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Abstracts of Articles Authored or Coauthored by Permanente Clinicians

From Colorado:

Treatment decisions about lumbar herniated disk in a shared decision-making program

Barrett PH, Beck A, Schmid K, Fireman B, Brown JB. *Jt Comm J Qual Improv* 2002 May;28(5):211-9

BACKGROUND: An explicit process of collaborative (shared) decision making involving the patient and physician has been recommended for discretionary surgical procedures in which small-area analysis demonstrates high variation not attributable to differences in the patient population in the area. One such example is laminectomy for lumbar herniated disk (HD). An observational study was undertaken to evaluate the impact of an HD videodisk program on patient satisfaction, decision making, and treatment preferences.

METHODS: Enrollment occurred in the outpatient offices of surgeons treating Kaiser Permanente (Colorado Region) patients with HD who had indications for surgery. Enrollment took place from May 1993 to December 1995, and follow-up surveys of patients were completed by January 1997.

RESULTS: A 6.0% decrease in the undecided group and a 1.3% decrease in the group preferring nonsurgical treatment drove a shift of patients toward laminectomy, from 26.7% to 35.8% (Wilcoxon signed rank test = 349.5, $p = .017$). Postviewing preference (74.0%) was a better aggregate predictor of the ultimate treatment than previewing preference (70.0%) for laminectomy.

DISCUSSION: Viewing the videodisk increased the preference for laminectomy. However, limitations in the data prevented us from determining whether this change in preference was actually reflected in patients' ultimate decisions. The fact that the strongest predictor of choosing surgery was the patient's valuation of his or her condition supports shared decision making, with its emphasis on patient's values. Par-

ticipation in other videodisk programs has been low; perhaps physicians should ask patients to view these videodisks before their visits.

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From Northern California:

Quality assurance and risk management in online medical discussion groups

Eshleman AM. *Am J Med Qual* 2002 May-Jun;17(3):89-93

There are thousands of sites on the Internet and World Wide Web where health care professionals and lay people interact to share medical information and health concerns. The majority of these sites do not have procedures in place to assess the quality of the information supplied by the providers or lay people, nor do they have any formal risk management policies to respond to posted material that may reveal a potential risk situation. This paper describes the quality assurance and risk management procedures that have been developed for KP Online—the Web site for members of the Kaiser Foundation Health Plan, Inc—and shares some preliminary findings based on these procedures.

CLINICAL IMPLICATIONS: It's inevitable that, in time, most physicians will engage in some form of electronic communication with their patients. This powerful medium presents some unique possibilities for miscommunication. Fortunately, Frankel and Stein's "Four Habits" model for in-person clinician-patient communication maps well to online communication. By following a few simple guidelines, clinicians can increase the value of online communication, prevent misunderstandings, and increase their and their patients' satisfaction. Data in the article was obtained through a three-year experience moderating members' message boards on the KP Online Web site. — AE

From Southern California:

A preliminary psychometric analysis of a computer-assisted administration of the Telephone Interview of Cognitive Status-modified

Buckwalter JG, Crooks VC, Petitti DB. *J Clin Exp Neuropsychol* 2002 Apr;24(2):168-75

Most screening tests of cognitive functioning require face-to-face administration by trained examiners. This limits their utility in epidemiology and in primary care settings. Further, existing screening tests have not been developed using established psychometric principles. We adapted the Telephone Interview of Cognitive Status-modified (TICS_m) for administration as a computer-assisted telephone interview (CATI). We screened 3681 elderly women with the CATI version of the TICS_m, using lay staff as part of a longitudinal study. A preliminary analysis of the psychometric properties of the TICS_m indicated good internal consistency. Test-retest reliability is needed to confirm reliability. Further work remains to adequately judge the validity of the TICS_m including comparisons with well-standardized tests and assessment of its predictive properties in identifying dementia. However, the CATI version of the TICS_m appears to have potential as a cost-effective means of testing cognitive performance.

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CLINICAL IMPLICATIONS: The evaluation of cognitive performance is increasingly recognized as a crucial part of effective diagnosis and treatment planning. Given the likelihood that cognitive testing will expand in medical practice, cost effective, yet psychometrically sound, means of assessing cognitive performance are needed. We suggest computer-assisted telephone interviews warrant further development for this purpose. — JB

From the Northwest:

Group cognitive-behavioral treatment for depressed adolescent offspring of depressed parents in a health maintenance organization

Clarke GN, Hornbrook M, Lynch F, et al. *J Am Acad Child Adolesc Psychiatry* 2002 Mar;41(3):305-13

OBJECTIVE: A randomized, controlled effectiveness trial of group cognitive-behavioral therapy (CBT) for depressed adolescent offspring of depressed parents in a health maintenance organization (HMO) was conducted.

METHOD: Potential adult cases were found by reviewing antidepressant medication prescriptions, mental health appointments, and medical charts. Introductory study letters signed by each parent's treating physician were mailed to the appropriate adults. Eligible offspring aged 13 to 18 who met current DSM-III-R criteria for major depression and/or dysthymia were randomly assigned to either usual HMO care (n = 47) or usual care plus a 16-session group CBT program (n = 41). Assessments were conducted at baseline, after treatment, and at 12- and 24-month follow-up.

RESULTS: Using intent-to-treat analyses, the authors were unable to detect any significant advantage of the CBT program over usual care, either for depression diagnoses, continuous depression measures, nonaffective measures, or functioning outcomes.

CONCLUSIONS: Group CBT does not appear to be incrementally beneficial for depressed offspring of depressed parents who are receiving other mental health care. However, given that many other studies have found positive effects of CBT for youth depression, this single study should not be viewed as evidence that CBT is ineffective overall.

CLINICAL IMPLICATIONS: The similar outcomes observed in the usual care and CBT group conditions indicate that usual care was as effective as state of the art, research-tested programs. However, both conditions resulted in unsatisfactorily low recovery rates.

Clearly new and more intensive approaches are needed for this very at-risk segment of the depressed adolescent population. Candidates for more intensive treatment include a greater focus on successful treatment for the depressed parent(s), more joint parent-child therapy, and possibly pharmacological treatments for the adolescents. However, the usefulness of any of these approaches is not yet known. — GC

From Northern California:

Race, epithelial ovarian cancer survival, and membership in a large health maintenance organization

McGuire V, Herrinton L, Whittemore AS. *Epidemiology* 2002 Mar;13(2):231-4

BACKGROUND: African-American ovarian cancer patients present with more advanced disease and have poorer survival than do white patients.

METHODS: To determine whether these differences occur among African-American and white patients who have equal access to medical care, we analyzed ovarian cancer patient characteristics separately for 1587 members of the Kaiser Permanente Medical Plan of Northern California and 5757 non-members.

RESULTS: The distributions of disease stage at diagnosis were similar among African-American and white patients, both in the Kaiser plan and elsewhere. However, ovarian cancer death rates, adjusted for disease stage and age at diagnosis and for histology, were higher for African-American patients compared with white patients, regardless of Kaiser membership status. The death rate ratios for African-Americans compared with whites were 1.32 (95% CI = 1.02-1.70) for Kaiser members and 1.20 (95% CI = 1.04-1.40) for Kaiser non-members.

CONCLUSION: Further research within an equal-access care system is needed to evaluate other important factors such as specialty of surgeon, extent of residual tumor after surgery, chemotherapy treatment, and post-operative management to determine whether these factors are contributing to the differences in survival between African-American and white ovarian cancer patients.

From the Northwest:

Efficacy and tolerability of venlafaxine compared with selective serotonin reuptake inhibitors and other antidepressants: a meta-analysis

Smith D, Dempster C, Glanville J, Freemantle N, Anderson I. *Br J Psychiatry* 2002 May;180:396-404

BACKGROUND: In individual studies and limited meta-analyses venlafaxine has been reported to be more effective than comparator antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs).

AIMS: To perform a systematic review of all such studies.

METHOD: We conducted a systematic review of double-blind, randomised trials comparing venlafaxine with alternative antidepressants in the treatment of depression. The primary outcome was the difference in final depression rating scale value, expressed as a standardised effect size. Secondary outcomes were response rate, remission rate and tolerability.

RESULTS: A total of 32 randomised trials were included. Venlafaxine was more effective than other antidepressants (standardised effect size was -0.14, 95% CI -0.07 to -0.22). A similar significant advantage was found against SSRIs (20 studies) but not tricyclic antidepressants (7 studies).

CONCLUSIONS: Venlafaxine has greater efficacy than SSRIs although there is uncertainty in comparison with other antidepressants. Further studies are required to determine the clinical importance of this finding.

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CLINICAL IMPLICATIONS: This research, which combined data on depression outcomes from 32 randomized trials comparing venlafaxine to other antidepressants, suggests that venlafaxine offers clinically important benefit over other antidepressants, particularly SSRIs. Overall, patients on venlafaxine had a final Hamilton Depression Rating Scale score 1.2 points lower than patients on other antidepressants. While further investigation of these findings in diverse populations is warranted, venlafaxine could be considered in patients failing therapy with other antidepressants. — DS

From the Northwest:

Evaluating primary care behavioral counseling interventions: an evidence-based approach

Whitlock EP, Orleans CT, Pender N, Allan J. Am J Prev Med 2002 May;22(4):267-84

Risky behaviors are a leading cause of preventable morbidity and mortality, yet behavioral counseling interventions to address them are underutilized in health care settings. Research on such interventions has grown steadily, but the systematic review of this research is complicated by wide variations in the organization, content, and delivery of behavioral interventions and the lack of a consistent language and framework to describe these differences. The Counseling and Behavioral Interventions Work Group of the United States Preventive Services Task Force (USPSTF) was convened to address adapting existing USPSTF methods to issues and challenges raised by behavioral counseling intervention topical reviews. The systematic review of behavioral counseling interventions seeks to establish whether such interventions addressing individual behaviors improve health outcomes. Few studies directly address this question, so evidence addressing whether changing individual behavior improves health outcomes and whether behavioral counseling interventions in clinical settings help people change those behaviors must be linked. To illustrate this process, we present two separate analytic frameworks derived from screening topic tools that we developed to guide USPSTF behavioral topic reviews. No simple empirically validated model captures the broad range of intervention components across risk behaviors, but the Five As construct—assess, advise, agree, assist, and arrange—adapted from tobacco cessation interventions in clinical care provides a workable framework to report behavioral counseling intervention review findings. We illustrate the use of this framework with general findings from recent behavioral counseling intervention studies. Readers are referred to the USPSTF (www.aHRQ.gov/clinic/prevenix.htm or 1-800-358-9295) for systematic evidence reviews and USPSTF recom-

mendations based on these reviews for specific behaviors.

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From Southern California:

Relationship of body iron stores to levels of serum ferritin, serum iron, unsaturated iron binding capacity and transferrin saturation in patients with iron storage disease

Beutler E, Felitti V, Ho NJ, Gelbart T. Acta Haematol 2002;107(3):145-9

None of the methods for assessing total body iron burden in patients with hemochromatosis is satisfactory. Although it is commonly believed that a relationship exists between serum ferritin levels and total iron burden, the extent of this relationship has not previously been documented. In the present investigation we measured the total body iron burden of 88 patients with putative hemochromatosis, 54 of whom were homozygotes for the 845G→A (C282Y) mutation. The total body iron stores were estimated from the volume of red cells removed during therapeutic phlebotomy corrected for an estimated 2 mg/day dietary iron absorbed during the phlebotomy period; the amount of storage iron was compared to the serum ferritin, serum iron, unsaturated iron binding capacity, and transferrin saturation before the beginning of phlebotomy. The serum ferritin proved to be the best predictor of body iron stores. The correlation between all of the analytes and the body iron burden was greater in patients homozygous for the C282Y mutation than in those who were not, including the compound heterozygotes for C282Y and H63D. The body iron burden tended to be greater in patients homozygous for the C282Y mutation than the other patients at any other given ferritin level. We conclude that the serum ferritin level does provide some information regarding total iron burden but even in the case of C282Y homozygotes, the correlation is not very strong.

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CLINICAL IMPLICATIONS: Many clinicians believe that there is a close relationship between serum ferritin levels and body iron stores. While this relationship exists, and serum ferritin is the best predictor of total body iron burden, the correlation is weak, especially in patients with iron overload who have no HFE mutations (the gene implicated in hereditary hemochromatosis). Other clinical measurements such as serum iron or transferrin saturation have even less predictive value. There are no robust measurements that accurately predict the size of increased body iron stores. Nonetheless, serum ferritin levels continue to be very useful in the diagnosis of iron deficiency. — EB

From the Southeast and Southern California:

Exposure to abuse, neglect, and household dysfunction among adults who witnessed intimate partner violence as children: implications for health and social services

Dube SR, Anda RF, Felitti VJ, Edwards VJ, Williamson DF. Violence Vict 2002 Feb;17(1):3-17

Intimate partner violence (IPV) damages a woman's physical and mental well-being, and indicates that her children are likely to experience abuse, neglect and other traumatic experiences. Adult HMO members completed a questionnaire about adverse childhood experiences (ACEs) including childhood abuse, neglect, and household dysfunction. We used their responses to retrospectively assess the relationship between witnessing intimate partner violence and experiencing any of the nine ACEs and multiple ACEs (ACE score). Compared to persons who grew up with no domestic violence, the adjusted odds ratio for any individual ACE was approximately two to six times higher if IPV occurred ($p < 0.05$). There was a powerful graded increase in the prevalence of every category of ACE as the frequency of witnessing IPV increased. In addition, the total number of ACEs was increased dramatically for persons who had witnessed IPV during childhood. There was a positive graded risk for self-reported alco-

holism, illicit drug use, iv drug use and depressed affect as the frequency of witnessing IPV increased. Identification of victims of IPV must include screening of their children for abuse, neglect and other types of adverse exposures, as well as recognition that substance abuse and depressed affect are likely consequences of witnessing IPV. Finally, this data strongly suggest that future studies, which focus on the effect of witnessing IPV on long-term health outcomes, may need to take into consideration the co-occurrence of multiple ACEs, which can also affect these outcomes.

From Northern California:
Severity of premenstrual symptoms in a health maintenance organization population

Sternfeld B, Swindle R, Chawla A, Long S, Kennedy S. Obstet Gynecol 2002 Jun;99(6):1014-24

OBJECTIVE: To describe severity of emotional and physical symptoms in a large diverse sample; to examine demographic, health status, and behavioral correlates of symptom severity; and to describe use of medications and

alternative remedies for premenstrual symptoms.

METHODS: A total of 1194 women, ages 21-45, selected from members of a large northern California health maintenance organization, completed daily ratings of symptom severity for two menstrual cycles. An empirically derived algorithm defined symptom severity groups as minimal (n = 186), moderate (n = 801), severe (n = 151), or premenstrual dysphoric disorder (n = 56). Symptom severity as a continuous variable was defined by the two-cycle mean symptom ratings in the luteal phase. Demographic, health status, and behavioral factors and use of treatments for premenstrual symptoms were assessed by self-report.

RESULTS: Luteal phase symptom-specific ratings were generally significantly greater in the premenstrual dysphoric disorder group than in the other groups (p < .001). Symptom severity score increased with each comorbidity and decreased with each year of age. Symptom severity was also inversely associated with oral contraceptive use (emotional symptoms) and better perceived health (physical symptoms). Hispanics reported greater severity of symptoms, and Asians less,

relative to whites. Use of herbal and nutritional supplements for premenstrual symptoms steadily increased from 10.8% in the minimal group to 30.4% in the premenstrual dysphoric disorder group (p < .01).

CONCLUSION: The degree of premenstrual symptom severity varies in the population, is relatively constant within each woman over two consecutive cycles, particularly for emotional symptoms, and is influenced by age, race/ethnicity, and health status.

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CLINICAL IMPLICATIONS: This study suggests that gynecologists should assess the degree of premenstrual symptom severity in their patients since a sizeable proportion of women suffer from moderate to severe symptoms and are at risk for overall poorer health and more comorbidity. Because symptom severity is relatively consistent from one cycle to the next, providers may not need to use prospective symptom reporting over two menstrual cycles for accurate diagnosis. — BS ❖

Learning

Learning is holy, an indispensable form of purification as well as ennoblement.

Rabbi Abraham Heschel, 1907-72, activist and Professor of Jewish Ethics and Mysticism