

# NIH Public Access

Author Manuscript

JAMA Intern Med. Author manuscript; available in PMC 2015 January 07.

Published in final edited form as:

JAMA Intern Med. 2013 January 14; 173(1): 76–77. doi:10.1001/2013.jamainternmed.480.

# When Physicians Counsel About Stress: Results of a National Study

Aditi Nerurkar, MD, MPH<sup>1</sup>, Asaf Bitton, MD, MPH<sup>2,3</sup>, Roger B. Davis, ScD<sup>1</sup>, Russell S. Phillips, MD<sup>1</sup>, and Gloria Yeh, MD, MPH<sup>1</sup>

<sup>1</sup>Division of General Medicine and Primary Care, Department of Medicine, Beth Israel Deaconess Medical Center, Boston, MA

<sup>2</sup>Division of General Medicine and Primary Care, Brigham & Women's Hospital, Boston, MA

<sup>3</sup>Department of Health Care Policy, Harvard Medical School, Boston, MA

# INTRODUCTION

The prevalence of stress in primary care is high; 60–80% of visits may have a stress-related component.<sup>1</sup> 44% of Americans report an increase in psychological stress over the past five years.<sup>2</sup> Stress is associated with more office visits and disease, but little is known about stress management counseling in primary care.<sup>3,4</sup> Our study objective was to examine the rates of stress management counseling by U.S. primary care physicians and to identify associated factors.

# METHODS

We obtained data from the 2006–2009 National Ambulatory Medical Care Survey (NAMCS), a cross-sectional, multi-staged, stratified sampling survey of randomly-selected, office-based physicians in the U.S. From 2006–2009, information was available on an aggregate of 123,192 office visits to 5,105 physicians (average response rate 60.4%).<sup>5</sup> We examined office visits which included stress management counseling provided by a primary care physician. Stress management was defined as "information intended to help patients reduce stress through exercise, biofeedback, yoga, etc." and included physician counseling at the visit and "referrals to other health professionals for the purposes of coping with stress." <sup>5</sup> Our final sample consisted of 34,065 visits to 1,263 physicians.

We conducted weighted analyses using SAS-callable SUDAAN (version 10.0; SAS Institute Inc) to account for the multi-staged probability design, clustering of patients by physician, and oversampling of selected physician practices used by NAMCS. Potential correlates of the provision of stress management counseling by primary care physicians were (1) patient

Address correspondence & requests for reprints to: Aditi Nerurkar, MD, MPH \*, Division of General Medicine & Primary Care, Beth Israel Deaconess Medical Center, 330 Brookline Ave YA-102 Boston MA 02215, Phone: (617) 754-1442, Fax: (617) 754-1044, gnerurka@bidmc.harvard.edu.

<sup>&</sup>lt;sup>\*</sup>Dr. Aditi Nerurkar is supported by an Institutional National Research Service Award (T32AT000051-11) from the National Institutes of Health.

Conflict of Interest: None disclosed

demographic characteristics (age, sex, race, education, income, region, insurance status and survey year), and (2) visit characteristics (physician specialty, visit continuity, visit acuity, number of chronic conditions, number of visits, visit length and diagnosis). Multivariable logistic regression modeling identified those factors independently associated with physician counseling about stress.

# RESULTS

From 2006–2009, 3.0% of 33,045 office visits included stress management counseling by primary care physicians (n= 1,020 visits). Stress management counseling was the least common type of counseling, compared to counseling about nutrition (16.8%), physical activity (12.3%), weight reduction (6.3%), and tobacco cessation (3.7%).

Adjusted multivariable analyses identified factors independently associated with physician counseling about stress (Table). Older patients (age >=65 years) were 39% less likely to be counseled, while patients living in the Northeast were 63% more likely to be counseled. Counseling was 43% more likely for patients being seen for a chronic problem flare-up. Counseling increased with the number of chronic conditions. Physicians were more likely to counsel patients with depressive disorder. Finally, counseling was associated with longer visits.

# COMMENT

This is the first study, to our knowledge, to examine factors associated with the provision of stress management counseling by U.S. primary care physicians using a nationally representative sample. The low rate of counseling points to potential missed opportunities, suggesting that physician counseling about stress has not been incorporated into primary care to the extent of other types of counseling.

As the number of chronic conditions increased, so did the receipt of stress counseling, especially in patients seen for flare-ups of existing conditions. This is expected since patients with chronic diseases may experience increased psychological stress. This care pattern implies that counseling is being offered downstream, rather than as a preventive measure, similar to physician counseling about other therapeutic lifestyle changes.<sup>6</sup>

Of the conditions we studied, only depression was associated with counseling. The pervasiveness of depression in primary care has led to primary care being described as the *hidden mental health system*.<sup>7</sup> And stress has been linked to both the initial diagnosis and clinical course of depression.<sup>4</sup> Our findings suggest that while primary care physicians are aware of the links between stress and depression, the role that stress may play in other non-mental health conditions may be less well-recognized.

We also found stress management counseling to be associated with longer visits. This is consistent with other types of counseling in primary care, and prior studies cite lack of time as a key obstacle preventing counseling about stress.<sup>1, 8</sup> Emerging models of primary care may address physicians' concerns of time by employing non-physician health coaches and health educators, and utilizing interventions such as group sessions and communication by

JAMA Intern Med. Author manuscript; available in PMC 2015 January 07.

email or phone, which may facilitate a greater incorporation of counseling into clinical care.<sup>9</sup>

The low rate of counseling we found is not unique to counseling about stress, as rates of physician counseling are suboptimal across most therapeutic lifestyle interventions.<sup>6</sup> Physicians may recognize the need for providing counseling, but the low rate points to broader delivery issues in primary care. Acknowledging the already overburdened primary care physician, our findings highlight the importance of restructuring primary care delivery and payment to emphasize and support a team-based approach.<sup>9</sup> Through such innovations, these emerging models may better incorporate mental health services into clinical care and shift counseling practices to earlier in the disease course, thereby facilitating comanagement of psychosocial stress and disease, and potentially improving health outcomes.

# Acknowledgments

We would like to thank Susan Schappert, health statistician at the National Center for Health Statistics of the Centers for Disease Control for her invaluable assistance. Dr. Nerurkar had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

**Funding/Support:** Dr. Nerurkar is supported by an Institutional National Research Service Award (T32AT000051-11) from the National Institutes of Health. Dr. Davis is supported in part by the Harvard Catalyst and the Harvard Clinical and Translational Science Center (NIH Award UL1RR025758). The analyses, interpretations and conclusions within this manuscript are of the authors' and do not reflect the views of the National Center for Health Statistics nor the Centers for Disease Control.

#### References

- Avey H, Matheny KB, Robbins A, Jacobson TA. Health care providers' training, perceptions, and practices regarding stress and health outcomes. J Natl Med Assoc. Sep; 2003 95(9):833, 836–845. [PubMed: 14527051]
- American Psychological Association. Stress in America: Our Health at Risk, 2012. Washington, DC: American Psychological Association; 2012. Retrieved from: http://www.apa.org/news/press/ releases/stress/2011/final-2011.pdf
- Pirraglia PA, Hampton JM, Rosen AB, Witt WP. Psychological distress and trends in healthcare expenditures and outpatient healthcare. Am J Manag Care. May; 2011 17(5):319–328. [PubMed: 21718079]
- Cohen S, Janicki-Deverts D, Miller GE. Psychological stress and disease. JAMA. Oct 10; 2007 298(14):1685–1687. [PubMed: 17925521]
- National Center for Health Statistics. Data File Documentation, National Ambulatory Medical Care Survey, 2006–2009 (machine readable data file and documentation). National Center for Health Statistics, Centers for Disease Control and Prevention; Hyattsville, Maryland:
- Wee CC, McCarthy EP, Davis RB, Phillips RS. Physician counseling about exercise. JAMA. Oct 27; 1999 282(16):1583–1588. [PubMed: 10546701]
- Searight HR. Efficient counseling techniques for the primary care physician. Prim Care. Sep; 2007 34(3):551–570. vi–vii. [PubMed: 17868759]
- Chen LM, Farwell WR, Jha AK. Primary care visit duration and quality: does good care take longer? Arch Intern Med. Nov 9; 2009 169(20):1866–1872. [PubMed: 19901138]
- Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA. Oct 9; 2002 288(14):1775–1779. [PubMed: 12365965]

JAMA Intern Med. Author manuscript; available in PMC 2015 January 07.

#### Table

Factors Associated with The Provision of Stress Management Counseling by U.S. Primary Care Physicians\*

	aOR (95% CI)	p-value
Age, y	-	
18–29	1.22 [0.90, 1.66]	0.0007
30–39	1.19 [0.86, 1.64]	
40–49	1.17 [0.90, 1.53]	
50-64	1.00	
>=65	0.61 [0.45, 0.81]	
Region	-	
Northeast	1.63 [1.00, 2.65]	0.0172
Midwest	0.99 [0.70, 1.39]	
South	1.00	
West	0.70 [0.46, 1.06]	
Acuity of problem		
New problem	0.83 [0.65, 1.05]	<0.0001
Chronic problem, routine	1.00	
Chronic problem, flare-up	1.43 [1.05, 1.95]	
Number of chronic conditions		
None	1.00	<0.0001
1–2	1.70 [1.32, 2.20]	
3–4	1.94 [1.31, 2.85]	
>=5	3.14 [2.05, 4.82]	
Depressive disorder, NOS		
Yes	4.10 [3.06, 5.49]	<0.0001
No	1.00	
Visit length, min		
0–20	1.00	<0.0001
21-40	2.07 [1.64, 2.61]	
>=41	1.75 [1.16, 2.65]	

\* Analyses were adjusted for all factors in the table in addition to patient sex, race, education, income, insurance status, and survey year.

NIH-PA Author Manuscript