

Role of Women Neurosurgeons Involved in Both Scientific Conferences and the Educational Activities of Turkish Neurosurgical Society

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Introduction

Results

The field of neurosurgery continues to be clearly male-dominated in all over the world (1, 2, 3). Although nearly half of the medical students are women, they still do not prefer applying neurosurgery residency as many challenges including long training period, unique lifestyle, limited mentorship, and discrimination (4, 5, 6). Most striking is the small number of women in positions of leadership (professorships, deanships, and so forth) in the academic field (5). The purpose of this study was to search whether the woman neurosurgeons were encouraged and supported in academic activities such as national scientific congresses and educational groups of Turkish Neurosurgical Society (TNS).

Methods

We analyzed the role of female neurosurgeons participated in annual national congress of TNS for the years 2004 to 2015. The total registered number of male and female neurosurgeons was obtained from database of TNS (accessed December 14, 2015). The annual congress booklets and the 6 main education and training groups of the society were reviewed to identify the rate of women within the scientific board of the congresses and within these groups respectively. Total registered number of neurosurgeons in Turkey was 1425 and the women were 65 (4.6%). The rate of woman speakers at the annual congresses of TNS had increased since 2004 except the years between 2011and 2013. Women (7.7%) were mostly elected to speak at breakfast seminars (p<0.01). This was probably due to the fact that most of the female neurosurgeons were younger in the society. There was not any woman neurosurgeon who gave a conference at any Congress of TNS. Women were significantly less placed as speakers and moderators when all assignments were analysed together (p=0.013) (Table 1 and Figure 1).

The rate of women neurosurgeons in executive board of education and training groups of TNS was 1/42 (2.2%). The highest percentage among education and training groups of TNS was 7.7% (8 female / 104 total) in the Surgical Anatomy Group while the least was 1.7% (5 female / 300 total) in the Spinal and Peripheral Nerve Surgery Group. The rate of woman neurosurgeons in Spinal and Peripheral Nerve Surgery Group was significantly low (p=0.005) when compared with the other groups. However, there was no significant difference (p=0.31) between the membership rate of woman (9.2%) and man (11%) in these main groups of the society (Table 2).

 Table 1. The number of woman neurosurgeons in comparison with men placed at annual congresses of Turkish

 Neurosurgery Society between the dates 2004 and 2015

 Image: Seminar Print Conference Moderator (FM)

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	(F/M)	(F/M)	(F/M)	(F/M)	(F/M)	
2004	0/12	0/0	0/7	2/74	2/93	0.31308
2005	2/46	0/54	0/21	0/52	2/173	0.0184 ⁿ
2006	3/45	2/54	0/16	2/44	7/159	0.8209*
2007	5/42	1/73	0/11	0/43	6/169	0.4431*
2008	6/42	1/53	0/10	2/34	9/139	0.3492*
2009	6/42	1/43	0/12	1/52	8/151	0.7631*
2010	4/43	3/59	0/18	1/38	8/158	0.8654*
2011	2/43	1/46	0/19	1/36	4/144	0.30378
2012	3/45	1/48	0/18	0/39	4/150	0.3044 ⁸
2013	2/30	1/47	0/31	0/32	3/140	0.20078
2014	2/30	2/50	0/29	1/32	5/141	0.4871*
2015	NA	7/101	0/37	4/43	11/181	0.4044*
Total	35/410	20/728	0/229	14/529	69/1896	0.013*
P	0.0007*	0.0113*	<0.0001*	0.0243*	0.013*	

Figure 1. The graph shows the number of woman neurosurgeons placed at the annual congresses of Turkish Neurosurgical Society between the dates 2004 and 2015



Table 2. The number and the rate of woman neurosurgeons in executive board of education and training groups of Turkish Neurosurgical Society

urkish Neurosurgical Society	65/1425 (%4.6)	
Surgical Anatomy Group	8/104 (%7.7)	0.111*
Functional / Epilepsy Group	4/80 (%5)	0.781 ^{&}
Neuro-oncology Group	13/278 (%4.7)	0.918*
Neurovascular Group	3/108 (%2.8)	0.4758
Pediatric Group	3/52 (%5.8)	0.5118
Spinal and Peripheral Nerve Group	5/300 (%1.7)	0.005*

Conclusions

Recently, the number of woman neurosurgeons has increased in Turkey despite the difficulties. Woman neurosurgeons were less elected both for the scientific board of annual congresses of TNS and for executive board of education and training groups of TNS. Creating the proper environment is an important consideration to allow women the chance to succeed in neurosurgery, the field primarily managed and directed by men.

Learning Objectives

By the conclusion of this session, participants should be able to: 1)Learn the number of woman neurosurgeons in Turkey, 2) Learn the rate of female neurosurgeons placed in scientific board of annual congresses of TNS, 3) Learn the rate of female neurosurgeons supported in academic activities of TNS.

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