Advances in Psychosomatic Medicine
Epidemiologic Studies in Psychosomatic Medicine

9 Volume Editors:
Stanislav Kasl, New Haven, Conn.
Franz Reichsman, Brooklyn, N.Y.

Series Editor:
Franz Reichsman, Brooklyn, N.Y.

S. Karger
Basel Mnchen Paris London New York Sydney

ISBN 3-8055-2654-7

Epidemiologic Studies in Psychosomatic Medicine

Advances in Psychosomatic Medicine
Vol. 9

Founded by
BERTHOLD STOKVIS; FELIX DEUTSCH; ARTHUR JORES

Editor-in-Chief
FRANZ REICHSMAN, Brooklyn, N.Y.

Editors
E.J. SACHAR, New York, N.Y.; P. SAINSBURY, Chichester

Consulting Editors
J. BASTIAANS, Leiden-Oegstgeest; G.L. ENGEL, Rochester, N.Y.; H. WEINER, Bronx, N.Y.

S. Karger Basel Mnchen Paris London New York Sydney
Epidemiologic Studies in
Psychosomatic Medicine

Volume Editors
STANISLAV KASL, New Haven, Conn. and FRANZ REICHSMAN, Brooklyn, N.Y.

8 figures and 6 tables, 1977

S. Karger Basel Mnchen Paris London New York Sydney

Advances in Psychosomatic Medicine

ISBN 3-8055-0459-4
ISBN 3-8055-1159-0
ISBN 3-8055-1356-9
ISBN 3-8055-1339-9

Cataloging in Publication
Epidemiologic studies in psychosomatic medicine / volume editor, Franz Reichsmann.
(Advances in psychosomatic medicine; v. 9)
1. Psychophysiologic Disorders - occurrence I. Reichsman, Franz, ed. II. Title
III. Series
WI AD81 v. 9 I WM 90 E64
ISBN 3-8055-2654-7

All rights, including that of translation into other languages, reserved.
Photomechanic reproduction (photocopy, microcopy) of this book or parts thereof without special permission of the publishers is prohibited.

Copyright 1977 by S. Karger AG, Basel (Switzerland), Arnold-Bocklin-Strasse 25
Printed in Switzerland by Buch- und Offsetdruckerei Kohlhepp AG, Allschwil
ISBN 3-8055-2654-7

Contents
## Contents

**Introduction** ........................................... IX

**Epidemiological Studies of the Psychosomatic Aspects of Coronary Heart Disease: A Review**  
C. DAVID JENKINS, Boston, Mass .................................. 1

- Sociologic Indexes ........................................... 3
- Social Mobility and Status Incongruity .................................. 5
- Anxiety and Neuroticism ........................................... 7
- Live Dissatisfactions ........................................... 9
- Stress and Life Change ........................................... 10
- Coronary-Prone Behavior Pattern .................................. 11
- Other Traits and Defenses ........................................... 14
- Conclusion ........................................... 16
- References ........................................... 17

**Rapid Sociocultural Change and High Blood Pressure**  
A.M. OSTFELD and D.A. D'ATRI, New Haven, Conn .................. 20

**The Prevalence of Anorexia nervosa and Some of Its Associations in the General Population**  
A.H. CRISP, London ........................................... 38

- Other Clinical Futures ........................................... 40
- Summary ........................................... 45
- References ........................................... 45

**Epidemiologic Aspects of Anorexia nervosa**  
OSCAR W. HILL, London ........................................... 48

**Criteria for Diagnosis** ........................................... 49
- Incidence ........................................... 50
- Anorexia nervosa in Males ........................................... 52
- Relative Frequency of Anorexia nervosa in the Two Sexes .................................. 53
- Is the Incidence of Anorexia nervosa Increasing? .................................. 53
- Familial Factors in Anorexia nervosa ........................................... 54
- Twin Studies ........................................... 54
- Anorexia nervosa and Gonadal Dysgenesis .................................. 57
- Anorexia nervosa and Pregnancy ........................................... 58
- Pre-Morbid Factors Associated with Anorexia nervosa .................................. 58
- Conclusion ........................................... 60
The Effects of Bereavement and Grief on Physical Health and General Well-Being
G.L. KLERMAN and J.E. IZEN, Boston, Mass

Introduction ................................................................. 64
Purpose ......................................................................... 64
Loss, Bereavement and Grief ........................................... 65
Life Stress ..................................................................... 68
Epidemiologic Focus ....................................................... 69
Sources of Evidence ......................................................... 71
Increase in Overall Mortality Rates ................................. 71
Evidence for Increased Mortality ..................................... 71
Possible Mechanisms Leading to Increased Mortality ......... 77
Suicide ........................................................................ 79
Completed Suicides ....................................................... 79
Suicide Attempters .......................................................... 80
Specific Medical Disorders ............................................. 81
Cancer ....................................................................... 81
Unspecified Neoplasms .................................................. 81
Cancer of the Breast ....................................................... 81
Cancer of the Cervix ....................................................... 82
Leukemia and Lymphoma ............................................... 83
Biological Mechanisms of Cancer ................................. 84
Cardiovascular Disease ............................................... 85
Other Disorders .......................................................... 86
Decrease in General Well-Being ..................................... 89
Health-Care Seeking Behavior ...................................... 92
Increased Consultations with Physicians ......................... 92
Use of Alcohol and Medication ...................................... 93
Discussion ................................................................... 94
Methodological Issues .................................................... 94
Possible Biological Mechanisms ...................................... 96

Contents VII

Psychosocial Mechanisms ............................................... 96
Type of Health Service ................................................... 97
Grief Itself as a Stimulus to Consulting a Physician ............ 97
Effect of Personal Status on Reporting of Illness ................. 97
Social and Cultural Supports ........................................... 98
Migration and Physical Illness
IAN PRIOR, Wellington, New Zealand 105

Introduction ................................................. 105
Migration Patterns ........................................... 106
Classification of Migration ................................. 108
Research Orientations and Conceptual Framework of Migrant Studies .............. 109
Hypotheses .................................................. 111
Hypertension ............................................... 114
Pacific Polynesian Migrations ......................... 116
Prevalence Data for Hypertension from the Pacific ......................... 116
Tokelau Island Migrant Study - a Longitudinal Study ..................... 117
Baseline Results ............................................ 119
Blood Pressure and Social Interaction ................................... 121
Coronary Heart Disease ..................................... 123
Israeli Migrant Studies ...................................... 125
An Australian Contribution ..................................... 125
Chest Diseases Including Asthma .................................. 126
Asthma ....................................................... 126
Conclusions ................................................ 128
Acknowledgements ........................................... 129
References .................................................. 129

Occupational Mobility and Health
EMIL BERKANOVIC and PAMELA C. KROCHALK, Los Angeles, Calif. 132
The Effects of Occupational Mobility on Health ........................... 133
Intragenerational Effects ....................................... 134
Intergenerational Effects ....................................... 136
Conclusions ............................................... 136
References .................................................. 138

Retirement and Physical Health
FRANCES M. CARP, Berkeley, Calif. .......................... 140
Impact of Health on Retirement ......................... 141

The Role of Health in the Decision to Retire .......................... 141
Introduction

This is a slimmer volume than the editors had intended it to be: it proved impossible to get commitments for contributions from expert authors in certain areas of epidemiologic, psychosocial research in which sufficient or even abundant data had accumulated. Clearly, this is an expression of heavy commitments which investigators have made for years in advance; it includes workers who have studied specific diseases as well as those who have researched the relationships between stressful life situations on the one hand and morbidity and mortality on the other hand. In regard to one syndrome, anorexia nervosa, the volume is rich because it contains two chapters on this important illness. The editors do not consider this fact an embarrassment of riches because the chapters by Drs. CRISP and HILL do not lead to redundancy of material but complement each other.

Important objectives of this volume are: the distributing of knowledge concerning epidemiologic data and concepts as well as pointing to the many areas in which data obtained so far are sketchy or given to varying interpretations or almost nonexistent. Dr. KASL particularly, in his 'Summarizing Discussion', points lucidly to numerous questions which need much further exploration.

Last not least, we trust that the volume will provide leads for psychosomatic investigators to observe psychologically small groups of patients in depth, using as their take-off point data obtained by epidemiologic studies.
In turn, the results of the in-depth studies should raise new questions and give leads to innovative epidemiologic research. We consider this sort of cross-fertilization an important source for productive investigations in psychosomatic medicine.

FRANZ REICHSMAN, MD
Professor of Medicine (assigned from Psychiatry)
Downstate Medical Center Brooklyn, N.Y. 11203 (USA)