

ONLINE ONLY

Supplemental material

Toward an understanding of sexual harassment in neurosurgery

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Supplemental Appendix 1: NSPT Sexual Harassment Survey

Starting Note

The One Neurosurgery Summit group-convened by the Society of Neurological Surgeons (SNS), and including the American Association of Neurological Surgeons (AANS), American Board of Neurological Surgery (ABNS), American Academy of Neurological Surgery (AAcNS), Congress of Neurological Surgeons (CNS), Review Committee for Neurological Surgery (RRC) and AANS/CNS Washington Committee-appointed a Professionalism Task Force in 2018. As part of the task force's charge, the following survey was created. Please take the time to complete the survey to provide the task force with important information. **All responses are guaranteed to remain anonymous. Only aggregate data will be reported.** Thank you for your time and efforts.

Questions 1-15 Likert Scale

Strongly Agree/Agree/ Neither agree nor disagree/Disagree/Strongly disagree

With respect to discrimination, bullying/intimidation and/or sexual harassment, please rate the following statements regarding neurosurgery...

1. Neurosurgery provides a supportive and inclusive culture that deals effectively with these behaviors.
2. My training environment (including the leadership) provides/provided a supportive and inclusive culture that deals effectively with these behaviors.
3. Neurosurgical meetings provide a supportive and inclusive culture that deals effectively with these behaviors.
4. Educational programs (such as industry-sponsored courses, RUNN course, resident review courses, AANS/CNS hands-on courses, etc.) provide a supportive and inclusive culture that deals effectively with these behaviors.
5. Formal/required neurosurgical evaluations and testing procedures ensure a supportive and inclusive culture that deals effectively with these behaviors.
6. Resident interviews, sub-internships, and neurosurgery-related medical school activities provided a supportive and inclusive culture that deals effectively with these behaviors.

Generally, the following people I have worked with as a neurosurgeon interact with me in a respectful and civil manner...

7. Neurosurgery colleagues
8. Faculty and leadership during my training
9. Industry personnel

I have felt excluded from presentations and leadership opportunities by...

10. Neurosurgery colleagues
11. Faculty and leadership during my training
12. Industry personnel

I have felt excluded from informal networking by...

13. Neurosurgery colleagues
14. Faculty and leadership during my training
15. Industry personnel

Questions 16-20 Likert Scale

Very High/High/Neither High nor Low/Low/Very Low

Rate your confidence in addressing unprofessional behavior of any sort without reprisal from the following individuals or at the designated meetings/programs...

16. Neurosurgery colleagues
17. Faculty and leadership during my training
18. Industry personnel
19. During national conferences
20. During educational programs

Additional Questions

Variable Answers

21. **Have you witnessed discrimination, bullying/intimidation and/or sexual harassment toward individuals other than yourself?** *Yes/No/Not Sure*
22. **How problematic is sexual harassment at neurosurgical meetings, courses, workshops?** *Extremely/Very/Somewhat/A little/None at all*
23. **Do you know if the national neurosurgical organizations (e.g. AANS, CNS, ABNS, Society of Neurological Surgeons, American Academy of Neurological Surgery, Neurosurgical Society of America) have policies in place to mitigate against sexual harassment?** *Yes, all do/Yes, some do/No, none do/Not sure*
24. **Should national neurosurgical societies (e.g. AANS, CNS, ABNS, Society of Neurological Surgeons, American Academy of Neurological Surgery, Neurosurgical Society of America) have policies in place to mitigate against sexual harassment at the national neurosurgical meetings and would it be a good idea to develop these?**
Yes/No/ Not sure
25. **Have you ever been the subject of discrimination, bullying/intimidation and/or**

- sexual harassment? *Yes/No/Not sure*
26. **Where/when have you been the subject of discrimination, bullying/intimidation and/or sexual harassment? Please check all that apply.** *During training/At a national meeting/During an educational meeting outside a national meeting/During a post-residency employment*
27. **How many times did you experience the behavior? Once/More than once less than 5 times/more than 5 times less than 10/More than 10 times/Not sure**
28. **How long ago did you experience the behavior? Please check all that apply.** *More than 10 years/More than 5 years but less than 10/More than 1 year but less than 5/less than 1 year/Not sure when*
29. **What was the gender of the individual(s) responsible for this behavior? Please check all that apply.** *Male/Female/Both male and female*
30. **What was the position of the individual(s) responsible for this behavior? Please check all that apply.** *A person in a superior position (chair, faculty, supervisor, etc.)/A person in a lateral position (fellow resident, colleague, etc.)/A person in a subordinate position/A personnel in industry (vendor, salesman, representative, etc.)/Other (please specify)*
31. **Did you address this behavior at the time? Yes/No/Not sure**
32. **How did you address the behavior? Please check all that apply.**
- a. Discussed with family/friends
 - b. Discussed with a peer
 - c. Discussed with mentor or senior colleague
 - d. Spoke directly with the individual
 - e. Spoke with supervisor/manager
 - f. Reported it to the appropriate hospital/university personnel
 - g. Reported it anonymously to a compliance program
 - h. Reported it to legal authorities
 - i. Not sure
 - j. Other (please specify)
33. **Did you feel there was any impact/result of the actions you took? Yes, positive/Yes, negative/No/Not sure**
34. **Did you feel there were barriers to taking action about these behaviors? Yes/No/Not sure**
35. **What barriers to taking action were of concern to you? Please check all that apply.**
- a. Retaliation/retribution
 - b. Reputation concerns
 - c. Associated stress
 - d. Impact on future career
 - e. Unclear mechanism
 - f. Other (please specify)
36. **Do you believe that reporting such behaviors have negative ramifications for the one who reports them? Yes/No/Not sure**
37. **From whom will reporting such behaviors have negative ramifications? Please**

check all that apply.

- a. From colleagues
- b. From hospital
- c. From organized neurosurgery
- d. Other (please specify)

38. Have you been exposed to any of the following sexual harassment behaviors?

Please check all that apply.

- a. Explicit or offensive jokes
- b. Unwelcome flirtations
- c. Inappropriate physical contact
- d. Discussion about my sexual or private life
- e. Inappropriate comments about my body
- f. Persistent requests for dates
- g. Display of offensive items
- h. Demand for sexual favors
- i. Sexual assault
- j. Rape
- k. Other (please specify)

39. In the box below, please provide details of the worst experience with sexual harassment you have endured at one of the national or regional neurosurgical meetings. Please DONOT identify specific individuals.

Demographic/Practice Questions Completed Survey

Concluding Statement

Thank you for responding to these survey questions. As previously stated, all responses will remain anonymous and confidential.

Supplemental Appendix 2: Poignant comments

Position of individual responsible for the behavior

- Head of department
- Non-neurosurgical administrator giving unequal time, resources, and staff to noisy male colleagues because they “will have a fit” if they do not get their way
- Hospital administration
- National neurosurgery leadership
- Dean of Medical school and several Department Chairs
- Chief resident
- Neurosurgeons in power positions
- Chief Medical Officer
- Senior residents
- Patients and patient’s families

Barriers to taking action

- There is no mechanism
- Complete and double standard for women in all elements of medicine
- Had severe retaliation
- Changed training opportunities drastically
- Threatened job security
- No protection for whistleblower
- Still facing consequences...and no committee that can help stop such behavior and help with resolution.
- Program probation threatened
- Futility of filing a complaint
- Power given to administration over MDs and burden placed on MD means they have no time to take action and make a case
- Especially impact on future career
- Our department doesn’t actually care

From whom will reporting have negative ramifications?

- Senior residents, attendings, chair
- Person responsible
- Program director
- Faculty
- Industry
- Numerous layers of high-level leadership
- Medical school and university leadership
- Future employment hoped
- Informal professional networks

- Employed medical group

Worst experience of sexual harassment

- Thrown against the wall (male, >60 years)
- Unwelcome flirtation by a female industry colleague (male, >60 years)
- The expectation that if I go out after a course with a colleague, that I am available for the entire evening, including bedtime (female, >60 years)
- Interruptions, ignoring questions, dismissal of opinions, assumption I am nurse or PA, overall lack of respect (female, 51-60 years)
- Seen current national leaders engage in explicit and sexually oriented talk and jokes, as well as racist jokes at national meetings (male, >60 years)
- Inappropriate unwanted contact at a social event (female, 51-60 years)
- Bullying and discrimination regarding voicing issues over quality of care (male, >60 years)
- Routinely being confused as a rep or spouse (female, <40 years)
- Specifically do not go to my section meetings because the leadership were particularly severe perpetrators (female, <40 years)
- Observed a neurosurgeon hitting hard on an industry rep...wife got so pissed off she got up and left (male, >60 years)
- Observed a male faculty make sexual advances at a female resident at a course (female, <40 years)
- There are biased and offensive jokes told frequently (male, 51-60 years)
- Kissed against my will then bullied for telling my husband (female, <40 years)
- One of my professors becomes flirtatious. I indicate I am not interested. He begins to grab me and tear my blouse...calmed him down...he said, "Remember we are a small group and your reputation can easily be lost. There are ways we can fail you and no one will ever know." (female, >60 years)
- The speaker used the phrase, "You don't want to be a douchebag..." (male, 51-60 years)
- The most pervasive is the normalization of treating women badly...the comments, going to strip clubs, etc. (female, <40 years)
- As a male, I really have not been directly affected. However, I have been offended by what has been tolerated in meetings by people who are considered leaders in the field in very public talks. (male, 51-60 years)
- I was told I was too pretty to be a neurosurgeon and I should just marry one. (female, 41-50)
- Speaker repeatedly asked me to bring coffee, adjust the thermostat...he did not allow me to introduce myself when he asked everyone in the room. (female, <40 years)
- A member of industry slipped a "date rape" drug into my drink (female, <40 years)
- Too numerous to count how many times I was propositioned by manufacturers reps, nurses, physical therapists, etc. (male, 51-60 years)
- At an evening reception, I was harassed and ultimately sexually assaulted by a famous neurosurgery chair. With numerous witnesses including his own department members (female, 41-50 years)
- A senior neurosurgeon had become a friend and mentor to me...at a regional meeting he cornered me, told me he loved me and wanted to leave his wife for me. (female, <40 years)

- Unwanted contact and difficulty extracting myself from a prolonged interaction with a powerful, notable and well-connected surgeon...could not create distance between us and felt that more assertive termination would affect my future prospects for my career. (female, 41-50 years)
- Mid-level resident my program director blatantly and persistently and aggressively came on to me during a social event at a national meeting. (female, <40 years)
- Open discussion about my body, pregnancy and related (very personal and intimate) (female, 51-60 years)
- On shuttle back to hotel and neurosurgeon sat next to me and started flirting with me and touching my knee. Asked if I wanted to go to his hotel with him. Tried to politely ignore and say no thank you. He called my room through the front desk and asked if I wanted to come downstairs for a drink. (female, 41-50 years)
- Junior faculty sexually assaulting me while I was stuck in-house on call. I was able to escape but couldn't leave the hospital nor feel safe in my call room...I couldn't even go home to shower or change. It was horrible. (female, <40 years)
- I was taken to a club with a group of residents and students while at a conference. I was a student at the time. One resident was drunk and insisted on dancing inappropriately with me all night with his hands/body all over me. I was applying for a residency position at the time and did not feel like I could confront him or put a stop to his actions without negatively affecting my ability to match. (female, 41-50 years)
- Raped by a co-resident (female, <40 years)
- On numerous occasions I faced sexual harassment by PD, saw him sexually harass other residents and staff. (male, <40 years)
- Physically assaulted by a resident, someone reported it, and my chair was aware but did nothing. (male, <40 years)
- Too many examples to include all. (female, 41-50 years)
- I had a neurosurgeon both ask me on a date and tell me he wanted to interview me for a job. He told me he'd love to have a female partner because we are aggressive and he'd love a woman to throw him into bed... (female, 41-50 years)
- Knowledge of a faculty member who slept with a medical student when at a meeting. (female, <40 years)
- Conversations at dinner about whom I have slept with (female, <40 years)
- Leaving room keys and asking me to "visit" later (female, <40 years)
- Being called a "slut" and not deserving to be a neurosurgeon (female, <40 years)