## ANNUAL REVIEW OF NURSING RESEARCH

Volume 5, 1987



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Joyce J. Fitzpatrick, Ph.D. Roma Lee Taunton, Ph.D. Editors



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Springer Publishing Company, Inc. 536 Broadway New York, NY 10012

87 88 89 90 91 / 5 4 3 2 1

ISBN 0-8261-4354-7 ISSN 0739-6686

ANNUAL REVIEW OF NURSING RESEARCH is indexed in *Cumulative Index to Nursing and Allied Health Literature* and *Index Medicus*.

Printed in the United States of America

### ANNUAL REVIEW OF NURSING RESEARCH

Volume 5, 1987

#### **EDITORS**

#### Joyce J. Fitzpatrick, Ph.D.

Professor and Dean of Nursing
Frances Payne Bolton School of
Nursing
Case Western Reserve University
Cleveland, Ohio

#### Roma Lee Taunton, Ph.D.

Associate Professor and Interim Director Office of Grants and Research School of Nursing The University of Kansas Kansas City, Kansas

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Founding Editor

#### **Publisher's Note**

This volume marks an important transition in the life of the Annual Review of Nursing Research. Dr. Harriet Werley, who with characteristic energy and inspiration founded the Review, has with this volume stepped down from its editorship. She will remain actively involved as a member of the Advisory Board. We wish to express our grateful appreciation to her for the groundbreaking and very successful work that she has done in planning and editing the Review over the years.

The editorial leadership remains in the capable hands of Dr. Joyce Fitzpatrick, who has skillfully co-edited the Review from its inception, and Dr. Roma Lee Taunton, who came on board as a co-editor for Volume 4. Both distinguished scholars, they share Dr. Werley's vision of a rigorous forum for the best in nursing scholarship. This volume represents a proud continuation of that vision.

#### **Preface**

This is the fifth volume in the Annual Review of Nursing Research (ARNR) series. Volume 1 appeared in December 1983; Volume 2 in October 1984; Volume 3 in May 1985; and Volume 4 in April 1986; this volume will appear in early 1987. Volumes 6 through 8 currently are in the planning and production stages, and soon we will be initiating discussions with potential authors for future volumes.

We have received a very positive response from the scientific community regarding the launching of this landmark series. We have introduced our work at various forums through presentations, symposia, and posters. Many of our colleagues have indicated that the *ARNR* series is a significant addition to their libraries. Importantly, we have received much positive feedback regarding the contribution of this series to the development of nursing knowledge for the discipline.

The chapters under Nursing Practice for Volume 5 pertain to human responses to actual and potential health problems. Volumes 1 and 4 chapters in this area were focused on human development along the life span, Volume 2 chapters on the family, and Volume 3 chapters on the community. Volume 6 chapters will address nursing interventions related to patient or client responses to health.

As in previous volumes, research reviewed for Volume 5 follows the established format of four other major parts in addition to Nursing Practice: Nursing Care Delivery, Nursing Education, the Profession of Nursing, and Other Research. In the nursing practice area, with a focus on human responses to health problems, Brenda L. Lyon and Joan Stehle Werner review ten years of research on stress, Ann Gill Taylor examines pain research, and Geraldene Felton reviews two decades of research on biologic rhythms. Mi Ja Kim introduces research on physiological responses in health and illness, which will be a specific thrust for the Nursing Practice area in Volumes 7 and 8. In the area of nursing care delivery, Kathleen Dracup presents critical care nursing. In the section on nursing education, Grace H. Chickadonz discusses faculty practice, and Christine A. Tanner deals with the

teaching of clinical judgment. Research on the profession of nursing includes a chapter by Joanne Comi McCloskey and Marilyn T. Molen, who examine leadership in nursing. In the area of other research, Afaf Ibrahim Meleis's report on international nursing research is a continuation of our effort to include a chapter on nursing research in other countries, in this case across countries. Mary Cipriano Silva also contributed a chapter in the area of other research, presenting research based on conceptual models of nursing.

We acknowledge most gratefully the work of the authors, the advice and involvement of the Advisory Board members, the critiques of anonymous reviewers, and the editorial and clerical assistance provided by Lois Schweitzer at Case Western Reserve University and Lavonne Meyers at the University of Kansas. Further, we are indebted particularly to Nikki S. Polis, Ph.D. candidate at Case Western Reserve University, for her continued editorial assistance throughout the production of this volume.

We welcome readers' comments and suggestions for shaping the upcoming volumes, including identifying potential chapter contributors. Authors should be recognized authorities in their areas, who have completed significant research. Please let us know your interests.

#### **Contributors**

#### Grace H. Chickadonz, Ph.D.

School of Nursing Medical College of Ohio Toledo, Ohio

#### Kathleen Dracup, D.N.S.

School of Nursing University of California-Los Angeles Los Angeles, California

#### Geraldene Felton, Ph.D.

College of Nursing University of Iowa Iowa City, Iowa

#### Mi Ja Kim, Ph.D.

College of Nursing University of Illinois at Chicago Chicago, Illinois

#### Brenda L. Lyon, D.N.Sc.

School of Nursing Indiana University Indianapolis, Indiana

#### Joanne Comi McCloskey, Ph.D.

College of Nursing University of Iowa Iowa City, Iowa

#### Afaf Ibrahim Meleis, Ph.D.

School of Nursing University of California-San Francisco San Francisco, California

#### Marilyn T. Molen, Ph.D.

Bachelor of Arts in Nursing Program Metropolitan State University St. Paul, Minnesota

#### Mary Cipriano Silva, Ph.D.

School of Nursing George Mason University Fairfax, Virginia

#### Christine A. Tanner, Ph.D.

School of Nursing Oregon Health Sciences University Portland, Oregon

#### Ann Gill Taylor, Ed.D.

School of Nursing University of Virginia Charlottesville, Virginia

#### Joan Stehle Werner, Ph.D.

School of Nursing University of Wisconsin-Eau Claire Eau Claire, Wisconsin

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#### PART I

# Research on Nursing Practice



#### Chapter 1

#### **Stress**

#### BRENDA L. LYON

School of Nursing Indiana University

#### AND

#### JOAN STEHLE WERNER

School of Nursing University of Wisconsin—Eau Claire

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Stress is recognized widely by nurses as a practice-relevant phenomenon, yet it is a concept about which there is little theoretical and practical agreement. It is readily apparent from the 976 stress-related articles appearing in nursing journals since 1956 that the term "stress" is used with various definitions to represent a wide range of problems

The authors wish to recognize Cathy Faulstich, Sheila Scott, Rosalee Dyke, Jo Straneva, Mary McGuire, Barbara Mehring, Julie Radovan, and Clara Ronnerud for their invaluable assistance with the literature search and preliminary analysis.

and situations. Although the first indexed reference to stress appeared in the *Cumulative Index to Nursing and Allied Health Literature* (CINAHL) in 1956, nurses' interest in stress as a phenomenon for study has flourished since 1970.

This review was limited to research conducted by nurses and published from 1974 to 1984. Only studies of adults with the word "stress" in the title or with stress in the theoretical framework were reviewed. Computer searches and the CINAHL were used to identify studies. There were 82 studies identified that met the review criteria.

The critical review that follows was guided by the belief that the credibility of nursing science will, in large part, depend on the utility of the theoretical underpinnings and empirical generalizations that characterize nursing practice. Therefore, the purpose of the review was to evaluate both nurse researchers' conceptualizations of stress and their systematic inquiry into the phenomenon.

The vast majority of the studies reviewed had common and serious flaws that limited contributions to nursing science. To highlight the problems, the chapter was organized around theoretically distinct conceptualizations of stress and common measurement and methodological flaws. The critique is presented in a summary format citing representative studies as illustrative examples.

## DEFINITIONS AND THEORETICAL ORIENTATIONS

The 82 studies were categorized into the following four theoretical orientations: (a) stress as a stimulus; (b) stress as a response; (c) stress as a transaction; and (d) atheoretical. The studies were fairly evenly distributed among the categories as follows: (a) 23 studies or 28% used a stimulus definition; (b) 20 studies or 24% used a response definition; (c) 17 studies or 21% used a transactional definition; and (d) 22 studies or 27% were atheoretical.

#### Stress as a Stimulus

When stress is defined as a stimulus it is conceptualized as causing a disrupted response. Historically the stimulus orientation had its roots in the works of Holmes and Masuda (1966) and Holmes and Rahe