



# **DENTAL CATEGORY**

OF THE UNITED STATES PUBLIC HEALTH SERVICE

## **USPHS Dental Category**

### **White Paper**

### **2010 DePAC Women's Issues Subcommittee**

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The Women's Issues Subcommittee (WIS) provides advice and consultation to the Dental Professional Advisory Committee (DePAC) and the Surgeon General on issues related to the Professional practices and personnel activities of Civil Service and Commissioned Corps female dentists. Membership of the WIS is limited to the female dental officers of the Department of Health and Human Service (DHHS) Agencies and other inter-governmental agencies listed in which Commissioned Corps officers serve.

The Women's Issues Subcommittee (WIS), established in the 1980's, was formulated to enhance the careers of female officers in the US Public Health Service. A forum was created to address concerns specific to women such as balancing family and career, and workplace issues related to equity. However, the Committee is not limited to gender specific issues as age discrimination; career development and career advancement are also assessed.

The 2010 DePAC WIS is comprised of ten (10) United States Public Health Service (USPHS) Dentists. The Indian Health Service, federal Bureau of Prisons, and the US Coast Guard are represented among our members. Future goals include active recruitment of representatives from the other governmental agencies.

## **II. 2010 WIS Objectives**

- Identify and facilitate issues of concern, as they relate to female dentists in the United States Public Health Service
- Increase the number of female dentist in the Public Health Service, and their exposure in the Commissioned Corps, through vigorous recruiting, training, utilization and recognition of women dentist
- Develop position papers, statistical reports and/or guidelines relevant to practicing women dentists
- Provide liaisons between women dentist within the Commissioned Corps and the Arms Bearing Services

### **Overview of White Paper:**

The WIS White Paper provides a brief historical account of women in dentistry, explores whether or not disparities exist for women, assesses the representation of women dentists in the USPHS Commissioned Corps, and How this representation compares to that of women in the general population. Finally, recommendations for the future will be provided.

### **First Woman Dentist**

Elizabeth King, *Women in Dentistry*, noted that the first woman in dentistry began practicing as early as 1864. Emeline Roberts Jones began as her dentist husband's

assistant, and after his death in 1864, developed a large practice. Dr. Ida Gray Nelson Rollins was recorded, *Black women firsts, Ebony*, as the first female African American who graduated from the University of Michigan Dental School in 1887. By the 1880's women were routinely considered as applicants to dental school. However, the numbers admitted, greatly lagged behind those of men.

### Recent History

As a snapshot of typical demographics of an urban university, statistics published in —Perspectives, the News Magazine of UMKC<sup>1</sup>, fall edition 2006 (The University of Missouri at Kansas City School of Dentistry) revealed the following distribution of men vs. women enrollees at the school for various time periods:

#### Distribution of Men vs. Women Enrollees at the School for Various Time Periods

Year	No. of Males (%)	No. of Females (%)
1946	299 (99.9%)	3 (0.0099%)
1975	675 (84.5%)	124 (15.5%)
2005	242 (62.4%)	146 (37.6%)

A review of literature has determined that a great deal has been written on women entering dental school and their practice of the profession. The American Dental Association (ADA) has an extensive library of data. Statistical data collected by the *ADA Survey Center, Survey of Dental Education*, for the years of 1995 – 2005 has noted a steady rise in the number of women entering the profession. During the 1995-96 school year 36.7% of students identified as being female, by the 2004-2005 school year this enrollment had increased to 43.8 %. The *ADA Official Guide to Dental Schools* noted that more than 19, 000 students were enrolled in dental programs during the 2008-2009 school years. A survey of these students noted that 47% were identified as female.

Examination of this data is important as it notes that as modern society has changed opportunities for women have increased. However, the numbers of women attending dental school continues to lag behind the numbers of men.

#### Number of Male vs. Female Attending Dental School

School Year	Male (%)	Female (%)
1995-96	63.3	36.7
1996-97	63	37
1997-98	62.6	37.4
1998-99	63.2	36.8
1999-2000	62.2	37.8
2000-01	61.7	38.3
2001-02	59.8	40.2
2002-03	58	42
2003-04	56.7	43.3
2004-05	56.2	43.8

Unfortunately, this disparity translates into the arena of dental practice. Throughout the years, the ADA has maintained an abundance of data on dentist practicing in the United States.

In *A Comparative Study of Transitional Roll Strain in Reentry Women Students - A Dissertation in Education*, Geraldine Menger, described the twentieth century as a window to change. The years 1900-1987 spanned the industrial revolution, the labor movement, and the era of women's liberation. These periods were significant in providing women with the opportunity and drive to pursue higher education, specifically dental educations, which were traditionally dominated by men.

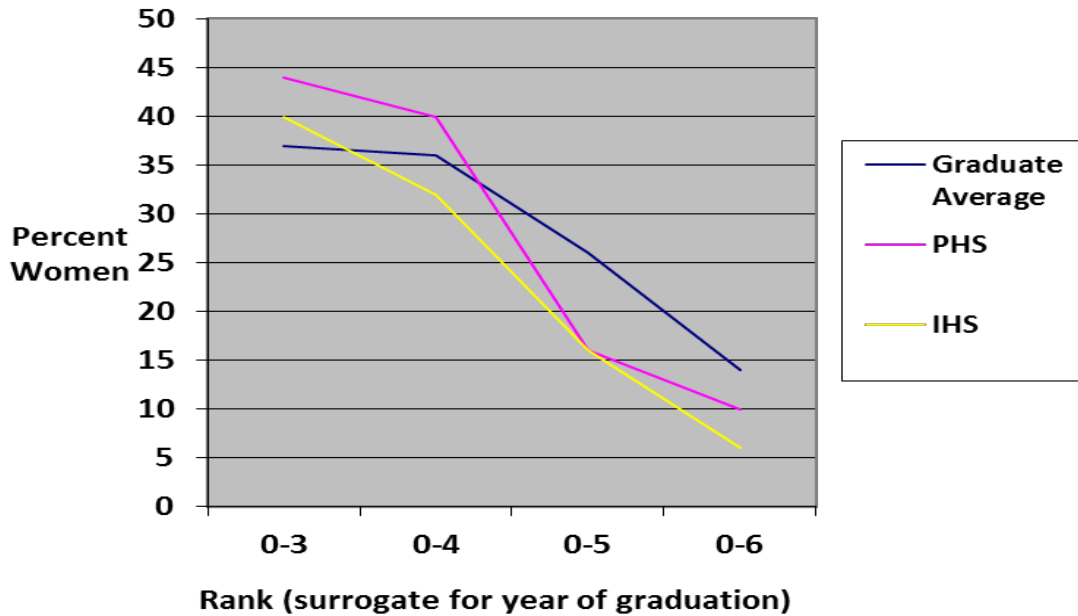
### **WIS Surveys**

A technical review of documents produced by the WIS in the past revealed that the most recent survey of dentists in the Corps was completed between 2000 and 2002. Within the USPHS Dental Corps, the survey reflected broad —disparities in the distribution and experiences of individuals based on gender and ethnic minority status. Findings included the following:

- Throughout the various agencies, the percentage of women dentists was not evenly distributed. Agencies employing fewer Dental Officers possessed the greater percentage of female Officers.
- A large percentage of women occupied low ranking Billets. Respondents identified themselves within the following percentages, O3=43%, O4=37%, O5=15%, O6=13%.
- Women Dentists were more likely to have completed specialty training before entering the Corps than male dentist.

Appointments to senior level positions such as Chief Dental Officer, Area Officer, and Regional Dental Specialist continue to be awarded primarily to men.

## Distribution of Women Dental School Graduates, USPHS and IHS Women Dentists by Approximate Year of Graduation



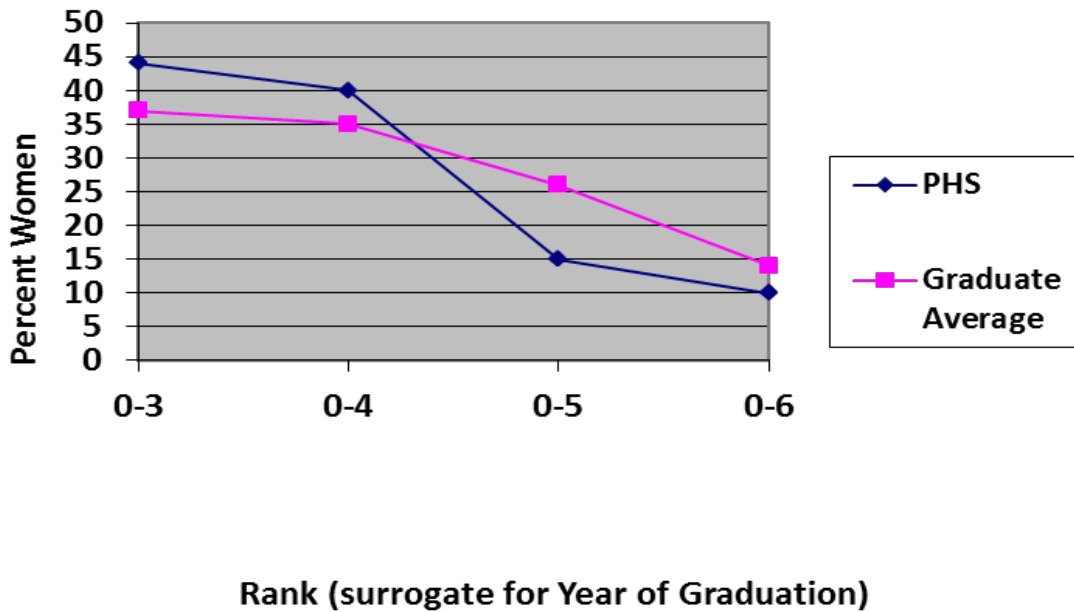
### IV. Additional Findings

#### Gender Disparity

Gender Disparity in USPHS Dental Corps<sup>1</sup> was addressed as part of a survey conducted from a population consisting of USPHS Commissioned Corps dental officers only. The survey was based on data collected 2000 -2001 with a general purpose to —provide data to assist recruitment and retention efforts within USPHS<sup>1</sup>.

A first mailing of 568 questionnaires yielded a response of 286 responders. A second mailing of 274 questionnaires yielded a response of 127 responders. The survey yielded a net response rate of 68%. Based on the survey results, WIS reported that the then female-dentist population distribution in the USPHS appeared skewed towards the junior billet levels or entry level positions and tended to decline as higher billets are achieved.

## Distribution of Women Dental School Graduate and USPHS Women Dentists by Approximate Year of Graduation



As part of an overall conclusion, WIS concluded that the survey results could not be used to conclude any specific recommendations concerning gender issues. More pertinent information would be needed, routinely collected and studied in order to better assess gender equality and ethnic issues.

Recommendations made were to set up additional programs to help identify leadership positions and create pipeline programs that might encourage more women to fill those leadership positions.

### Women in the Dental Profession: Gender Shift

ADA trend analyses during the 1970's and 1980's revealed women graduating dentists to be typically about 10% of the graduating classes. But by the year 2000, women graduates rose to about 38% of the class. The table below reveals dental school enrollment by gender for the period from 1995 to 2004:

### ADA Analysis: Dental Enrollment by Gender, 1995-2005

School Year	Male (%)	Female (%)
1995-96	63.3	36.7
1996-97	63	37
1997-98	62.6	37.4
1998-99	63.2	36.8
1999-2000	62.2	37.8
2000-01	61.7	38.3
2001-02	59.8	40.2
2002-03	58	42
2003-04	56.7	43.3
2004-05	56.2	43.8

### 2003 ADA Survey

In 2003, the ADA conducted a survey of all known dentist in the United States and found that the percentage distribution of all active private practitioners (defined as private practice, dental school faculty, armed forces dentist, government-employed at the state, local or federal level, graduate student, intern or resident, or other health or dental organization staff member) in the United States to be only 17.2 percent female. Among new active practitioners, defined at 10 years out of Dental School, women represented 34.6% of that population. The paper concluded that by the year 2015, the ratio of male / female dentists will approach 60/40, as the male dominant generations in the profession age and retire and as the number of women increases in undergraduate (pre-dental) and graduate (dental school) programs.

The breakdown by age and gender of all professionally active dentists in the United States in 2003 was reported as follows:

### 2003 ADA Survey of U.S. Dentists, 2003

Dentist Age Bracket	Male (%)	Female (%)
65 and older	11.9%	1.1%
55-64	23.7%	4.9%
45-54	32.6%	27.3%
35-44	20.8%	39%
Under 35	11%	27.6%

The survey also indicated that the Pacific Region shows the largest percentage of female active practitioners, where 20.3% of all active private practitioners were female.

Among the US states, Maryland and the District of Columbia (24.2% and 22.8% respectively) show the highest percentage of female active practitioners. Utah was found

to have the lowest percentage of female active private practitioners in the US at 2.3%. The 2006 ADA survey revealed the following about the American dental workforce:

**2006 U.S. Dental Workforce (2006 Distribution of U.S. Dentists by Region and State)**

**Number of Professionally Active Dentists**

Gender	Number	Percentage
Male	144,214	80.3%
Female	35,380	19.7%
Total	179,594	100%

**Number of New Professionally Active Dentist**

Gender	Number	Percentage
Male	23,833	64.1%
Female	13,348	35.9%
Total	37,181	100%

**Number of Active Private Practitioners**

Gender	Number	Percentage
Male	132,718	80.8%
Female	31,537	19.2%
Total	164,255	100%

**Number of Active General Practitioner and Specialist**

Gender	Number	Percentage
Male	131,733	80.2%
Female	32,522	19.8%
Total	164,255	100%

**2007 ADA Survey:**

In the ADA 2007 survey, a total of **233,433** Dentists were surveyed. Of this, **183,718** were classed as professionally active. Additional findings included the following:

- **45,942** Dentists reported they no longer practiced dentistry, were pursuing a degree in another field, looking for employment, waiting for boards, were retired or were working in unrelated fields.
- **5,776** Dentists did not supply occupation data
- Of the **183,718** dentists that were actively practicing:
  - **145,690** or 80% were male
    - Of these, 79.6% classed themselves as general practitioners
    - 20.4% were in the Specialty Practices



- **38,038** or 20% were female
  - Of these, 82.7% classed themselves as general practitioners
  - 17.3% were in Specialty Practices
- Of all dentists surveyed, **181,725** dentists were classed as New Active Private Practitioner. The gender breakdown was as follows:
  - 36.7% were females versus 63.3 % as males
  - 84.9% of the females classed themselves as general practitioners compared to only 82.6% of males
  - 15.1% of the females classed themselves as specialists versus 17.4% of the males

To summarize the 2007 ADA Survey, the number of male dentists was more than twice that of female dentists. Additionally, women were underrepresented in the Specialty Practices. This significantly impacts earning potential, mentorship at dental school and residency programs and overall representation of female dentist in the population. Female dentist are also younger than their male counterparts. This survey also revealed, among surveyed active private practitioners, only 60.3% of women own their practices, versus 79.2% of men. Additionally, 23.0% of women worked as employees/associates, versus 8.7% of men; 4.7% of women and 2.2% of men are independent contractors. Among new active practitioners, 38.3% of women were owners, versus 55.5% of men; 41.9% of women were employees/associates, versus 27.5% of men; 6.6% of women were independent contractors, versus 3.6% of men. Independent contractor was the only category for both the active practitioner/new active practitioners in which the percentage of women exceeded men (ADA Distribution of Dentists in the United States by Region and State, 200; published Dec. 2009).

Finally, researchers have noted that the percentage of women graduating from dental school is likely to approach 48% by 2022 (D. Guthrie et al, The Impact of New Dental School on the Dental Workforce through 2022, Journal of Dental Education, Vol. 73, No. 12).

### **2008 Survey of new Dentists – Gender Breakdown**

A 2008 ADA survey of new dentists, with 1006 new dentists responding, found that the ratio of male to female new dentists was 58.9% to 41.2%. A survey of Dental Practices indicated that the great majority of new dentists (89.5%) were in general practice (employed) or classified as independent dentists (sole proprietor or partner in a practice). The Federal / Armed Forces services accounted for 5.4% of the new dentists and Intern / Resident accounting for the balance of 5.1%. The gender breakdown for new dentists declared as general practitioners was as follows:

#### **Gender of New General Practitioners**

<b>All new Dentists</b>	<b>Male new Dentists</b>	<b>Female new Dentists</b>
<b>73.6%</b>	<b>74.8%</b>	<b>70.4%</b>

The female distribution among new\* independent and employed females, statistics showing the relative change over the time period of 2003 to 2007:

### Female Distribution among New Independent and Employed Female Dentists

Year Graduated	New Independent Dentist	New Employed Dentists
2003	25.8%	48.6%
2004	22.9%	45.6%
2005	32.6%	52.9%
2006	24.1%	48.5%
2007	23.2%	53.7%

*\*New dentists are defined as those who graduated from dental school in the last ten years.*

### ADEA: Equity and Disparity

For the past few years, American Dental Education Association (ADEA) led by Dr. Jeanne Sinkford, director of ADEA's center of Diversity and Equity, has addressed the issue of disparity. Her efforts have established policies which address women's issues in dentistry. These policy guidelines can serve as a model for the USPHS agencies and maybe found on the ADEA web site. ADEA states that policies are needed to strongly endorse the continuous use of recruitment, admission, and retention practices that achieve excellence through diversity. Institutions active in inclusivity have created specific programs of mentorship, and good support systems that are based on individuality and particular cases.

Additional interest has arisen in recent years in the area of pipeline development. Dr. Marjorie Jeffcoat, past Editor of the Journal of American Dental Association has stated, —Professional leadership, like education is dominated by a —pipeline effect, actions taken now go into the pipeline now, but their effects (for good or ill) will not be felt for years or decades.

### Examples of successful Women Dentists Working at the National Level:

One does not have to look far for great examples of dynamic women leaders in the dental category of the USPHS:

- Former Assistant Surgeon General and Chief Dental Officer, RADM (ret.) Dushanka Kkeinman.
- The current Director of NIDCR/NIH, RADM Isabel Garcia.
- Women ADA Presidents:
  - The first woman ADA President in 1992, Dr. Geraldine Morrow, who started her career in the 1970's as a Public Health dentist working with the Alaska Natives in rural area of Alaska.
  - Dr. Kathleen Roth (2007)

## V. FUTURE RECOMMENDATIONS

To foster a more inclusive atmosphere for female commissioned officer in the USPHS, all OPDIV/STAFFDIV and agency leads are encouraged to develop and consider policy addressing issues of relevance to women, that they might be implemented at both the dental officer level and agency level.

At the officer level, female PHS officers must be pro-active, innovative in navigating their career paths. They must acquire strong leadership and communicative skills, and create a mental state of ownership and inclusivity for their voices to be heard. Finally, women must engage in key organizations and Public Health dental committees, such as DePAC to find mentors and protégées in the process.

At the OPDIV/STAFFDIV and agency levels, there must be robust, supportive leadership programs, based on a pipeline model, to help women navigate balanced careers. An inclusive culture should be supported where possible. Effective policies should be developed to recruit women, creating a supportive culture across all PHS agencies and leadership. Formal mentoring programs should be developed as a means of recruiting, preparing, and retaining women as new dental and allied health dental faculty, as well as serving as a vehicle for developing and retaining existing faculty.

## VI. CONCLUSION

Gender disparity does still exist in the USPHS. Public Health leadership has a great opportunity to evaluate existing policies, to implement a review of these policies and then to establish action plans to foster an increased atmosphere of inclusivity within the corps.

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