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Full Length Research Paper

Is There Perceived Gender Disparity for Women Practicing Sports Medicine?

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To understand the demographics of women sports medicine physicians and to determine whether they experienced gender disparity in the quality, quantity or types of clinical job opportunities. The authors surveyed women sports medicine physicians in the United States who were trained in one of the five primary care sports medicine specialties (pediatrics, emergency medicine, internal medicine, physical medicine and rehabilitation, and family medicine). The participants completed the survey on the Internet and their participation was solicited via email based on membership in the American Medical Society for Sports Medicine or board certification with the American Board of Family Medicine. A total of 300 surveys were distributed; 182 surveys were completed for a response rate of 61%. Our study revealed that women over 35 years of age covered fewer events and games as part of their sports medicine practice than women under age 35 (75% versus 89% respectively). Only 25% of women under 35 and 41% over age 35 felt that they had achieved their career goals. In addition, 60.5% of the women surveyed felt that they were compensated at a rate commensurate with their male peers and most women stated that the type and amount of clinical opportunities for women did not differ from men. Overall, women sports medicine physicians were satisfied with their careers and most work in larger communities. However, it will be important to follow the careers of women sports medicine physicians in order to better understand the nuances of their clinical practice environments that may reveal disparities in the field of primary care sports medicine.

Keywords: women, sports medicine, gender disparity

Introduction

Men clearly outnumber women physicians in the field of primary care sports medicine in the United States. According to the American Board of Family Medicine (ABFM) gender statistics, 19% of 2012 diplomates with certificates of added qualification (CAQ) in sports medicine are women (ABFM, *Gender of Current Diplomates,* 2012). This represents an increase, since in 2009 the percentage of women with CAQs in sports medicine was 17%, and in 2007, it was 15% (ABFM, *Gender of Current Diplomates,* 2007, 2009). This disparity in the number of women in sports medicine may be due to the relatively recent establishment of this specialty in the early to mid-1980s (Puffer, 2004). Some gender differences were recognized in a study of family physicians trained in sports medicine previously, demonstrating that men did have more training room coverage, except at the Division 1 level (Pana & McShane, 2001). In this same study, men were also shown to be more likely to have a wider variety of game and event coverage (Pana & McShane, 2001).

In another study of primary care sports medicine physicians, clinical practice descriptions and job satisfaction were examined from a predominantly male perspective (Bennett, Lipsky, & Sharp, 2008). Since no previous studies looked at the career experience or employment satisfaction of women primary care sports medicine physicians, our study was

exploratory in nature and designed to better understand factors that affect career satisfaction for this specific minority of women physicians. Overall, we do know that gender disparity exists among primary care and nonsurgical physicians as evidenced by the physician work life study (McMurray et al., 2000). In this study, women were less satisfied with their autonomy (e.g. decision-making regarding physician referrals, volume of patient load, and office scheduling particulars), salary, and availability of resources compared to their male colleagues (McMurray et al., 2000).

In an effort to better understand gender disparity in physician clinical practice, we surveyed women sports medicine physicians, since this group of physicians may reflect gender inequities found in other non-physician sports-related professions. Unlike most medical settings where patients dictate their preference for providers, in many athletic department clinics, the gender of providers is dictated by sports administrators, head certified athletic trainers, coaches, and school traditions.

Historically, collegiate and professional sports in the United States have been male-biased. Title IX, which dictates gender equity in federal funding, was only established in the early 1970's. As more women athletes participated in collegiate sports and then further in professional sports, more women found job openings in coaching and certified athletic training. However, job opportunity and compensation disparities between men and women still persist within these professions. In 2009, the National Collegiate Athletic Association (NCAA) reported that some female coaches indicated dissatisfaction with the lack of equity between the sexes within athletic departments, salary, and workplace stress level (NCAA, 2009).

In addition, more men than women coach women's sports, and there are very few women coaching male collegiate and professional sports. To illustrate this statement, in the 2010-2011 season, examination of representative Division 1 state universities in 3 different conferences reveals 50 intercollegiate sports of which 23 are men's teams, 25 are women's teams and 2 are mixed (e.g. men's and women's ski team). All men's teams are coached by men and, of the 25 women's teams, 11 are coached by men, 14 are coached by women and both mixed gender teams have men as head coaches.

Therefore, the primary purpose of this study was to identify perceptions of gender disparity among women sports medicine physicians and to determine the role (if any) of physicians' ages and locations of practice in these perceptions.

Methods

An Internet survey was completed with a national non-probability sample. The questionnaire was divided into two main sections. The largest section surveyed the demographics of women sports medicine physicians and included questions about specialty, age, population of practice location, practice setting, fellowship training, board certification, team physician designation, family composition, and past experience as an athlete. The second section included questions about type of sports medicine coverage such as game, event or training room experience, coverage of women's versus men's sports teams, and perceptions of whether gender played some role regarding type or amount of work opportunities or compensation differences. A copy of the survey is available on request from the first author (N.S.).

Women primary care sports medicine physicians in the United States were recruited on a voluntary and confidential basis to take part in this study. Participation was solicited via email, based on membership in the American Medical Society for Sports Medicine (AMSSM) or certification with the American Board of Family Medicine. An email including the survey link was sent three different times. For our study, 300 women sports medicine physicians were contacted based on the percentage of women holding certificates of added qualification in sports medicine (220) plus a conservative estimate of those trained in other non-surgical specialties and those without a CAQ (80) (ABMS, 2005; ABFM, 2012). Initially, 200 women physicians agreed to complete this Internet survey. However, out of these, 15 did not complete any portion of the survey and 3 failed to complete a majority of the survey. Consequently, 182 women physicians (61%), out of 300, completed the survey (total sample size). Of note, not all respondents answered every question.

In order to examine the relationships under investigation in the present study, frequencies and chi-square tests were used. When calculating frequencies, an age split of 35 was used in order to separate those physicians who were within five years of fellowship graduation from those older. This is significant as a smaller percentage of older women sports medicine physicians certified prior to the requirement mandating completion of an accredited fellowship as of 2000 (AMSSM, n.d.). In addition to age, the physicians surveyed were sorted by population size of their clinical practice location (less or more than 100,000 people).

This study was judged to be exempt by the Institutional Review Board of the University of Arizona.

Results

When indicating their primary practice specialty, family medicine (144) comprised the largest number of physicians out of a total of 185 respondents to this first question. This compared to physicians in pediatrics (13), internal medicine (13), emergency medicine (7), and other (8). Out of 185 women answering the approximate age question, there were 80 respondents stating their age was under 35 versus 105 women over age 35. As far as practice location, 44 out of 185 women stated they worked in an academic setting at a university and 22 of the 185 practiced in a student health facility.

Statistically significant findings in our study reveal that among women under age 35, 89% covered games and events, while only 75% of women over 35 covered these as part of their sports medicine practice (p = 0.015). Out of 176 women who answered, 12 covered women's sports only, 11 covered men's sports only and 153 covered both. In addition, among women under 35, 25% stated they did not feel they have achieved their goals, while women over 35 answered affirmatively at 41% (p = 0.036) [Figure 1]. Age clearly appeared to play a role in the type and quality of sports medicine experienced by women physicians. Specifically, among older practitioners there are significant perceptions of gender disparities by the majority of women sports medicine physicians. However, this population of women practitioners over age 35, in spite of perceived differences of practice opportunity and lower compensation believe that they have, in fact, achieved their goals. This may reflect lower expectations than their younger colleagues, i.e. they have had more time to achieve their career benchmarks and they may have less family versus career conflicts, as their families are now older.

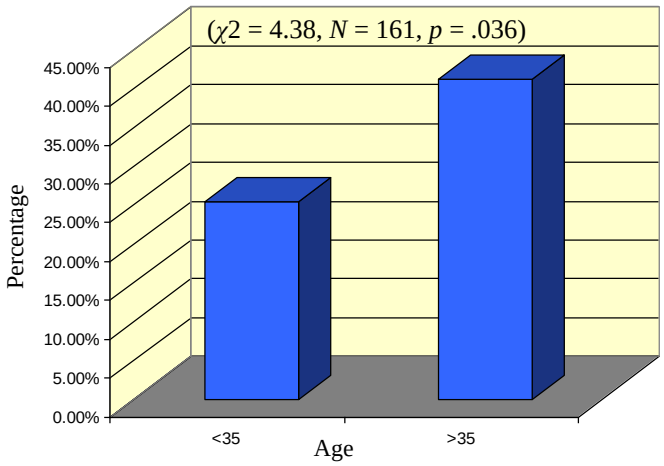

Figure 1. Women who have achieved career goals

Additional results of our survey indicated that irrespective of age, practice location, or years of experience, only a few more than half of the women surveyed (60.5%) felt that they were compensated at a rate commensurate with their male peers. Notably, the preponderance of women physicians felt that the type (75%) and amount (87%) of opportunities available to them did not differ from their male counterparts. In terms of sports coverage available to women physicians, about 44% were granted the opportunity and chose to cover both football and men's or women's basketball (alongside other varsity and club sports).

Table 1 reveals some interesting additional findings that were not statistically significant. One result revealed that, in comparison to a survey of sports medicine fellowship graduates completed in 2000 where only 15% of graduates had a practice comprised of 75% or more sports medicine, 28% of women in our study had a practice 75% or more of which was comprised of sports medicine (Henehan, Shiple, & Coppola, 2003).

Table 1
Select Survey Results

Questions	Yes	No
Board Certified (e.g. CAQ) in Sports Medicine	88%	12%
Head Team Physician	62%	38%
Fellowship Trained	83%	17%
Completed fellowship after 1992	85%	15%
Willing to Attend Women's Interest Group at AMSSM	77%	23%
Travel with any teams	33%	67%
Women >35 y.o. who felt compensation was equal to men	54%	46%
Women <35year old who felt compensation equal to men	68% (p = 0.078)	32%
Felt type and amount of opportunities did not differ from men	75% (type) and 87% (amount)	25% (type) and 13% (amount)
Married	62%	38%
Sports Medicine practice limited time with family and personal life	63%	37%
Wish could do more sports medicine	53%	47%
Was/is a competitive athlete	86%	14%

Conclusions

Overall, most of the women surveyed in our study believe that the availability of options afforded women sports medicine physicians appears to be on par with those for men. However, as questions arise from large surveys of women physicians about practice parity, we hope that our study will prompt further inquiry and research about medical practice differences that exist between men and women.

Limitations of our study include the lack of a male comparison group and perhaps a biased sample, i.e. only those women interested in the questions being asked completed the survey. However, our intention was only to survey women physicians to see if perceptions of practice differences exist at all. Another limitation is that we did not use different age range comparisons, since we used the two categories of under 35 and over 35. The reason for this was to better understand the difference in experiences between those within just a few years

of fellowship graduation in their first job(s), and those out several years, who may or may not have completed fellowship training.

A final conclusion from our study is that more research into the concept of practice parity is needed. With decreased gender disparity in our profession and other closely related professions, we should anticipate over time more equal and ruminative practice opportunities for women sports medicine physicians practicing alongside men in the United States.

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