Permanente Abstracts

Characteristics of Patients with Asthma Within a Large HMO: A Comparison by Age and Gender

Osborne ML; Vollmer WM; Linton KL; Buist AS. Am J Respir Crit Care Med 1998 Jan;157(1):123-8.

Adequate information about characteristics of asthmatic patients in large health maintenance organizations (HMOs) is still lacking. As part of an ongoing longitudinal study, baseline data were collected on 914 individuals aged 3 to 55 years with physician-diagnosed asthma within a large HMO, Kaiser Permanente, NW Region. There were no significant differences between men and women in post-bronchodilator FEVI when expressed as percent (%) predicted yet women with asthma reported more daytime and nocturnal symptoms than men ($p = 0.002$), and worse quality of life in all but three of 14 subscales in two asthma quality of life instruments. Specifically, women in the 35-55 yr. age group uniformly reported worse physical functioning on the SF-36 quality-of-life scale (71 ± 23 versus 85 ± 18; $P = 0.001$), social functioning (73 ± 21 versus 77 ± 20; $p = 0.016$), and bodily pain (63 ± 27 versus 72 ± 24; $p < 0.001$). Also these women reported use of more health care ($p = 0.002$) and more medications for asthma than men ($p < 0.01$). Our data suggest that men and women respond differently to their asthma, and observed gender differences in various measures of asthma such as hospital admissions, quality of life, and use of metered dose inhalers (MDIs) may be related to this difference in response to disease, rather than to real differences in the disease between men and women. Understanding gender-related differences in response to a chronic disease such as asthma is important in tailoring an education and management plan to each individual patient.

Managed Care and School-Based Health Centers. Use of Health Services

Kaplan DW; Calonge BN; Guernsey BP; Hanrahan MB. Arch Pediatr Adolesc Med 1998 Jan;152(1):25-33.

Objective: To explore the use of physical and mental health services for adolescents who are enrolled in managed care and have access to a school-based health center (SBHC), compared with adolescents enrolled in managed care without access to an SBHC.

Design: Retrospective cohort designed with age, sex, and socioeconomic status matching to compare the use of health services for adolescent members of Kaiser Permanente of Colorado (who had access to SBHCs) with those with no access.

Participants: The study included 342 adolescents, resulting in 3,394 visits that occurred during three academic years. During the study, 240 adolescents with access to an SBHC were compared with 116 adolescents without access to an SBHC.

Main Outcome Measures: The use of primary and subspecialty medical, mental health, and substance abuse treatment services; the use of after-hours (emergent or urgent) care; and comprehensive preventive health supervision visits and documentation of screening for high-risk health behaviors.

Results: Adolescents with access to SBHCs were more than ten times more likely to make a mental health or substance abuse visit (98% of these visits were made at the SBHC) ($P < .001$). Adolescents with SBHC access had an after-hours (emergent or urgent) care visit rate of 0.33 to 0.52 visits per year less (35%-55% fewer visits) than adolescents without SBHC access, and, overall, made almost one additional medical visit per year. A greater percentage, 80.2%, of adolescents with access to SBHCs had at least one comprehensive health supervision visit compared with 68.8% of adolescents without access ($P = .04$). In addition, the adolescents with access were screened for high-risk behaviors at a higher rate.

Conclusions: School-based health centers seem to have a synergistic effect for adolescents enrolled in managed care in providing comprehensive health supervision and primary health and mental health care and in reducing after-hours (emergent or urgent) visits. School-based health centers are particularly successful in improving access to and treatment for mental health problems and substance abuse.

Diet Diversity, Diet composition, and Risk of Colon Cancer (United States)

Slattery ML; Berry TD; Potter J; Caan B. Cancer Causes Control 1997 Nov;8(6):872-82.

In this study, we evaluate diet diversity, diet composition, and risk of colon cancer in an incident population-based study of 1,993 cases and 2,410 controls in the Kaiser Permanente Medical Care Program of Northern California, eight counties in Utah, and the Twin Cities area of Minnesota. Ethnically, 91.5% of the population was non-Hispanic white. Dietary intake was obtained using an adaptation of the CARDIA diet-history questionnaire. Diet diversity was defined as the number of unique food items reported; diversity also was explored within six major food groups. Composition of the diet was described by estimating the proportion of total number of food items contributed by major food groups. Younger individuals, higher education individuals, and those who lived in larger households reported eating the most diverse diet. Total diet diversity was

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not associated with colon cancer. However, eating a diet with greater diversity of meats, poultry, fish, and eggs, was associated with a 50% increase in risk among all men (95% confidence interval [CI] = 1.1-2.0; P trend = 0.01), with slightly stronger associations for younger men and men with distal tumors. A diet with a greater number of refined grain products also was associated with increased risk among men (odds ratio [OR] = 1.7, CI = 1.3-2.3). Women who ate a diet with a more diverse pattern of vegetables were at approximately a 20 percent lower risk than women who had the least diverse diet in vegetables. Assessment of diet composition showed that men who consumed a large proportion of their food from meat, fish, poultry, and eggs were at an increased risk, with the most marked association being for distal tumors (OR - 1.7, CI = 1.2-2.5). Women who consumed the largest percentage of their food items in the form of plant foods (fruits, vegetables, or whole grains) were at a reduced risk of developing colon cancer (OR = 0.7, CI = 0.5-1.0).

"Women who ate a diet with a more diverse pattern of vegetables were at approximately a 20 percent lower risk than women who had the least diverse diet in vegetables."

Ischemic Stroke and Use of Estrogen and Estrogen/Progestogen as Hormone Replacement Therapy

Petitti DB; Sidney S; Quesenberrry CP Jr; Bernstein A. Stroke 1998 Jan;29(1):23-8.

Background and Purpose: Information about the risk of stroke in current postmenopausal hormone users is limited.

Methods: In this case-control study, women aged 45 to 74 years hospitalized with a fatal or nonfatal stroke in any of ten Northern California Kaiser Permanente facilities during the period November 1991 to November 1994 were identified as cases. Controls were selected at random from female Health Plan members. Data regarding use of estrogen plus progestogen or estrogen alone were obtained in interviews.

Results: The analysis was based on nonproxy responses from 349 cases of ischemic stroke and 349 matched control subjects. After adjustment for confounders, the odds ratio for ischemic stroke in current hormone users was 1.03 (95% confidence interval, 0.65 - 1.65). The odds ratios for ischemic stroke in current hormone users showed no clear trend of increasing or decreasing risk in relation to duration of hormone use. The odds ratio for ischemic stroke in past hormone users was 0.84 (95% confidence interval, 0.54 - 1.32).

Conclusions: In this study postmenopausal hormone use was not associated with an increase or decrease in the risk of ischemic stroke, a finding that is consistent with the body of literature on this topic.

"In this study postmenopausal hormone use was not associated with an increase or decrease in the risk of ischemic stroke ... "

Beta-Blocker Dosages and Mortality After Myocardial Infarction: Data from a Large Health Maintenance Organization

Barron HV; Viskin S; Lundstrom RJ; Swain BE; Truman AF; Wong CC; Selby JV. Arch Intern Med 1998 Mar 9;158(5):449-53.

Background: Although long-term beta-blocker therapy has been found beneficial in patients after an acute myocardial infarction, these drugs are greatly underused by clinicians. Moreover, the dosages of beta-blockers used in randomized controlled trials appear to be much larger than those routinely prescribed.

Objective: To determine whether an association exists between the dosage of beta-blockers prescribed after a myocardial infarction and cardiac mortality.

Methods: We performed a retrospective cohort study of 1,165 patients who survived an acute myocardial infarction from January 1, 1990 through December 31, 1992. These patients represent a subgroup of the 6,851 patients hospitalized at Northern California Kaiser Permanente hospitals.

Results: Of the 37.7% of patients prescribed beta-blocker therapy, 48.1% were treated with dosages less than 50% of the randomized clinical trials (lower-dosage therapy). Compared with patients not receiving beta-blockers, those treated with lower-dosage therapy appeared to have a greater reduction in cardiovascular mortality (hazard ratio, 0.33; P = .009) than patients treated with a higher dosage (hazard ratio, 0.82; P = 0.51) after adjustment for age, sex, race, disease severity, and comorbidities.

Conclusions: The dosages of beta-blockers shown to be effective in randomized trials are not commonly used in clinical practice, and treatment with lower dosages of beta-blockers was associated with at least as great a reduction in mortality as treatment with higher dosages. This suggests that physicians who are reluctant to prescribe beta-blockers because of the relatively large dosages used in the large prospective clinical trials should be encouraged to prescribe smaller dosages.

Cigarette Smoking and Risk of Non-Hodgkin's Lymphoma Subtypes

Herrinton LJ; Friedman GD. Cancer Epidemiol Biomarkers Prev 1998 Jan;7(1):25-8.

We examined the hypothesis that cigarette smoking increases the risk of non-Hodgkin's lymphoma (NHL) subtypes in a cohort of approximately 253,000 members of the Kaiser Permanente Medical Care Program, ages 16-84 years, who completed a self-administered questionnaire during the period 1964-1991 that ascertained smoking history. Using infor-

mation from the Surveillance, Epidemiology, and End Results cancer registry that operates in the area and the Kaiser Permanente cancer registry, we identified 674 incident cases of NHL through 1993. We observed a positive association between smoking and risk of follicular lymphoma (compared with nonsmokers: former smokers, relative risk = 1.9 with 95% confidence interval = 1.2-2.9; current smokers, relative risk = 1.4 with 95% confidence interval = 0.9-2.2), although the strength of the association did not increase consistently with increasing duration and intensity of smoking. We observed no relationship between smoking status and the risks of small cell lymphocytic, diffuse, or high-grade lymphoma, nor was smoking related to the risk of all histological types of NHL combined. These results give limited evidence for a relationship between smoking and the risk of follicular lymphoma.

Satisfaction, Managed Ethics, and the Duty to Design

Feldstein BD; Ogle R. HEC Form 1997;9(4):333-54.

Health care ethics committee (HEC) members and health care professionals at all levels are facing a crisis in ethics as a result of the pervasive organizational, economic, scientific, and technological changes in medicine and health care. Our current approach to medical ethics does not effectively address the fundamental challenge this crisis poses: to provide ethically principled care to the satisfaction of all stakeholders. In this paper, we present a new approach that extends the scope and understanding of ethics by building links between the disciplines of ethics, management, and design. We call such an approach Managed Ethics and Design. After outlining the main tenets of this approach, we illustrate its application with a design-based quality improvement project at the Kaiser Permanente Medical Center, Santa Clara, California, that successfully enhanced delivery of thrombolytic drugs to treat patients arriving with acute myocardial infarction. We conclude that in order to provide and ensure ethically principled care to the satisfaction of all stakeholders, we have a duty to design, improve, create, and innovate new practices, processes, standards, and understandings of health care. Good design can lead to new possibilities that will enable us to achieve higher, rather than lower, ethical standards. In the current era of organizational medicine and managed care, the duty to design is an inescapable moral imperative. ❖

" ... in order to provide and ensure ethically principled care to the satisfaction of all stakeholders, we have a duty to design, improve, create, and innovate new practices, processes, standards, and understandings of health care."

Problem or Solution

"If you give physicians a problem, they'll find a solution;
if you give physicians a solution, they'll find a problem."

Thomas McInerey, MD
Successful Guideline Implementation in an IPA
American Association of Health Plans Conference, June 1998