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# Women Physicians Are Underrepresented in Recognition Awards From the Association of Academic Physiatrists

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**Objective:** Determine representation by gender for individual recognition awards presented to physicians by the Association of Academic Physiatrists (AAP).

**Design:** Cross-sectional survey was used. Lists of individual recognition award recipients for the 27-yr history of the AAP awards (1990–2016) were analyzed. The primary outcome measures were the total numbers of men versus women physician award recipients overall and for the past decade (2007–2016).

**Results:** No awards were given to women physicians for the past 4 yrs (2013–2016) or in half of the award categories for the past decade (2007–2016). No woman received the outstanding resident/fellow award since its inception (2010–2016). There was a decrease in the proportion of awards given to women in the past decade (2007–2016, 7 of 39 awards, 17.9%) as compared with the first 17 yrs (1990–2006, 10 of 46 awards, 21.7%). Furthermore, compared with their proportional membership within the specialty, women physicians were underrepresented for the entire 27-yr history of the AAP awards (1990–2016, 17 of 85 awards, 20%). According to the Association of American Medical Colleges, the proportion of full-time female physical medicine and rehabilitation faculty members was 38% in 1992 and 41% in 2013.

**Conclusions:** Women physicians have been underrepresented by the AAP in recognition awards. Although the reasons are not clear, these findings should be further investigated.

**Key Words:** sexism, gender bias, physicians, medical societies

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In academic medicine, physician-supported medical specialty societies play an important role in career development and provide access to critical resources and opportunities needed for advancement. For example, academic physicians benefit from publications in society-affiliated journals, presentations at society conferences, and leadership positions on society task forces, committees, and boards. Through a variety of awards, societies also provide members with opportunities for recognition. These awards further buttress academic reputations and sometimes even provide financial support to the recipients. Thus, societies may be viewed as “gatekeepers” to key resources that academicians need for career advancement. However, despite their crucial role, there are few studies that examine disparities

in access to resources provided by physician-supported medical specialty societies.

Recognition awards provide a rubric by which to measure how physicians have been supported by these types of organizations. To receive an award, one typically needs to be successful with a body of work for a period of years—often decades. Depending on the award category, this body of work may include career-enhancing opportunities such as scientific publications, oral research presentations at society conferences, and participation in or leadership of society committees, task forces, and/or boards. The timeframe assessed for the recognition may be relatively short, even just a few years, as with an outstanding resident/fellow award or may be determined over

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the course of decades such as with a distinguished member type of award. Regardless of the timeframe, recognition awards provide a unique opportunity to assess a body of work. Moreover, recognition awards are not only a marker of professional achievement, but the awards themselves support academicians in building their reputations, which may in turn positively impact career advancement and compensation. In a report focusing on the underrepresentation of women among recipients of professional science awards, Lincoln et al.<sup>1</sup> noted that awards are external markers of professional achievement and instrumental in advancing careers—including promotion and tenure.

The aim of this report was to determine whether women physicians were underrepresented in recognition awards within a major medical specialty society for psychiatrists—the Association of Academic Psychiatrists (AAP). Recognition awards are an evolving area of research, and we recently published a report demonstrating underrepresentation of women physicians from the American Academy of Physical Medicine and Rehabilitation, which, to our knowledge, was the first study in the medical literature to assess the representation of women physicians for recognition awards by a physician-supported medical society.<sup>2</sup> To our knowledge, this is first study to assess the gender of recognition award recipients from a physician-supported medical society focused primarily on *academic medicine*. Within the specialty of physical medicine and rehabilitation (PM&R), the AAP and its members are academically focused and the stated mission of the AAP is “Creating the future of academic psychiatry through mentorship, leadership, and discovery.”<sup>3</sup> With respect to membership and academic development, goals include to “increase AAP membership and retention from medical student through emeritus members” and to

“promote career development and networking for psychiatrists,” respectively. As the proportion of women physicians in each of the four academic positions (instructor, assistant professor, associate professor, and full professor) has been steadily increasing in PM&R since 1994,<sup>4</sup> approximately 41% of full-time academic psychiatrists are currently reported as female,<sup>5</sup> and PM&R has been cited as being among the medical fields with the highest proportion of women physicians positioned as full professor,<sup>4</sup> equitable support for this large group of academic physicians is paramount to achievement of the AAP's mission and strategic goals. Therefore, the aims of this investigation were to assess the proportion of women physicians recognized by AAP awards for the entire history of the awards as well as for the past decade.

## METHODS

A published online list of AAP Award Winners,<sup>6</sup> representing 27 yrs of data (1990–2016), was analyzed in August 2016 by physicians specializing in PM&R.

The data were publicly available from a published list on the AAP website; however, upon initial analysis, it was noted that there seemed to be some inconsistencies in award dates.

The AAP was contacted and subsequently provided a verified recipient list that did include corrections to the online data.

In all cases of inconsistency, the verified recipient list was used as the source for study data. The study was deemed exempt from requiring institutional review board approval. This study conforms to all Strengthening the Reporting of Observational studies in Epidemiology guidelines and reports the required information accordingly (see Checklist, Supplemental Digital Content, <http://links.lww.com/PHM/A449>).

**TABLE 1.** AAP Award Descriptions

### Distinguished Academician Award

This award shall be given to a member of the Association who has achieved distinction and peer recognition regionally or nationally by virtue of excellence as a teacher, researcher and/or administrator. This award shall be given to no more than one member in any particular year. Those honored as Distinguished Members are not eligible for the award.

### Early Career (Young) Academician Award

This award shall honor an academic psychiatrist who has demonstrated outstanding performance in the areas of teaching, research and/or administration. The nominee must have an academic rank of associate professor or less and be nominated within 10 yrs of completing clinical residency or fellowship training or 7 yrs after the completion of a funded, mentored research award. This award can be given to only one member in any particular year.

### Distinguished Member Award

This award is selected by a unanimous vote of the Awards Committee and by the Board of Trustees. Only one candidate may be nominated per year. Final selection is by a three-fourths affirmative vote of members present at a General Business Session. This award category of membership is reserved for the most distinguished psychiatrist, an individual who is of international status, is recognized as a major contributor to the field by virtue of teaching, research, and scholarly publications and is noted for dedicated service to the AAP. Distinguished members have the right to vote and hold office and have a lifetime exemption from any dues or fees.

### McLean Outstanding Resident/Fellow Award

This award will be given to a member Resident/Fellow who demonstrates outstanding academic performance in academic leadership, teaching and education, and research. Nominations for the McLean Outstanding Resident/Fellow Award must also include a letter of recommendation from the nominee's Program Director.

### Carolyn Braddom Ritzler Research Award

This award is presented to an individual who has conducted research that has had profound impact on the science and/or practice of PM&R. The intent is to look at impact such as changes in clinical care, policy, or research direction. The awardee should preferably be a psychiatrist and an Association member. The same individual can win the award only once in a 10-yr period. The individual will be presented with a plaque and a monetary award from income from the Braddom endowment. A poster, video, or handout of the research should be made available at the annual meeting.

### Outstanding Service Award

This honor is given to a member who has made major contributions to the organization or to the field through the Association over a significant period of time.

Lists of recipients for nine recognition awards were published online. Five of the awards had exclusively physician recipients, were clearly intended for individual recognition, and were included in this study. These were the (1) Distinguished Academician Award, (2) Early Career (Young) Academician Award, (3) Distinguished Member Award, (4) McLean Outstanding Resident/Fellow Award, and (5) Carolyn Braddom Ritzler Research Award. A sixth award, the Outstanding Service Award, was also included in this study because its recipient list was also primarily composed of physicians. Three following awards were excluded from the study because they did not focus on the individual recognition of physicians: the (1) Public Service Award, (2) American Journal of PM&R Excellence in Research Writing Award, and (3) Ernest W. Johnson Excellence in Research Writing In-Training Award. Although four physicians were listed among the recipients, the Public Service Award was routinely presented to nonphysician recipients ( $n = 12$ ). The writing awards, although listed under the first author's name, were designed to recognize an outstanding publication and were intended to recognize the group of researchers authoring the winning publication. Descriptions of each award are listed in Table 1.<sup>7</sup>

The name and gender of each award recipient were verified independently by three of the authors via online searches. Discrepancies were reviewed and reconciled to ensure the accuracy of the findings. The primary outcome measure was the total number of awards given to women versus men physicians for the 27-yr history of the AAP awards (1990–2016). To account for an increase in the proportion of women physicians in the specialty of PM&R over time, the number of awards presented to women versus men physicians for the past 10 yrs was also evaluated.

Given that gender membership data were not routinely collected by the AAP over the history of the association, two other sources were used to determine the proportion of women physicians within the specialty of PM&R over time: the Association of American Medical Colleges (AAMC)<sup>5,8,9</sup> and the American Academy of Physical Medicine and Rehabilitation (AAPM&R, e-mail communication, April 2016).

## RESULTS

National gender data collected within the specialty of PM&R were used to determine the gender breakdown for the specialty and interpret the study results. Although AAP membership gender data were not routinely collected, the AAPM&R began collecting membership gender data in 2011. AAPM&R data revealed that from 2011 to 2016, the proportion of women practicing physiatrists ranged from 33.1% to 34.6% ( $n = 2713$  in 2016) (e-mail communication, April 2016). Similarly, the most recent physician gender data reported by the AAMC revealed that of the nearly 9000 physiatrists in the United States, 34.7% ( $n = 3083$ ) of practicing physiatrists were reportedly female in 2013.<sup>9</sup> With respect to academia, the AAMC reported that the proportion of female PM&R faculty members was 29.2% in 1975 and surpassed the 38% mark by 1992 and the 41% mark by 2013.<sup>5,8</sup>

For the past 27 yrs, the AAP presented 85 recognition awards to physicians. Women physicians received 17 awards (20.0%, Fig. 1). For the past 10 yrs, 39 awards were given to physicians. Women physicians received seven awards (17.9%, Fig. 2). Comparison of the proportions of women award recipients from the first 17 yrs (1990–2006,  $n = 10$  of 46 awards, 21.7%) and the past 10 yrs revealed a decrease in their representation (Fig. 3).

Distribution of individual awards was similarly examined (Fig. 4). The Distinguished Academician Award is an annual award that was first presented in 1995. Of the 22 total recipients, 5 (22.7%) were women. The Early Career (Young) Academician Award was also given annually to one physician beginning in 1996, except for 2001 and 2006 when it was given to two physicians. Although 23 physicians received this award, 8 (34.8%) were women. The Distinguished Member Award was first presented in 1990 and was inconsistently given to physicians for the 27-yr history of the AAP awards. Of the 13 total recipients, 1 (7.7%) was a woman. The McLean Outstanding Resident/Fellow Award was given to six men since 2010, and no woman received this award. The Carolyn Braddom Ritzler Research Award was presented to six physician recipients

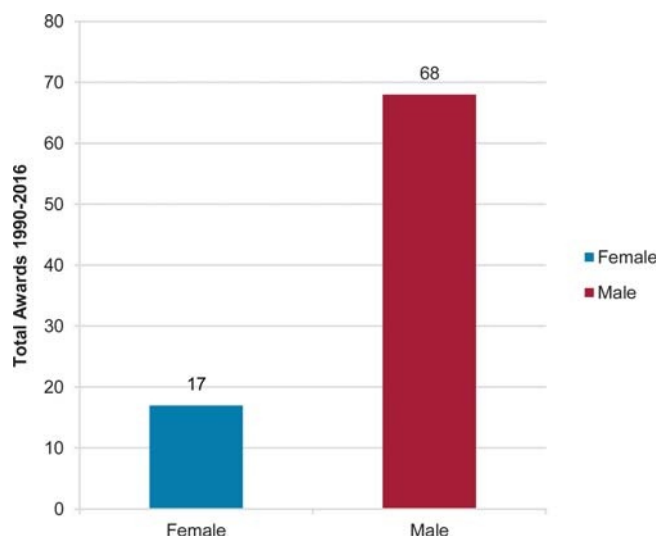


FIGURE 1. Total number of physician awards presented by the AAP from 1990 to 2016.

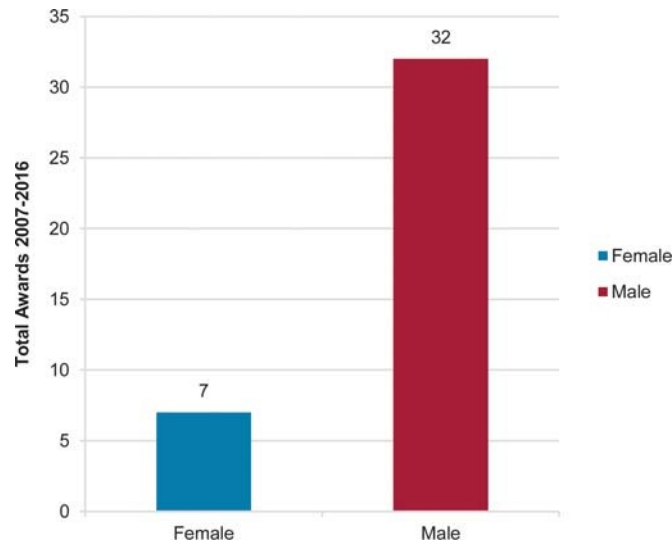


FIGURE 2. Total number of physician awards presented by the AAP from 2007 to 2016.

since 2001. Of these, one (16.7%) was a woman. The Outstanding Service Award was the only award that included both physician ( $n = 15$ ) and nonphysician ( $n = 4$ ) recipients. The award was first presented in 1995 and was given intermittently, to a total of 19 recipients. Women comprised 21.1% ( $n = 4$ ) of the total recipients and 13.3% ( $n = 2$ ) of the physician recipients.

For the past 10 yrs, half of the award categories included in this analysis ( $n = 3$  of 6) included female physicians: the Distinguished Member, Early Career (Young) Academician, and Distinguished Academician Awards (Fig. 4). No awards were presented to women physicians in the three remaining categories included in this report: the Carolyn Braddom Ritzler Research, McLean Outstanding Resident/Fellow, and Outstanding Service Awards. Moreover, analysis of award recipient gender annually over the history of the awards revealed that no awards were presented to women physicians in any of the six award categories between 2013 and 2016 (Fig. 5) despite a documented rise in female representation in academia.<sup>5,8</sup>

### DISCUSSION

Recognition awards are an evolving area of research, and, to our knowledge, this is the second study in the medical

literature to assess the representation of women physicians within recognition awards presented by a physician-supported medical specialty society and the first study to assess representation of women within recognition awards presented by a medical specialty society focused specifically on *academic medicine*. Analysis revealed the following five results of importance: (1) no awards were given to women physicians during the past 4 yrs (2013–2016), (2) no awards were given to women physicians in half of the award categories for the past decade (2007–2016), (3) no woman physician has been a recipient of the outstanding resident/fellow award since its inception (2010–2016), (4) there was a decrease in the proportion of awards given to women for the past decade (2007–2016) as compared with the first 17 yrs, and (5) women physicians were underrepresented for the entire 27-yr history of the AAP awards (1990–2016) when compared with proportional membership within the specialty. These findings contrast with a documented increase in the proportion of both women practicing psychiatrists and, more specifically, women academic psychiatrists for the same period.

Finding a lower proportion of women physician award recipients compared with gender within the specialty of PM&R

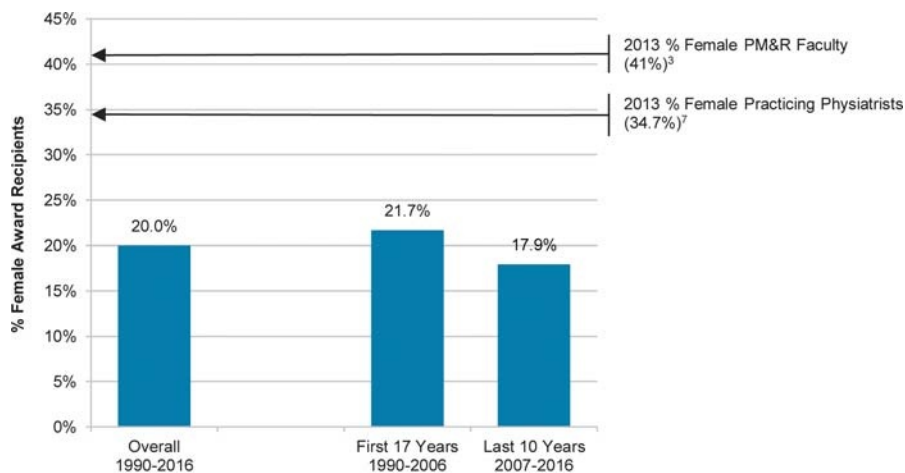


FIGURE 3. Trend in proportion of female AAP award recipients.



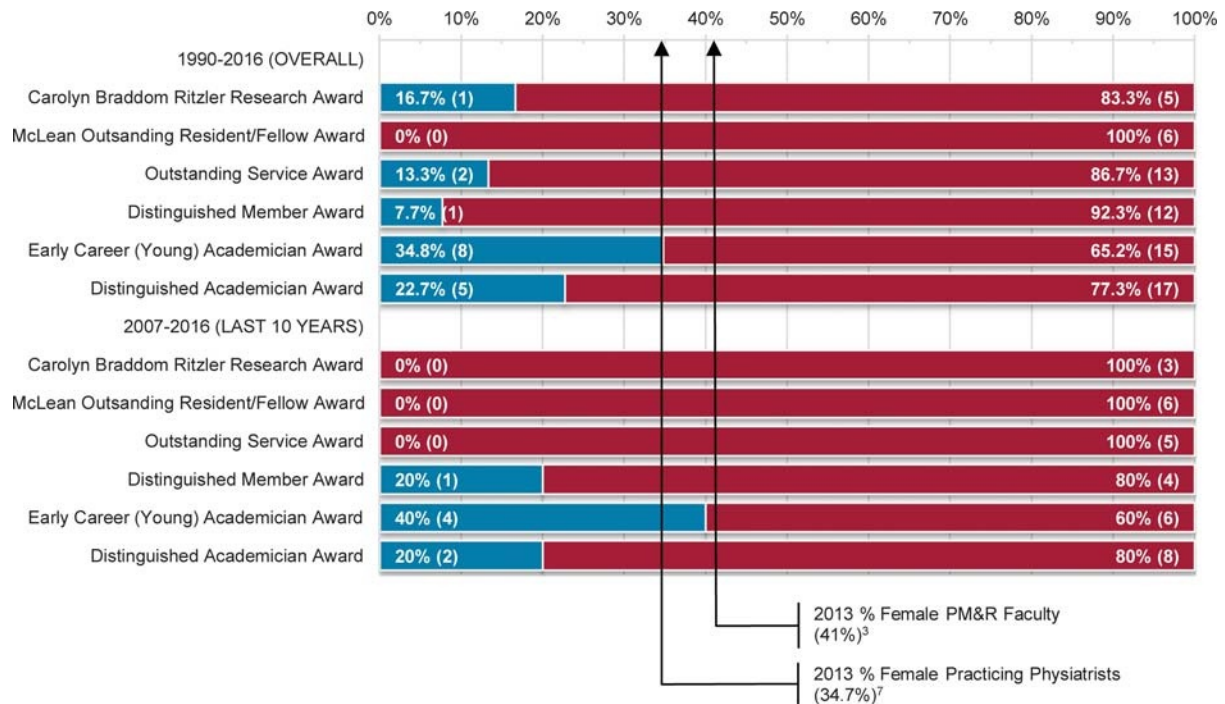


FIGURE 4. Proportion of awards per category presented by the AAP from 1990 to 2016.

is consistent with a large body of research demonstrating a gender gap in the recognition of female scientists and physicians. Considerable research led by the Society for Women's Health Research has demonstrated gender inequities in recognition awards across a wide variety of scientific arenas.<sup>10</sup> The Society for Women's Health Research has tracked STEM (science, technology, engineering, mathematics, and medicine) awards for more than 2 decades<sup>10</sup> and for the unrestricted awards, "the clear finding is that women do not receive recognition in a ratio anywhere near the percentage of women in their fields."<sup>11</sup> Other studies have reported on gender-based disparities in peer-reviewed publications,<sup>12,13</sup> grant funding,<sup>14</sup> editorial boards,<sup>15</sup> leadership positions,<sup>16</sup> and scientific recognition awards.<sup>10</sup> Yu et al.<sup>17</sup> studied the representation of women and minorities in

academic leadership positions for a 12-yr period and found that both were "grossly underrepresented." At least two studies have specifically addressed the gender gap in PM&R. Morton and Sonnad<sup>18</sup> demonstrated that a gender gap exists on the editorial boards of PM&R journals, whereas Wagner et al.<sup>19</sup> found that women physiatrists applied for fewer grants, had lower publication rates, received less compensation, and were underrepresented at higher academic ranks and leadership positions when compared with men. In response, Bickel<sup>20</sup> stated that the study by Wagner et al.<sup>19</sup> was a "wake-up call" for PM&R. Interestingly, all three of the previously mentioned articles addressing the gender gap in PM&R were published in 2007. This was nearly a decade ago, and there have been few follow-up studies in the field.

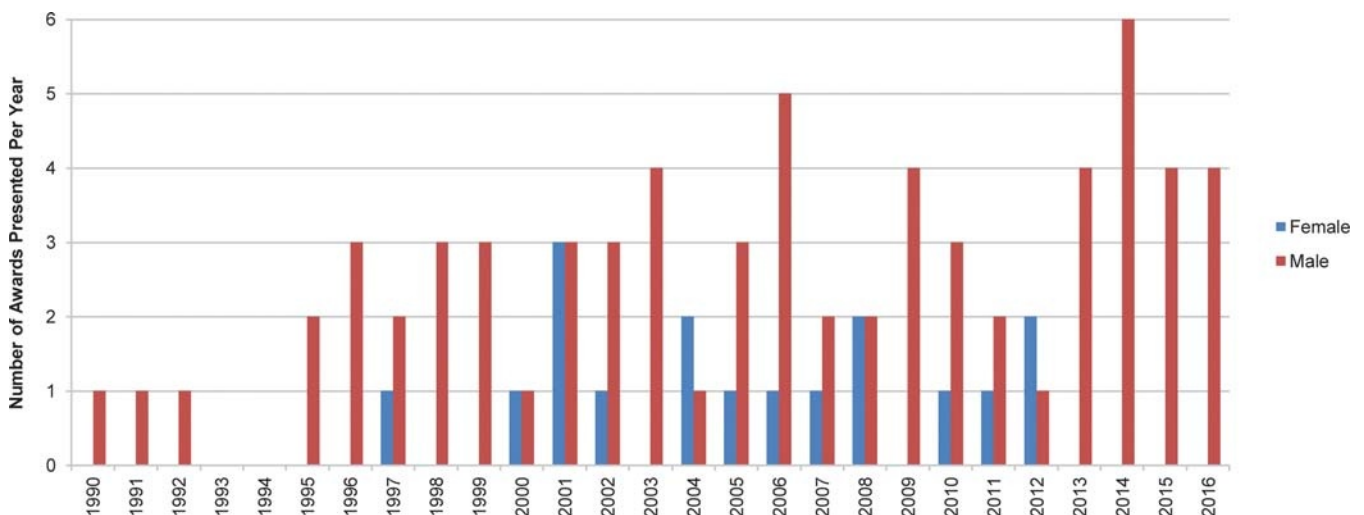


FIGURE 5. Gender-specific trends in awards presented by the AAP from 1990 to 2016.

The years during which no woman physician received an award from the AAP in a single category or group of categories deserve particular scrutiny as the number zero has been sometimes referred to as an *inexorable zero*. Huang,<sup>21</sup> in the *Harvard Law Review*, explained that “evidence of an inexorable zero can serve as a telling symptom of hidden attitudes or hiring practices that work to exclude women or minorities from whole categories of jobs.” A detailed discussion of the inexorable zero is beyond the scope of this report; however, it is notable that the number zero has been described as having a “peculiarly persuasive quality”<sup>22</sup> and that statistical tests may not be superior in an analysis when the findings are zero.<sup>21</sup>

Although the results of this study are compelling, it did not focus on *why* women physicians have been underrepresented. Further research is needed to assess what factors may have played a role. Implicit (or unconscious) bias has been proposed as a leading factor in discrimination and has been cited as an issue related to disparity in recognition awards,<sup>1</sup> and some organizations have attempted to reduce or eliminate implicit bias with best practices recommendations.<sup>23</sup> The composition of awards committees (e.g., comprised predominantly or exclusively of men) may be a factor.<sup>1,24</sup> The pipeline theory (i.e., there are not enough women physicians available) has been cited and disputed.<sup>1,25</sup> Although not specific to recognition awards, the creation of a “diversity structure” such as a task force may not be sufficient to address diversity inclusion in an organization. It has been suggested that these structures might actually impede progress if they are not focused on metrics, because leadership may infer that diversity inclusion is being addressed, even in the absence of data that supports this conclusion.<sup>26</sup> To date, although research specific to recognition awards is sparse, gender disparity is likely multifactorial, and further investigation is warranted.

A recent article in the journal *Nature* focused on the value—to science and the individual—of building a reputation as a scientist.<sup>27</sup> This article pointed out that although publications are generally considered the cornerstone of an academician's reputation, there are numerous other components that contribute as well. Undeniably, recognition awards may positively impact physicians' reputations, and it is well known that individual faculty members' reputations provide value in support of hospital reputations. In a recent report, Goldstein et al.<sup>28</sup> stated that the US News & World Report/Doximity rankings have become the “default tool to compare US Medical Schools.” Therefore, although hospital quality reporting may play a larger role in most specialty rankings, reputation continues to be a factor.<sup>29</sup> Notably, rehabilitation continues to be one of the four specialties that is ranked on the basis solely of reputation.<sup>30</sup> Using recognition awards as an example then, department chairs may find it challenging and resource intensive to help women physicians build their own (and the hospital's) reputation by nominating these women for recognition awards if medical specialty societies have a history of underrepresenting them.

The important role that medical specialty societies play in supporting women physicians' careers was highlighted in 2002 when The National Academies convened a workshop focused on the role of professional societies in advancing women scientists' careers, noting that “Scientific societies play a crucial role in career development, and identifying specific strategies that societies could deploy might be very helpful in encouraging

women to enter and continue in clinical research careers.”<sup>31</sup> A transcript produced from the session titled “Advancing Women in Academic Medicine” was included in the published report titled “Achieving XXcellence in Science: Role of Professional Societies in Advancing Women in Science.”<sup>31</sup> Afterward, the Institute of Medicine published a report titled “Beyond Barriers and Bias: Fulfilling the Potential of Women in Academic Science and Engineering” that focused in part on the underrepresentation of women in academic medicine, noting that although many women enter the field, attrition rates are high.<sup>32</sup> High attrition rates have been attributed to unintentional (implicit) bias while balancing work/family may lead to slow advancement.<sup>33</sup> Indeed, in PM&R, a high level of physician burnout has been reported,<sup>34</sup> and there is a need for further investigation as well as solutions.<sup>35</sup> Across specialties, addressing demoralization is a priority.<sup>36</sup>

Although recognition awards are only one aspect of how physicians may be valued, they represent a “window into the values and culture of an institution.”<sup>37</sup> Therefore, there is an urgent need to address medical specialty society accountability with respect to underrepresentation in recognition awards, including wide scale assessment that is transparent to the membership and the entire specialty they represent, acknowledgement of historic and current underrepresentation, investigation as to causation, implementation of efficient best practice solutions, and reporting of outcomes back to the members that is coupled with ongoing quality improvements and surveillance. Moreover, and as noted earlier, a 2007 study by Wagner et al.<sup>19</sup> confirmed that the gender gap in PM&R was not limited to recognition awards, and there is a large body of research that documents widespread problems with physician equity that includes but is not limited to gender.<sup>17</sup> Indeed, medical specialty societies have an *obligation* to actively investigate and address disparities to ensure that they equitably support both individual physicians and the entire specialty. Recognizing the diverse cadre of talented physicians across the specialty of PM&R elevates the entire field and helps to attract and retain members.

## Study Limitations

Diversity inclusion within medical specialty societies may involve many components, and this study focused only on gender representation in recognition awards. A limitation of this study was that an accurate list of AAP membership data by gender was not available, and the two sources used for comparison, AAMC specialty physician data in PM&R and AAPM&R physician membership data, may not reflect the gender membership of the AAP. However, it is important to note that knowing the gender membership breakdown of the AAP would likely not change the conclusions in this study. For example, it is known that there are women physiatrist AAP members and there have been for many years. Therefore, finding instances in which no awards were given to women physicians demonstrates an underrepresentation regardless of the proportion of women physiatrists as members of the AAP. Furthermore, this study only included recognition awards that were primarily intended for individual recipients and listed on the AAP website. Awards for other academic achievements such as “best poster” were not included. This study did not evaluate specific award criteria or other factors such as time spent in service for the AAP.

Publications and grant metrics were not evaluated nor was access to resources that support career growth. Employment factors such as full-time versus part-time and practice setting, each of which may impact an individual physician's career growth and likelihood of recognition, were also not evaluated. Use of a verified list of AAP award recipients does not preclude the possibility of errors on the list regarding reporting of recipient names and/or award dates. Finally, the gender of each recipient was assigned as a woman or a man after searches of readily available online profiles and/or use of the pronouns he and she in online descriptions.

## CONCLUSIONS

Female physicians have been underrepresented by the AAP in recognition awards. Although the reasons are not clear, these findings should be further investigated. To our knowledge, this is the first investigation demonstrating underrepresentation of women physicians in recognition awards presented by a PM&R-related medical specialty society focused on academic physiatrists. Women physicians received a disproportionately low number of awards from the AAP compared with men. Women physicians were excluded from all award categories for the last 4 yrs, half of the award categories for the past decade and from the outstanding resident/fellow category since its inception. Moreover, despite an increase in the number of women academic physiatrists over time, there was a decrease in the proportion of women receiving recognition awards in the past decade.

Based on these results, the AAP should systematically and transparently review their history of recognition awards and implement strategies to address problems that may be contributing to underrepresentation of women physicians. Although this study focused on gender, addressing problems associated with other underrepresented groups of physicians is also warranted. The publication of commentaries, workforce gap studies, and best practices reports on effective strategies to improve disparities may support more rapid change.

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## REFERENCES

- Lincoln AE, Pincus S, Koster JB, et al: The Matilda effect in science: awards and prizes in the US, 1990s and 2000s. *Soc Stud Sci* 2012;42:307–20
- Silver JK, Bhatnagar S, Blauwet CA, et al: Female physicians are underrepresented in recognition awards from the American Academy of Physical Medicine and Rehabilitation. *PM R* 2017;9:976–84
- Mission and Strategic Plan: Association of Academic Physiatrists. Available at: <http://www.physiatry.org/?page=MissionStrategicPlan>. Accessed October 20, 2016
- Hwang J, Byrd K, Nguyen MO, et al: Gender and ethnic diversity in Academic PM&R Faculty: national trend analysis of two decades. *Am J Phys Med Rehabil* 2017;96:593–5
- Table 4A: Distribution of Women M.D. Faculty by Department and Rank, 2014. American Academy of Medical Colleges. Available at: [https://www.aamc.org/download/411788/data/2014\\_table4a.pdf](https://www.aamc.org/download/411788/data/2014_table4a.pdf) Published 2014. Accessed September 30, 2016
- AAP Award Winners: Association of Academic Physiatrists. Available at: [http://www.physiatry.org/?page=Award\\_Winners](http://www.physiatry.org/?page=Award_Winners). Accessed August 23, 2016
- AAP Awards Criteria & Descriptions: Association of Academic Physiatrists. Available at: [http://www.physiatry.org/?page=AAP\\_Awards&hhSearchTerms=%22award+and+descriptions%22](http://www.physiatry.org/?page=AAP_Awards&hhSearchTerms=%22award+and+descriptions%22). Accessed October 28, 2016
- Bickel J, Quinnc R: *Women in Medicine: Statistics*, Association of American Medical Colleges, Washington, DC, 1992
- 2014 Physician Specialty Data Book, Washington, DC, Association of American Medical Colleges, 2015
- Recognizing the Achievements of Women in Science, Technology, Engineering, Mathematics, and Medicine: Society for Women's Health Research, The RAISE Project. Available at: <http://raiseproject.org/>. Accessed March 27, 2016
- Advancing and Recognizing Women in STEM: A Guide for Universities. The RAISE Project. Available at: <http://raiseproject.org/university.php>. Accessed March 27, 2016
- Jagsi R, Guancial EA, Worobey CC, et al: The "gender gap" in authorship of academic medical literature—a 35-year perspective. *N Engl J Med* 2006;355:281–7
- Long MT, Leszczynski A, Thompson KD, et al: Female authorship in major academic gastroenterology journals: a look over 20 years. *Gastrointest Endosc*; 2015;81:1440–7
- Ginther DK, Schaffer WT, Schnell J, et al: Race, ethnicity, and NIH research awards. *Science* 2011;333:1015–9
- Amrein K, Langmann A, Fahrleitner-Pammer A, et al: Women underrepresented on editorial boards of 60 major medical journals. *Gen Med* 2011;8:378–87
- Monroe AK, Levine RB, Clark JM, et al: Through a gender lens: a view of gender and leadership positions in a department of medicine. *J Womens Health (Larchmt)* 2015;24:837–42
- Yu PT, Parsa PV, Hassanein O, et al: Minorities struggle to advance in academic medicine: A 12-y review of diversity at the highest levels of America's teaching institutions. *J Surg Res* 2013;182:212–8
- Morton MJ, Sonnad SS: Women on professional society and journal editorial boards. *J Natl Med Assoc* 2007;99:764–71
- Wagner AK, McElligott J, Chan L, et al: How gender impacts career development and leadership in rehabilitation medicine: a report from the AAPM&R research committee. *Arch Phys Med Rehabil* 2007;88:560–8
- Bickel J: The work that remains at the intersection of gender and career development. *Arch Phys Med Rehabil* 2007;88:683–6
- Huang BI: The 'inexorable zero.' *Harv Law Rev* 2004;117:1215–35
- Loyd v. Phillips Bros, Inc.* 25 F.3d 518, 524 n.4 (7th Cir. 1994)
- Avoiding Implicit Bias: Guidelines for ASA Awards Committees: American Statistical Association. Available at: <http://www.amstat.org/awards/acguidelines.cfm>. Accessed March 27, 2016
- Bruguera M, Arrizabalaga P, Londoño MC, et al: Professional recognition of female and male doctors. *Rev Clin Esp (Barc)* 2014;214:69–73
- Carnes M, Morrissey C, Geller SE: Women's health and women's leadership in academic medicine: hitting the same glass ceiling? *J Womens Health (Larchmt)* 2008;17:1453–62
- Kaiser CR, Major B, Jurcevic I, et al: Presumed fair: ironic effects of organizational diversity structures. *J Pers Soc Psychol* 2013;104:504–19
- Woolston C: Recognition: build a reputation. *Nature* 2015;521:113–5
- Goldstein MJ, Lunn MR, Peng L: What makes a top research medical school? A call for a new model to evaluate academic physicians and medical school performance. *Acad Med* 2015;90:603–8
- Harder B, Comarow A: Hospital quality reporting by US News & World Report: why, how, and what's ahead. *JAMA* 2015;313:1903–4
- Olmsted MG, Geisen E, Murphy J: *Methodology U.S. News & World Report 2016-17 Best Hospitals: Specialty Rankings*, U.S. News and World Report, L.P., Washington, DC, 2016
- Shaywitz S, Hahn J: *Achieving Excellence in Science: Role of Professional Societies in Advancing Women in Science: Proceedings of a Workshop (AXXS 2002)*, Washington, DC, The National Academies Press, 2004
- Committee on Maximizing the Potential of Women in Academic Science and Engineering, Committee on Science, Engineering, and Public Policy: *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, Washington, DC, National Academies Press, 2006
- Bauman MD, Howell LP, Villablanca AC: The Women in Medicine and Health Science program: an innovative initiative to support female faculty at the University of California Davis School of Medicine. *Acad Med* 2014;89:1462–6
- Shanfelt TD, Hasan O, Dyrbye LN, et al: Changes in Burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc* 2015;90:1600–13
- Silver JK, Bhatnagar S: Physician burnout in Physical Medicine and Rehabilitation (PM&R): should we focus more on physiatrists' mission? *Am J Phys Med Rehabil* 2017;96:e159–61
- Gabel S: Demoralization in health professional practice: development, amelioration, and implications for continuing education. *J Contin Educ Health Prof* 2013;33:118–26
- Abuhl S, Bristol MN, Ashfaq H, et al: Examining faculty awards for gender equity and evolving values. *J Gen Intern Med* 2010;25:57–60