive and multivariable statistical methods (Chi-Square test, t test, multilevel Poisson regression) were used to estimate differences in practice patterns between male and female dentists by age cohort, such as:
  - Work capacity (patient visits, work hours/week)
  - Patient volume change during the past year
  - Perception of practice busyness
  - Patient population by age and dental insurance

Data analysis was conducted for a subgroup of solo practitioners who weresole proprietors and the only dentists in the practice treating patients.

• Estimates were weighted to account for oversampling of specialists and potential nonresponse bias.

• All analyses were conducted in SAS v9.4. Study findings were considered statistically significant at P<0.05.

RESULTS (cont.)

Among a subset of 825 solo practitioners in private practice:

• A significantly larger proportion of female dentists than male dentists reported an increase in their practice volume in the past year.

Table: Distribution of Patients’ Age and Insurance Coverage in the Primary Practice of Solo Practitioners by Dentists’ Gender, 2016

| Age Group | % of Patients' Age | % of Public Insurance | % of Private Insurance
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<tr>
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<tbody>
<tr>
<td>&lt;18 Years</td>
<td>20.2%</td>
<td>53.8%</td>
<td>46.2%</td>
</tr>
<tr>
<td>18-64 Years</td>
<td>71.7%</td>
<td>53.9%</td>
<td>46.1%</td>
</tr>
<tr>
<td>≥66 Years</td>
<td>8.1%</td>
<td>53.8%</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

• Female solo practitioners were significantly more likely to provide dental services to children (<18 years) compared with male dentists in all age cohorts ≤65 years.

• The likelihood of female dentists treating children in comparison with male dentists was highest among those 46-55 years of age.

• Female solo practitioners were significantly more likely to provide dental services to patients covered by public dental insurance compared with male dentists in the age cohorts 36-65 years.

• The likelihood of female dentists treating patients covered by public insurance was nearly 2 times higher than male dentists among the 56-65 years of age.

CONCLUSIONS

• Findings suggest that female dentists are more likely to assume care for younger patients than male dentists and may work in practice settings with higher percentages of historically underserved patients.

• Many factors, including generational differences, will continue to affect the practice configurations in dentistry. It is important to continually monitor the workforce in order to ensure the adequate supply and appropriate distribution of dental professionals to meet the needs of the growing, aging, and changing US population.

• Trends in the diversification of the dental workforce should be evaluated over time so that pipeline programs, policy advocates, and professional stakeholders can be proactive in responding to changes in practice patterns, especially those related to the geography of dental practices.

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