

THE DEMOGRAPHIC VIEWPOINT IN THE VITAL AND HEALTH
STATISTICS MONOGRAPHS OF THE AMERICAN
PUBLIC HEALTH ASSOCIATION

MORTIMER SPIEGELMAN*

RESUMEN

El plan incluye monografías sobre 16 tópicos específicos y un volumen revisado. Los tópicos específicos incluyen una monografía sobre fecundidad, y otra sobre matrimonio y divorcio, y una sobre factores sociales y económicos en la mortalidad, todos los cuales son de obvio interés demográfico. El núcleo de desarrollo de las monografías que tratan de tópicos de enfermedades y accidentes, homicidio y suicidio, es un programa de tabulación que implica tasas específicas de mortalidad y edad ajustada basadas en las muertes en los E. Unidos para el período de tres años 1959-61 y el censo de población de 1960. El programa pide una serie de tabulaciones standard comunes a cada monografía y también una serie de tabulaciones especiales diseñadas para encontrar necesidades particulares para cada tópico como está especificado por sus autores. Esta riqueza de detalles demográficos relativos a la mortalidad en los Estados Unidos durante 1959-61 llena solamente un aspecto de su cuadro de salud. Para completar este cuadro de salud, se ha hecho uso del gran volumen de datos de morbilidad proporcionados por la Entrevista Nacional de Salud y el Examen de Estudios (surveys) y una amplia variedad de otros estudios especializados. En todos estos casos los resultados son invariablemente descritos en términos de características demográficas de edad y sexo, y frecuentemente en términos de variables socioeconómicas tales como educación, ingreso, status de trabajo y clase ocupacional.

Una gran parte del contenido de la monografía sobre factores sociales y económicos en la mortalidad serán obtenidos en los resultados disponibles del estudio del censo de certificados de muertes de 1960 llevado a cabo en la Universidad de Chicago. Una importante característica de esta monografía, no contenida en el estudio de Chicago, es un análisis de regresión y correlación de la mortalidad total en 202 áreas estadísticas metropolitanas en relación a un gran número de factores sociales, económicos y climáticos. Entre los aspectos sobresalientes en la monografía sobre fecundidad están los capítulos sobre características médicas y biológicas de nacimientos, fecundidad y planeación familiar y un análisis de las tendencias de fecundidad de las cohortes. La monografía sobre matrimonio y divorcio hará uso de tabulaciones detalladas del censo de 1960 sobre estado civil en relación a la educación, raza, linaje, ganancias y otras clasificaciones de los individuos y del marido y la esposa en parejas de casados. Contendrá también un estudio comparativo (matching study) de registro de divorcios en ciertos Estados para un período corto antes del censo de 1960 con el retorno en el censo. El proyecto está apoyado por una subvención de la Publicación del Servicio de Salud Pública de los Estados Unidos editada por la Imprenta de la Universidad de Harvard (CH 00075; formerly RG 08262).

SUMMARY

The plan calls for monographs on 16 specific topics and a review volume. The specific topics include a monograph on fertility, another on marriage and divorce, and one on social and economic factors in mortality, all of which are of obvious demographic interest. The core of the development of the monographs dealing with the disease topics, and accidents, homicide, and suicide, is a tabulation program involving specific and age-adjusted death rates based upon the deaths in the United States for the three year period 1959-61 and the 1960 census of population. The program called for a set of standard tabulations common to each monograph and also a set of special tabulations tailored to meet the particular needs for each topic as specified by its authors. This wealth of demographic detail regarding mortality in the United States during 1959-61 fills only one aspect of its health picture. To fill out the health picture, use is being made of the great volume of morbidity data out of the National Health Interview and Examination Surveys and a wide variety of other specialized surveys. In all of these, the findings are invariably described in terms of the demographic characteristics of age and sex, and frequently in terms of such social-economic variables as education, income, work status, and occupational class.

A large part of the content of the monograph on social and economic factors in mortality will

* Metropolitan Life Insurance Company; Chairman, Committee on Vital and Health Statistics Monographs, Statistics Section, APHA;

presented before the Population Association of America, New York City, April 29, 1966.

come out of available results of the 1960 census-death certificate matching study at the University of Chicago. One important feature of this monograph, not contained in the Chicago study, is a regression and correlation analysis of total mortality in 202 Standard Metropolitan Statistical Areas in relation to a large number of social, economic, and climatic factors. Among the features in the monograph on fertility are chapters on the medical and biological characteristics of births, fecundity and family planning, and an analysis of cohort fertility trends. The monograph on marriage and divorce will make use of the detailed tabulations from the 1960 census on marital status in relation to education, race, parentage, earnings and other classifications of individuals and of husband and wife in married couples. It will also contain a matching study of divorce records in certain states for a short period before the census of 1960 with the returns in the census. The project is supported by a grant from the United States Public Health Service (CH 00075; formerly RG 08262). Publication will be by the Harvard University Press.

The background to this undertaking is described in a paper presented at the Annual Conference of the Milbank Memorial Fund in 1962.¹ Its purpose is contained in these words:

Using the opportunity provided by the 1960 census of population for a close examination of current vital and health statistics, the purpose of this proposal is to produce a series of monographs based on specific and general topics which will not only present analysis of these current findings but also discuss and bring into evidence whatever data from local surveys or clinical experience, in this country or elsewhere, are pertinent.

The project was started in 1958, and support in its formative years was received from the Rockefeller Foundation, the Milbank Memorial Fund, and the Health Information Foundation. The large scale of tabulations and the extensive research required for the project were made possible by a grant from the Public Health Service for a five-year period beginning May 1, 1961 (CH 00075; formerly RG 08262).

The plan calls for monographs on sixteen specific topics and a review volume. The specific topics include a monograph on fertility, another on marriage and divorce, and one on social and economic factors in mortality, all of which are of obvious demographic interest. Before describing these, a brief account will be

given of the demographic features common to most of the remaining monographs whose topics range, in alphabetic sequence, from accidents and homicide to venereal disease.

The core of the development of the monographs dealing with the disease topics, and accidents, homicide, and suicide, is a tabulation program involving specific and age-adjusted death rates based upon the deaths in the United States for the three-year period 1959-61 and the 1960 census of population. The program called for a set of standard tabulations common to each monograph and also a set of special tabulations tailored to meet the particular needs for each topic as specified by its authors. The details for this phase of the operation were organized by Dr. Robert D. Grove, Chief of the Division of Vital Statistics, National Center for Health Statistics, where the requisite tabulations and computations were carried out.

One set of the standard tabulations includes death rates specific for age, sex, and color for the total United States, its nine geographic divisions, and for each of the fifty states plus the District of Columbia. A second set of standard tabulations includes death rates, again specific for age, sex, and color, for the total of metropolitan counties (as defined for Standard Metropolitan Statistical Areas), the total of such counties containing a central city, the total without a central city, and the total of non-metropolitan counties. These data have been prepared not only for the country as a whole, but also for the nine geographic divisions. The

¹ M. Spiegelman, "The Organization of the Vital and Health Statistics Monograph Program," *Emerging Techniques in Population Research* (Proceedings of the 1962 Annual Conference of the Milbank Memorial Fund, New York), p. 230.

third set, also for the entire country and the nine divisions, presents age- and sex-specific rates separately for the native-born and the foreign-born. For each of these three sets, age-adjusted death rates have been computed for all ages, ages under 15 years, and ages 65 and over.

The fourth set of the standard tabulations relates to marital status. Death rates specific for age, sex, and color were computed separately for the single, married, widowed, and divorced for the total United States and the nine divisions. In this case, the age-adjusted rates were prepared for ages 15 and over, 15-64, and 65 and over. The standard used for age adjustment in all instances was the 1940 census of population.

Among the special tabulations, mention should be made of the specific and age-adjusted rates for 202 Standard Metropolitan Statistical Areas. This was done for the total of all causes of death and for a few leading causes. Another facet of the special tabulations of some interest is that of mortality according to country of birth.

This wealth of demographic detail regarding mortality in the United States during 1959-61 fills only one aspect of its health picture. To fill out the health picture, use is being made of the great volume of morbidity data out of the National Health Interview and Examination Surveys and a wide variety of other specialized surveys. In all these, the findings are invariably described in terms of the demographic characteristics of age and sex and frequently in terms of such social-economic variables as education, income, work status, and occupational class.

Although morbidity is an important element in an accounting of social and economic factors related to health, the monograph on this topic will be concerned only with mortality. It is expected that a large part of its content will come out of available results of the 1960 census-death certificate matching study at the University of Chicago which has been

described elsewhere.² The sponsors of that study, Professors Kitagawa and Hauser, are also the monograph authors. One important feature of this monograph, not contained in the Chicago study, is a regression and correlation analysis of total mortality in the 202 Standard Metropolitan Statistical Areas previously mentioned in relation to a large number of social, economic, and climatic factors. This feature is being tested first on a sample of forty areas. The social and economic indices for each area include the percent non-white, median family income, percent of families with income under \$3,000, percent of families with income of \$10,000 or more, median years of school completed, percent of families in substandard housing units, percent of households with 1.01 or more persons per room, and percent of employed persons in manufacturing industries. The climatic factors include an index of air pollution and several indices of climate extremes.

Consideration is also being given to corresponding regression and correlation analyses for a few leading causes of death and for accidents for the review volume. The monograph will also contain a digest of the literature on social and economic factors in relation to mortality. The review volume is expected to digest the literature on social and economic factors in relation to morbidity.

The monograph on fertility has as its authors Clyde Kiser, of the Milbank Memorial Fund, Wilson Grabill, of the Bureau of the Census, and Arthur Campbell, of the National Center of Health Statistics, who replaced Joseph Schachter when he left that office.³ The first two will be

² E. M. Kitagawa and P. M. Hauser, "Methods Used in a Current Study of Social and Economic Differentials in Mortality," *Emerging Techniques in Population Research* (Proceedings of the 1962 Annual Conference of the Milbank Memorial Fund, New York), p. 250.

³ C. V. Kiser, W. H. Grabill, and J. Schachter, "Plans for the APHA Monograph on Fertility in the 1960 Census Period," *Emerging Techniques in Population Research* (Proceedings of the 1962 Annual Conference of the Milbank Memorial Fund, New York), p. 82.

recognized as having shared with the late P. K. Whelpton in the authorship of "The Fertility of American Women," one of the series of monographs based upon the 1950 census under the joint sponsorship of the Social Science Research Council and the Bureau of the Census. In addition to the usual sources, the new monograph will have the advantage of the detailed tabulations of women by children ever born in relation to social, economic, and housing characteristics in the 1960 census made possible by partial support from the Public Health Service grant to the American Public Health Association.⁴

Among the features not present in the earlier monograph are separate chapters on the "Medical and Biological Characteristics of Births," "Fecundity and Family Planning," and "Analysis of Cohort Fertility Trends." Altogether, a total of fourteen chapters are in preparation. The remaining chapters are concerned with the world setting; nativity, color, and ethnic group; residence; migration; marital characteristics; illegitimacy; education; occupation; income and other indices of socioeconomic status; economic trends; and a final chapter with a summary and conclusions.

The monograph on marriage and divorce is being written by Paul Glick, of the Bureau of the Census, and Hugh Carter, formerly with the National Center for Health Statistics. Two features of the data entering into this monograph are worthy of special mention. One is the intensive use being made of the detailed tabulations from the 1960 census on marital status in relation to education, race, parentage, earnings, and other classifications of individuals and of husband and wife in married couples.⁵ This tabulation program, like that previously cited

for the monograph on fertility, was made possible by partial support from the Public Health Service grant to the American Public Health Association.

The second feature of special interest is a matching study of divorce records in certain states for a short period before the census of 1960 with the returns in the census. After an introductory chapter, this monograph continues with chapters on trends in marriage and divorce, with international comparisons; trends in marital status; marriage in the United States; marriages ended by death; persons who never marry; marital status and health; and future trends in marriage and divorce.

Only the health topics in the monographs on fertility and marriage and divorce will be covered in the review volume, which will be in three parts. The first part will deal with health in general and will contain chapters on longevity and mortality in the United States and the world situation, long-term mortality trends within the United States, morbidity, and medical care utilization. The second part, concerned with specific morbid conditions, will go beyond a digest of each monograph by an attempt to correlate the relevant findings of each and also by inclusion of more recent material of significance. The third part will relate to special topics, with separate chapters on prenatal mortality, mortality in infancy and childhood, and maternal mortality; morbidity and mortality in relation to marital status; geographic variations; ethnic variations; social and economic factors; and projections of morbidity and mortality. This volume will be the joint task of Professor Brian MacMahon, of the School of Public Health at Harvard University, and Dr. George Hutchison, of the Michael Reese Hospital and Medical Center in Chicago, and Mortimer Spiegelman.

The drafts for the manuscripts on the specific topics are nearing their final stage. Publication will be by the Harvard University Press.

⁴ U.S. Bureau of the Census, *U.S. Census of Population, 1960: Subject Reports—Women by Number of Children Ever Born* (Final Report PC(2)-3A; Washington, 1964).

⁵ U.S. Bureau of the Census, *U.S. Census of Population, 1960: Subject Reports—Marital Status* (Final Report PC(2)-4E; Washington, 1966).