

who have gotten through the healing process, and that awareness of the abuse helps them to understand the patient's physical symptoms.

The mental health professionals to whom physicians refer patients should be specifically trained and experienced in working with abuse survivors. Because of frequent substance abuse among sexually abused patients, training in this field can also be beneficial. These resources exist in most communities, but physicians need to evaluate them as aggressively as they would for any other type of consultation. Battered women shelters and rape crisis centers are often good starting points for locating therapists experienced in treating abuse survivors.²

Recognizing a sexual abuse history and its attendant post-traumatic consequences in physical, psychological, and behavioral domains is essential in differential diagnosis, treatment strategies, and patient care.^{2,10} Although most physicians have not been taught such skills in medical school, acquiring these skills could be one of the most powerful ways to improve the care that a physician provides.

Marybeth Hendricks-Matthews, PhD
Cuyahoga Falls, OH

References

1. Walker EA, Torkelson N, Katon WJ, Koss MP. The prevalence rate of sexual trauma in a primary care clinic. *J Am Board Fam Pract* 1993; 6:465-71.
2. Hendricks-Matthews MK. Caring for victims of childhood sexual abuse. *J Fam Pract* 1992; 35:501-2.
3. Walch AG, Broadhead WE. Prevalence of lifetime sexual victimization among female patients. *J Fam Pract* 1992; 35:511-6.
4. Kluft RP. Incest-related syndromes of adult psychopathology. Washington, DC: American Psychiatric Press, 1990.
5. Dunn SF, Gilchrist VJ. Sexual assault. In: Elliott BA, Halverson KC, Hendricks-Matthews MK, editors. *Family violence and abusive relationships*. Primary Care 1993; 20(2):359-74.
6. Vogel M, Garcia-Shelton L, Lechner M. Adult survivors of childhood sexual abuse and self-reported problems: a masked presentation. Presented at Society of Teachers of Family Medicine spring conference, Philadelphia, 1991.
7. Hendricks-Matthews MK. Survivors of abuse: health care issues. In: Elliott BA, Halverson KC, Hendricks-Matthews MK, editors. *Family violence and abusive relationships*. Primary Care 1993; 20(2):391-406.
8. Friedman LS, Samet JH, Roberts MS, Hudlin M, Hans P. Inquiry about victimization experiences. A survey of patient preferences and physician practices. *Arch Intern Med* 1992; 152:1186-90.
9. Wahlen SD. Adult survivors of childhood sexual abuse. In: Hendricks-Matthews MK, editor. *Violence education: toward a solution*. Kansas City, MO: Society of Teachers of Family Medicine, 1992; 89-102.
10. Courtois CA. Adult survivors of sexual abuse. In: Elliott BA, Halverson KC, Hendricks-Matthews M, editors. *Family violence and abusive relationships*. Primary Care 1993; 20(2):433-46.

Breast Cancer Care: A Beacon Of Change?

Breast cancer care in the United States demonstrates both the potential and the pitfalls of Western medicine. Through this one disease we can glimpse the horizons of science, the limitations of medical practice, and physicians' preoccupation with treatment rather than prevention and early detection. Breast cancer care also casts a beacon of light toward the future of medical practice.

The horizons of science expand through research. This research has led to such an exponential growth in knowledge that the *Index Medicus* lists 16,351 publications on breast cancer in the last 5 years.¹⁻³ We now have evidence that breast cancer is a systemic disease rather than a localized phenomenon,⁴ that genetic markers identify some women at risk for developing this disease,⁵ and that the development of cancer requires both a defect in cell repair and a change in cell development.⁶ In addition, hundreds of studies, including randomized trials, have tested treatments for breast cancer and shown that breast-conserving treatments for stage I and II cancers work as effectively as mastectomy,^{7,8} that radiation to the axillary nodes reduces recurrence,⁹ and adjuvant chemotherapy should be considered for all women except perhaps

Submitted, revised, 11 June 1993.

From Group Health Cooperative of Puget Sound, Seattle, Washington. Address reprint requests to Stephen Taplin, MD, Group Health Cooperative of Puget Sound, Metropolitan Park East Tower, 1730 Minor Avenue, Suite 1600, Seattle, WA 98101-1448.

those with tumors less than 1 cm and uninvolved axillary lymph nodes.¹⁰

Despite this phenomenal growth in our understanding of breast cancer, a sobering reality persists: breast cancer mortality has been a constant 27 cases per 100,000 women since 1973.¹¹ The National Cancer Institute has spent hundreds of millions of dollars on treatment trials for all cancers during the last 20 years.* Despite this expenditure, we have not changed the course of breast cancer.

Many wonder about Western medicine's preoccupation with treatment rather than prevention and early detection, but it has precedent in our history. During the early 1900s Western medicine developed as a discipline to reduce rather than prevent suffering.¹² The precedent echoes in our practices today. By 1973, results from the Health Insurance Plan (HIP) randomized trial demonstrated that fewer women die of breast cancer if mammography occurs regularly.¹³ By 1990 fewer than one-third of US women older than 50 years reported having received two or more mammograms in their lifetime.¹⁴ Mammography prevents breast cancer mortality, but physicians and women have not implemented its widespread use.

The National Cancer Institute recognized this deficiency in the late 1980s and funded a set of projects to test methods of promoting mammography use in communities around the United States.¹⁵⁻²⁰ In this issue of *JABFP*, Rimer and colleagues report results from one of these projects.¹⁷ Together the projects demonstrate that focused educational activities for physicians might influence their reported behavior. This effect of continuing medical education (CME) provides encouragement for CME efforts, which to date have appeared to be a weak influence upon medical practice.^{21,22}

Rimer and colleagues, however, did not deliver their CME intervention in isolation from practice. Their study included a tracking system that mailed recommendations to women and then targeted additional interventions toward women who did not schedule mammograms. Intervention physicians increased their reported

rates of ordering mammograms. Mailing reminders to women who failed to seek screening when it was recommended increased the likelihood they would subsequently get the mammogram. Furthermore, compared with using mailed reminders alone,²³ telephone counseling increased the proportion of women who scheduled mammograms.²⁴ Overall, the use of mammography increased in the intervention communities.

Several factors affect the generalization of these results. First, the study took place in a health maintenance organization (HMO) that absorbed the cost of the mammogram. The control population consisted of women and physicians in the surrounding communities who were not members of the HMO. At another consortium site using a different intervention, the provision of free mammograms achieved increases in mammography use that matched the increase attributable to the intervention itself.¹⁸ In the study by Rimer and colleagues, the effect of cost cannot be measured. We cannot tell whether control physicians would have recommended mammography more regularly in the absence of cost constraints or whether the control population would have achieved similar levels of mammography use. In the absence of cost constraints, reminders clearly increased the use of mammography.²³

Second, the interventions directed toward women occurred in a stepwise fashion that makes estimating the total effect of the interventions in the population difficult. Though reminders increased participation among women randomized to get them, many women were lost to follow-up (22 percent) and never became candidates for randomization.²³ Rimer and colleagues have demonstrated that reminders work in selected HMO enrollees. How much the participation of HMO women increased because of the reminders and telephone calls has not been shown. More must be done to demonstrate the effect of these promotional techniques on the population's overall use of mammography.

Third, though telephone counseling increased the use of mammography, the investigators did not test the effect of the telephone call alone. There might be ways to reduce the cost of the intervention without reducing its efficacy. Before implementation becomes widespread, such considerations need to be addressed.

*Telephone conversation 1 July 1993 with a representative of the Financial Management Branch of the National Cancer Institute.

Finally, though education had an effect on the physicians' reported rate of ordering mammography, another question emerges: Who manages prevention? Someone had to take charge of the educational activity, and someone had to establish the tracking system to select women due for reminders or counseling calls. Rimer and colleagues took responsibility for implementing the intervention, but the study has come to a close. Will the HMO take up the project now, or will physicians begin to manage prevention?

As health care reform begins, we must think carefully about the answer to this last question. The answer has everything to do with US culture and the precedents established in our medical care system.²⁴ The answer has to do with economics. Rimer and colleagues organized the intervention because it was in their interests to do so. Now whose interests are served by reminder systems and an organized approach to implementing breast cancer screening? The HMO might pay a price for widespread use of mammography. Cost savings through early breast cancer detection have not been demonstrated and might be an unrealistic expectation.^{25,26} In the face of growing cost constraints, we must consciously begin to prioritize our health care needs.²⁷ At some point we might need to decide about the relative importance of lung transplants and breast cancer screening.

Unconsciously we make the decisions now and treatment gets a higher priority. Reimbursement mechanisms reflect our nation's preoccupation with treatment, and physicians manage treatment. Medicare and Medicaid only began paying for mammography in 1991; they have always paid for treatment. Primary care physicians still do not get reimbursed for preventive visits. This lack of reimbursement reflects a societal priority, and the lack of practice follows. Even if reimbursement becomes widespread, few physicians have adopted the use of reminder systems and organized approaches to their practices that Rimer and colleagues' intervention requires.^{21,28} Before physicians begin managing prevention, they will need to face new expectations and learn new skills.

Ultimately, who manages prevention becomes an issue of society's values. There are hints that these values have begun to change. In the proposed Clinton administration 1994 budget, the

National Cancer Institute is projected to increase its expenditure on breast cancer prevention and detection research to \$119 million — 3.7 times its 1991 level — compared with a tripling of treatment research dollars to \$88 million.* In this one disease, prevention and early detection have begun to take a higher priority than treatment.

The efficacy of screening compared with treatment has been known for 20 years. We now see a hint that the evaluation of treatment has slipped in importance relative to prevention and early detection. The change, however, is projected, not realized, and the projection reflects research, not practice. Congress, insurance companies, and individuals must allocate the necessary resources to accomplish screening. Rimer and colleagues demonstrate that we must also begin to consider changing the way we manage practice. Breast cancer care is a beacon of this change toward prevention and early detection, but it still sheds a weak light.

Stephen Taplin, MD
Seattle, WA

*Telephone conversation 1 July 1993 with a representative of the Financial Management Branch of the National Cancer Institute.

References

1. Harris JR, Lippman ME, Veronesi U, Willett W. Breast cancer. Part I. *N Engl J Med* 1992; 327:319-28.
2. *Idem*. Breast cancer. Part II. *N Engl J Med* 1992; 327:390-8.
3. *Idem*. Breast cancer. Part III. *N Engl J Med* 1992; 327:473-80.
4. Fisher B. Laboratory and clinical research in breast cancer — a personal adventure: the David A. Karnofsky memorial lecture. *Cancer Res* 1980; 40:3863-74.
5. Steel CM, Cohen BB, Porter DE. Familial breast cancer. *Semin Cancer Biol* 1992; 3:141-50.
6. Moolgavkar SH, Day NE, Stevens RG. Two-stage model for carcinogenesis: epidemiology of breast cancer in females. *J Natl Cancer Inst* 1980; 65:559-69.
7. Fisher B. Justification for lumpectomy in the treatment of breast cancer: a commentary on the underutilization of that procedure. *J Am Med Assoc* 1992; 47:169-73.
8. Veronesi U, Saccozzi R, DelVecchio M, Banfi A, Clemente C, DeLena M, et al. Comparing radical mastectomy with quadrantectomy, axillary dissection, and radiotherapy in patients with small cancers of the breast. *N Engl J Med* 1981; 305:6-11.

9. Fisher B, Redmond C, Poisson R, Margolese R, Wolmark N, Wickerham L, et al. Eight-year results of a randomized clinical trial comparing total mastectomy and lumpectomy with or without irradiation in the treatment of breast cancer. *N Engl J Med* 1989; 320:822-8.
10. Glick JH, Gelber RD, Goldhirsch A, Senn HJ. Meeting highlights: adjuvant therapy for primary breast cancer. *J Natl Cancer Inst* 1992; 84:1479-85.
11. Riles LAG, Hankey BF, Miller BA, Hartman AM, Edwards BK. Cancer statistics review, 1973-1988. Bethesda, MD: National Cancer Institute. NIH Publication No. 91-2789, 1991.
12. Starr P. The social transformation of American medicine. Book one. A sovereign profession. The rise of medical authority and the shaping of the medical system. New York: Basic Books, 1982:181.
13. Shapiro S, Venet W, Strax P, Venet L, Roeser R. Ten- to fourteen-year effect of screening on breast cancer mortality. *J Natl Cancer Inst* 1982; 69:349-55.
14. US Centers for Disease Control. Use of mammography — United States, 1990. *MMWR* 1990; 39(36):621-30.
15. Howard J. Using mammography for cancer control: an unrealized potential. *Ca Cancer J Clin* 1987; 37:33-48.
16. Screening mammography: a missed clinical opportunity? Results of the NCI Breast Cancer Screening Consortium and National Health Interview Survey Studies. *JAMA* 1990; 264:54-8.
17. Rimer BK, Ross E, Balshem A, Engstrom PF. The effect of a comprehensive breast screening program on self-reported mammography use by primary care physicians and women in a health maintenance organization. *J Am Board Fam Pract* 1993; 6:343-51.
18. Lane DS, Polednak AP, Burg MA. Effect of continuing medical education and cost on physician compliance with mammography screening guidelines. *J Fam Pract* 1991; 33:359-68.
19. Costanza ME, Zapka JG, Harris DR, Hosmer D, Barth R, Gaw VP, et al. Impact of a physician intervention program to increase breast cancer screening. *Cancer Epidemiol Biomarkers Prev* 1992; 1:581-9.
20. Fletcher SW, Harris RP, Gonzalez JJ, Degnan D, Lannin DR, Strecher VJ, et al. Increasing mammography utilization: a controlled study. *J Natl Cancer Inst* 1993; 85:112-20.
21. Kanouse DE, Jacoby I. When does information change practitioner's behavior? *Int J Tech Assess Health Care* 1988; 4:27-33.
22. Haynes RB, Davis DA, McKibbon A, Tugwell P. A critical appraisal of the efficacy of continuing medical education. *JAMA* 1984; 251:61-4.
23. Trock B, Rimer BK, King E, Balshem A, Cristinzio CS, Engstrom PF. Impact of an HMO-based intervention to increase mammography utilization. *Cancer Epidemiol Biomarkers Prev* 1993; 2:151-6.
24. Starr P. The social transformation of American medicine. Book two. The struggle for medical care. Doctors, the state, and the coming of the corporation. New York: Basic Books, 1982:288.
25. Russell LB. Is prevention better than cure? Washington, DC: The Brookings Institution, 1986:134.
26. Eddy DM, Hasselblad V, McGivney W, Hendee W. The value of mammography screening in women under age 50 years. *JAMA* 1988; 259:1512-9.
27. Aaron HJ, Schwartz WB. The painful prescription: rationing hospital care. Washington, DC: The Brookings Institution, 1984:134.
28. Frame PS, Zimmer JG, Werth PL, Martens WB. Description of a computerized health maintenance tracking system for primary care practice. *Am J Prev Med* 1991; 7:311-8.

Nicholas J. Pisacano, MD, Memorial Foundation

The Nicholas J. Pisacano, MD, Memorial Foundation (NJPMF) is pleased to announce the inaugural recipients of the Pisacano Scholars award. The Pisacano Scholars program recognizes the future leaders of the specialty of family practice. Each recipient has demonstrated his or her commitment to family practice and has shown exceptional leadership skills, superior academic achievement, strong communication skills, identifiable character and integrity, and a noteworthy level of community service. These 10 Pisacano Scholars were selected by the NJPMF Board of Directors from a pool of nearly 300 candidates representing 95 different medical schools. Eligible candidates were personally interviewed by a local board-certified family physician. These physicians, named the Scholarship Advisory Committee, asked each applicant a series of questions and rated the applicant on the measures listed above. Financial need was not a determining factor in the selection process. The NJPMF Board of Directors met on May 27 and 28 to select the final 10 Pisacano Scholars.

Each Pisacano Scholar is eligible to receive a maximum scholarship of \$50,000. Recipients are awarded up to \$10,000 per year for up to 5 years (last 2 years of medical school and 3 years of residency). Each Pisacano Scholar is evaluated yearly to assure continued eligibility.