

SOCIETY OF ACTUARIES

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THE SKANDIA INTERNATIONAL SYMPOSIA VOLUMES, 1967-1976

by Courtland C. Smith

David Garrick Halmstad was a very bright and special person who had the happy faculty of making his friends and associates feel valued just for being themselves. Before his recent death from a brain tumor, David gave us ten volumes from the Skandia Insurance Group's International Symposia on various medical impairments, with the simple request that we publicize them in *The Actuary* and then file them to permit ready accessibility. As ever with David, his manner was casual but his message compyed a small treasure.

While most of the material in these volumes describes recent studies in the anatomy, physiology and related aspects of various physical and behavioral impairments which are of technical interest to life insurance medical directors, virtually every volume includes some papers on epidemiology and statistics that may be of interest to actuaries and concerned citizens generally. For example, the fourth volume, entitled Alcoholic Cirrhosis and Other Toxic Hepatopathias (Stockholm, 1970), includes information on alcohol consumption that is at least food—or if you prefer "drink"—for thought.

In the U.S. we tend to try to resolve social problems with legislation and then to offset any counter-productive effects with further legislation, and sometimes with outright repeal. We rarely study a problem or test a proposed solution on a limited scale first; therefore, we have no real consensus on the proper and most efficacious role of legislation in producing social change. Perhaps this is there we must pay for having lawyers room than scientists, physicians, engincers and/or businessmen predominate in

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Halmstad Prize

David Garrick Halmstad died in February of this year at the age of thirty-nine.

The loss of one who had contributed so much to our profession in his brief span and whose promise for the future was even greater has moved a number of David's friends to attempt to extend the significance of his life beyond its untimely end. It is proposed to accomplish this by the annual award of a prize bearing his name as a memorial.

Since David's interests and accomplishments were most noteworthy in the area of research, it is proposed that the Research Committee of the Society of Actuaries screen the work in this field each year and submit the results of their screening to a Selection Committee consisting of the chairmen of the Society of Actuaries' Committees on Research, Computer Science, and Theory of Risk, and a representative of the Casualty Actuarial Society. This Committee would choose the recipient of the award.

It is expected that the wherewithal to pay the award would be obtained from the income of a fund to be built up from contributions by those who would like to join in this memorial. The Actuaries' Club of New York, whose programs over the years have benefitted so greatly from David's work, has made the initial contribution of \$200. The Society of Actuaries has agreed to receive the checks sent in by contributors. It is proposed that ultimately the accumulated contributions will be administered by the Actuarial Education and Research Fund. All wishing to join in this memorial should send their checks to the Society of Actuaries, indicating they are for the David Garrick Halmstad Memorial Fund. Such checks payable to the Society of Actuaries are deductible on U.S. Federal Income Taxes. П

THE INTERNATIONAL ACTUARIAL NOTATION

by Frank P. Di Paolo

In an article on the same subject, in the March 1976 issue of *The Actuary*, it was reported that the Sub-Committee on Notation of the International Actuarial Association had circulated a questionnaire among the various national organizations to sound out public opinion on the issue of linearization and expansion of the International Actuarial Notation.

In the same article, it was pointed out that the Committee on Standard Notation and Nomenclature of the Society had replied to the questionnaire saying "NO" to linearization and "YES" to expansion.

During the course of the XX International Congress of Actuaries, a Special Meeting on the International Actuarial Notation was held on October 30, 1976 which was chaired by Prof. J. J. Engelfriet of the Netherlands.

At the beginning of the Special Meeting, the Chairman released the replies to the questionnaire on the International Actuarial Notation submitted by 14 national organizations.

The 14 national organizations included Argentina, Austria, Belgium, Finland, Germany, Great Britain, Israel, Italy, The Netherlands, New Zealand, The Society of Actuaries, The Casualty Actuarial Society, Sweden and Switzerland. Practically all national organizations replied "YES" to the questions dealing with expansion of the actuarial notation. Two organizations (The Society of Actuaries and Austria) opposed the introduction of the linearized notation. Six organizations (Argentina, Belgium, Great Britain, The Netherlands, New Zealand and Switzerland) favoured the introduction of a linearized notation as an alter-

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Symposia Volumes

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our legislative assemblies. In any event, it is interesting — and perhaps surprising — to learn that selective regulation of alcohol distribution has actually proven to be effective in reducing cirrhosis mortality within certain cultural contexts.

In his opening address to the Symposium on Alcoholic Cirrhosis, P. G. Gyllenhammar, president of the Skandia Group, pointed out that until October 1, 1955, "the sale of hard liquor, wine and stronger beer in Sweden was rationed and registered. When this legislation was discontinued in 1955, there was an immediate increase in the consumption of (pure) alcohol . . . from 1954, 3.7 litres to 1965, 4.5 litres per head and year. The increase is most obvious among young people and women. Morbidity and mortality from cirrhosis of the liver and other alcohol-induced diseases have risen."

In "The Epidemiology of Cirrhosis of the Liver," G. A. Martini and Ch. Bode state that death rates from cirrhosis dropped impressively "during both world wars in Paris when the per capita wine ration was drastically reduced by authority to one half of one litre per week . . . It dropped from 35:100,000 in 1941 to 6:100,000 in 1947.. (But in) the following 10 years when wine became freely available . . . the cirrhosis death rate increased again to its former high level." Noting that these figures might have been influenced by other factors during the war period, e.g., shifts in population, age grouping, nutritional factors, etc., the authors go on to point out that the war period saw a rise in the total mortality rate and in the cardiovascular mortality rate despite the drop in cirrhosis mortality. Since alcoholic cirrhosis takes 20 years to develop, "The immediate decrease of death rates from cirrhosis during the war in Paris certainly cannot be explained by less cirrhosis morbidity, but by stopping the acute complications of alcoholism (e.g., infections, delirium, intoxications, accidents, etc.)"

"A similar trend," the authors note, "has been seen in the United States and England. In the United States the cirrhosis death rate lay between 13 and 15:100,000 from 1900 to 1914, then fell to 7:100,000 during the war time ... (and) post-war prohibition period and remained so low until 1933. When prohibition was loosened in 1933 a steady increase can be noticed . . . In 1958 it reached 11.5 and went up to 12.1 in 1964."

In England, there was "... a steady decrease in both per capita alcohol consumption and cirrhosis death rate from 14:100,000 in 1900 to a low level of 2:100,000 in 1945 ... However, the post-war increase is very slow and it appears that rationing of alcohol consumption by high taxes and restriction of hours of sale for alcoholic beverages is an efficient tool to prevent cirrhosis. Even in 1965 the cirrhosis death rate for England and Wales was as low as 2.9:100,-000." This is one of the lowest national rates in the world.

Evidently selective regulation has proven tolerable and effective in England. It seems that England's experience is unusual in one further respect. "It has become the privilege of the upper class to die from cirrhosis and Oscar Wilde's saying that 'work is the curse of the drinking classes' is no longer true for England." In most other countries with reliable statistics on cirrhosis mortality by sociocconomic level, Wilde's dictum seems still to apply. Unfortunately no figures are presented to compare the level of cirrhosis mortality among the upper classes in England with the level elsewhere.

Variations in alcohol consumption and cirrhosis mortality are graphed and discussed by country, region, year, age group, sex, specific pathological findings, etc., in the Martini and Bode article, and also for some of these variables in "Wine and Cirrhosis" by S. Moeschlin and P. Righetti. As always in reading scientific material, it is advisable to begin with the abstract or Summary and Conclusions and the graphs and tables in order to determine which are the key findings and what, if any, content seems worthwhile to pursue in the text.

I believe we owe the Skandia Group a debt of gratitude for assembling the material in the International Symposia Volumes, which by the way are nearly all in English. To David Halmstad we owe a belated vote of thanks for bringing the volumes to our notice.

Until final arrangements have been made for a permanent home for the Skandia.Symposia Volumes and similar

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Issue 1976.2

This issue is the Proceedings of the Ann Arbor Actuarial Conference held in September 1976.

Introduction to Clustering, John A. Hartigan

Methods of Discriminations with Applications, Robert V. Hogg

Underwriting Individual Disability Income Insurance with Discriminant Analysis, Carol C. Shall and Mark L. Shall

Predicting Policyholder Behavior by Discriminant Analysis, Richard Ziock

An Econometric Model of Worker's Compensation, Jan Lommele

Pedoe Analysis Using Multivariate Statistics, Joseph Brzezinski

Canonical Correlation Applied to Life Insurance Market Research, Robert G. Miller

Analysis of Insurance Data using A.I.D. and Multiple Classification Analysis to Insurance Data, Frank M. Andrews

Overview of the Ann Arbor Conference, James C. Hickman

Subscriptions may be sent to Donald A. Jones, Ann Arbor Actuaries Inc., 321 South Main Street, Ann Arbor, Michigan 48104.

medical reference material, please contact Dr. Richard B. Singer at New England Mutual or me at Cologne Life Re if you wish to see one of the volumes. Some additional sets may be available from the Skandia in Stockholm. A full list is given below of the Symposia Volumes in our possession currently:

Stroke, Stockholm, 1967

Cancer and Aging, Stockholm, 1968

- Aging of Connective and Skeletal Tissue, Stockholm, 1969
- Alcoholic Cirrhosis and Other Toxic Hepatopathias, Stockholm, 1970
- Regional Enteritis (Crohn's Disease), Stockholm, 1971
- Suicide and Attempted Suicide, Stockholm, 1972
- Early Phases of Coronary Heart Diseases: The Possibility of Prediction, Stockholm, 1973

Rehabilitation After Central Nervous System Trauma, Stockholm, 1974

Drug Dependence — Treatment and Treatment Evaluation, Stockholm, 1975

Health Control in Detection of Cancer, Stockholm, 1976.

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