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Disclaimer: The contents of this article are solely the responsibility of the authors and do not necessarily represent the official views of the CDC, the FDA, or the NPHIC.

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When Physicians Counsel About Stress: Results of a National Study

The prevalence of stress in primary care is high; 60% to 80% of visits may have a stress-related component.¹ Over the past 5 years, 44% of Americans have reported an increase in psychological stress.² Stress is associated with more office visits and disease, but little is known about stress management counseling in primary care.^{3,4} Our study objective was to examine the rates of stress management counseling by US 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, multistaged, stratified sampling survey of randomly selected, office-based physicians in the United States from 2006 through 2009; information was available on an aggregate of 123 192 office visits to 5105 physicians (average response rate, 60.4%).⁵ 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."⁵ Our final sample consisted of 34 065 visits to 1263 physicians.

We conducted weighted analyses using SAS-callable SUDAAN (version 10.0; SAS Institute Inc) to account for the multistaged 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 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.

Table. Factors Associated With the Provision of Stress Management Counseling by US Primary Care Physicians^a

Factor	aOR (95% CI)	P Value
Age, y		
18-29	1.22 (0.90-1.66)	<.001
30-39	1.19 (0.86-1.64)	
40-49	1.17 (0.90-1.53)	
50-64	1 [Reference]	
≥65	0.61 (0.45-0.81)	
Region		
Northeast	1.63 (1.00-2.65)	.02
Midwest	0.99 (0.70-1.39)	
South	1 [Reference]	
West	0.70 (0.46-1.06)	
Acuity of problem		
New problem	0.83 (0.65-1.05)	<.001
Chronic problem, routine	1 [Reference]	
Chronic problem, flare-up	1.43 (1.05-1.95)	
Chronic conditions, No.		
None	1 [Reference]	<.001
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		
Yes	4.10 (3.06-5.49)	<.001
No	1 [Reference]	
Visit length, min		
0-20	1 [Reference]	<.001
21-40	2.07 (1.64-2.61)	
≥41	1.75 (1.16-2.65)	

Abbreviation: aOR, adjusted odds ratio.

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

Results. From 2006 through 2009, 1020 of 33 045 office visits (3%) included stress management counseling by primary care physicians. Stress management counseling was the least common type of counseling, compared with 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 a 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 US 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.⁶

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.”⁷ In addition, stress has been linked to both the initial diagnosis and clinical course of depression.⁴ 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 nonmental 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.^{1,8} Emerging models of primary care may address physicians’ concerns of time by using nonphysician health coaches and health educators and using interventions such as group sessions and communication by e-mail or telephone, which may facilitate a greater incorporation of counseling into clinical care.⁹

The low rate of counseling we found is not unique to counseling about stress, since rates of physician counseling are suboptimal across most therapeutic lifestyle interventions.⁶ Physicians may recognize the need for providing counseling, but the low rate points to broader delivery issues in primary care. In acknowledgment of 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.⁹ 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.

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COMMENTS AND OPINIONS

Clinical Scores to Predict Streptococcal Pharyngitis: Believers and Nonbelievers

One of the merits of Robert Centor is that in 1981, he and his colleagues¹ already showed that the prevalence of group A β -hemolytic streptococci (GAS) in the throat is 56% when the following 4 Centor criteria are present: fever of 38.5°C or higher, tonsillar exudate, absence of cough, and enlarged cervical glands. The validation of the Centor and McIsaac scores by Fine et al² showed comparable results.

Now, how is it possible that clinical scores have gained poor traction in clinical practice? One reason is that other