

Letters to the Editor

Letters to the Editor are welcomed and will be published, if found suitable, as space permits. Submission of a Letter to the Editor constitutes permission for its publication in the Journal. Letters should not duplicate similar material being submitted or published elsewhere. Letters referring to a recent Journal article should be received within three months of the article's publication. The editors reserve the right to edit and abridge letters, to publish replies, and to solicit responses from authors and others.

Letters should be submitted in duplicate, double-spaced (including references), and should not exceed 400 words.

A Note from the Tobacco Industry

While Sprafka, et al, 1 failed to acknowledge it, explicitly, their Twin Cities data reconfirm a discordancy in the case against cigarettes. Premature mortality from CHD and stroke is higher among Blacks, as it is nationally, 2 but per capita cigarette consumption (prevalence times quantity smoked per smoker) is lower, as it also is nationally.3

REFERENCES

- Sprafka MJ, Folsom AR, Burke GL, Edlavitch SA: Prevalence of cardiovascular disease risk factors in blacks and whites: The Minnesota heart survey. American J Public Health 1988; 78:12,1546-1549.
- Vital Statistics. Mortality Reports. US Vital Statistics: Washington DC, 1900–1985.
- US Dept Health Human Services: The Health Consequences of Smoking, Cancer and Chronic Lung Disease in the Workplace. A Report of the Surgeon General. DHHS (PHS) 85-50207. Rockville, MD: DHHS, 1985.

Rebecca C. Gantt Research Specialist Jetson E. Lincoln Retired Vice President Strategic Research

Philip Morris Management Corp, 120 Park Avenue, New York, NY 10017

© 1989 American Journal of Public Health

Response from Professor Sprafka

An example of multifactorial thinking from the tobacco industry.

J. Michael Sprafka, MPH, PhD Assistant Professor, Division of Epidemiology, School of Public Health, University of Minnesota, Stadium Gate 27, 611 Beacon Street, SE, Minneapolis, MN 55455.

© 1989 American Journal of Public Health

Determinants of Stopping Smoking: Italian National Health Survey

We have applied an approach similar to that of Kabat and Wynder¹ to the 1986-87 Italian National Health Survey,² conducted by the Central Institute of Statistics, based on a sample of 30,096 males and 32,176 females aged 15 or over, randomly selected within strata of geographical area, size of the place of residence and of the household in order to be representative of the general Italian population.

Among 16,033 males ever smokers, 3,717 were ex-smokers for at least one year, a quit rate of 23.2 percent; the comparable figure for females was 11.9 percent (753/6,340). In males, "quit rates" were directly and linearly related to age, ranging from 1.3 percent at ages 15–24 to 59.5 percent at ages 75 or over. In females, a clear trend of increasing "quit rates" with age was evident only above age 55.

After standardization for age. "quit rates" in both sexes were directly related to education. When a measure of social class based on the subjects' occupation was used, stopping smoking was directly associated with higher social class for females, but not for males. In both sexes, cessation of smoking was more common in Northern (richer) areas of the country, and positively associated with the prevalence of smokingrelated chronic diseases. Smoking cessation rates were somewhat lower among separated or divorced individuals, but absolute numbers were too small to permit any meaningful inference.

Quit rates were lower among those smoking less than 25 cigarettes/day (20.9 percent), than among heavier smokers (27.8 percent).

Ex-smokers gave a number of reasons for stopping smoking: the most frequent (49 percent of ex-smokers)

was having one or more smoking-related health diseases or complaints, followed by knowledge of the health consequences of smoking (38 percent). Only 1 percent gave the cost of smoking as a reason, and 12 percent listed a variety of other reasons.

These data reflect the limited knowledge of smoking-related risks and the low prices of cigarettes in Italy.³ The low cessation rates as compared with other developed countries (particularly among females),4-7 is discouraging. Further, this study confirms the results from a previous Italian National Health Survey. 8 Females, less educated individuals of both sexes, particularly from the less developed areas of the country, are a major target for future interventions against smoking, although it should be noted that in this study no material difference in "quit rates" emerged among males when occupation was used as an indicator of social class.

REFERENCES

- Kabat GC, Wynder EL: Determinants of quitting smoking. Am J Public Health 1987; 77:1301-1305.
- ISTAT (Istituto Centrale di Statistica): Indagine sulle condizioni di salute della popolazione e sul ricorso ai servizi sanitari. Novembre 1986– Aprile 1987. Primi risultati. Notiziario ISTAT 1987; 8:n. 17.
- La Vecchia C, Garattini S: Attitudes to legislation on restriction of smoking. Lancet 1987; 1:1310.
- La Vecchia C, Decarli A, Pagano R: Education and prevalence of smoking in Italian men and women. Int J Epidemiol 1986; 15:279.
- Office of Population Censuses and Surveys: Cigarette smoking 1972 to 1982. OPCS Monitor July 5, 1983
- Remington PL, Forman MR, Gentry EM, Marks JS, Hogelin GL, Trowbridge FL: Current smoking trends in the United States. The 1981-1983 behavioral risk factor surveys. JAMA 1985: 253:2975-2978.
- Pierce JP, Aldrich RN, Hanratty S, Dwyer T, Hill D: Uptake and quitting smoking trends in Australia 1974-1984. Prev Med 1987; 16:252-260.
- Negri E, Pagano R, La Vecchia C: Determinants of stopping cigarette smoking in Italy. Rev Epidemiol Sante Publique (in press).

Eva Negri, ScD Carlo La Vecchia, MD

Mario Negri Institute for Pharmacological Research, Via Eritrea, 62-20157 Milan, Italy

Monica Ferraroni, PhD Institute of Medical Statistics, University of Milan, Via Venezian 1-20133 Milan, Italy

Romano Pagano, PhD ISTAT (Central Institute of Statistics) 00100 Rome, Italy

© 1989 American Journal of Public Health

A Contrasting View on Rheumatoid Arthritis

A recent report by Drs. Meenan, Kazis, and Anderson suggests that rheumatoid arthritis is generally stable over five years, and that differences in morbidity are not associated with formal education level. These conclusions differ from most other reports of this disease over five years or longer, which indicate severe functional declines, 2 radiographic progression,³ substantial work disability,4 and increased mortality rates,5 and that formal education level is associated with clinical status,⁶ morbidity,⁷ and mortality.⁷ While these differences were cited by the authors, the implications for health policy toward rheumatoid arthritis appears to indicate further discussion.

The differences may be explained in part on two bases: differences in the questionnaires used; patient selection. Data provided by the Guttman scales for global items in the AIMS (Arthritis Impact Measurement Scales) question-naire of Meenan, et al, may differ from data provided by graded responses for specific activities of daily living in the Health Assessment Questionnaire (HAQ)9 or its modified version.10 All studies using the HAQ over extended periods indicate progression of the disease. A recent analysis 11 indicated significant progression at all intervals over 17 years according to the HAQ, but no change in the same patients according to AIMS scales. However, the AIMS is responsive in clinical trials, 12 and patient selection may be the most important explanation for the observed differences.

Two selection biases may explain in part the observed absence of morbidity over five years:

- 49 percent of the initial study group patients were part of a clinical trial¹ in which patients are selected for milder disease¹³;
- the baseline AIMS questionnaire was completed after a "wash-out" period, which required exacerbation for entry.

Two additional selection biases may explain in part the absence of

observed associations between morbidity and formal education level:

- 27 percent of the baseline group did not complete the second questionnaire five years later, and patients who died or were lost to follow-up were significantly more likely to have lower formal education levels;
- completion of the AIMS questionnaire five years apart involves important selection, as questionnaires simpler than the AIMS are completed by only about 75 percent of non-highschool graduates, 14 who are at highest risk group for severe morbidity and increased mortality rates in rheumatoid arthritis. 6.7

Dr. Meenan, we, and others have reported that more than 50 percent of rheumatoid arthritis patients become work-disabled^{2,14,15} with longer disease duration, inconsistent with a stable process. Some patients have a mild course, but most have a progressive disease.^{2-7,11,13} Therefore, we agree strongly with the suggestion of Meenan, et al, that earlier aggressive interventions might be appropriate in rheumatoid arthritis.

REFERENCES

- Meenan RF, Kazis LE, Anderson JJ: The stability of health status in rheumatoid arthritis: A five-year study of patients with established disease. Am J Public Health 1988; 78:1484-1487.
- Pincus T, Callahan LF, Sale WG, Brooks AL, Payne LE, Vaughn WE: Severe functional declines, work disability, and increased mortality in seventy-five rheumatoid arthritis patients studied over nine years. Arthritis Rheum 1984; 27:864-872.
- Scott DL, Coulton BL, Symmons DPM, Popert AJ: Long-term outcome of treating rheumatoid arthritis: Results after 20 years. Lancet 1987; 2:1108-1111.
- Yelin EH, Meenan RF, Nevitt M, Epstein WV: Work disability in rheumatoid arthritis: Effects of disease, social, and work factors. Ann Intern Med 1980; 93:551-556.
- Pincus T, Callahan LF, Vaughn WK: Questionnaire, walking time and button test measures of functional capacity as predictive markers for mortality in rheumatoid arthritis. J Rheumatol 1987; 14:240-251.
- Callahan LF, Pincus T: Formal education level as a significant marker of clinical status in rheumatoid arthritis. Arthritis Rheum 1988; 31:1346-1357.
- Pincus T, Callahan LF: Formal education as a marker for increased mortality and morbidity in rheumatoid arthritis. J Chronic Dis 1985; 38:973-984.
- Meenan RF, Gertman PM, Mason JH: Measuring health status in arthritis: The Arthritis Impact Measurement Scales. Arthritis Rheum 1980; 23:146-152.
- Fries JF, Spitz P, Kraines RG, Holman HR: Measurement of patient outcome in arthritis. Arthritis Rheum 1980; 23:137-145.
- Pincus T, Summey JA, Soraci SA Jr, Hummon NP, Wallston KA: Assessment of patient satisfaction in activities of daily living using a

- modified Stanford Health Assessment Questionnaire. Arthritis Rheum 1983; 26:1346-1353.
- 11. Wolfe F, Hawley DJ, Cathey MA: Health status measures over time: Serial assessments in 442 RA patients. (Abstract) Arthritis Rheum 1989; (in press).
- Meenan RF, Anderson JJ, Kazis LE, et al: Outcome assessment in clinical trials: Evidence for the sensitivity of a health status measure. Arthritis Rheum 1984; 27:1344-1352.
- Pincus T: Rheumatoid arthritis: Disappointing long-term outcomes despite successful shortterm clinical trials. J Clin Epidemiol 1988; 41:1037-1041.
- 14. Callahan LF, Brooks RH, Summey JA, Pincus T: Quantitative pain assessment for routine care of rheumatoid arthritis patients, using a pain scale based on activities of daily living and a visual analog pain scale. Arthritis Rheum 1987; 30:630-636.
- Meenan RF, Yelin EH, Nevitt M, Epstein WV: The impact of chronic disease: A sociomedical profile of rheumatoid arthritis. Arthritis Rheum 1981; 24:544-549.

Leigh F. Callahan, BS Theodore Pincus, MD

Division of Rheumatology and Immunology, Vanderbilt University School of Medicine, Nashville, TN 37232

Frederick Wolfe, MD Wichita Arthritis Center, University of Kansas School of Medicine, Wichita, KS 67214

© 1989 American Journal of Public Health

Laws Regulating Tattooing

The spread of disease to the public during the process of tattooing is a very real threat. To ensure that tattoo artists and tattooing studios maintain a high level of hygiene, each state must enact legislation to regulate them.

An article recently published in a small legal journal presents the results of a survey of the current laws regulating tattooing in all 50 states. ¹ It also evaluates the court's interpretation of these statutes and the challenges to these laws based on whether such regulation by the states is constitutional and suggests model legislation to prevent the spread of disease from tattooing.

There are currently three states (MS, OK, SC) that ban tattooing at the state level and 16 states (AK, AR, CT, FL, HI, IL, IN, ME, MA, NH, NC, PA, TN, TX, VT, WA) that have some form of regulation of tattooing. The remaining 31 states and the District of Columbia do not regulate tattooing.

When a state does regulate tattooing, the regulation takes the form of:

- requiring the licensing of the tattoo studio (AR, HI, ME, NH, WA);
- requiring the licensing of the artist (AR, HI, ME);
- permitting only persons licensed to practice medicine or dentistry in the