

SECOND EDITION

INTRODUCTION TO
HEALTH RESEARCH
METHODS A Practical Guide

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PREFACE

The goal of this book is to make the health research process accessible, manageable, and perhaps even enjoyable for new investigators. One of the reasons that engaging in health research is satisfying is that research is the necessary foundation for meaningful improvements in clinical and public health practice. Research helps us learn how to be healthier and how to help our families, friends, and communities improve and maintain their health. Without the building blocks provided by health research, we would not be able to identify and map areas that have a high rate of various diseases. We would not know about the risk factors for various disorders. We would not know which interventions are most effective for improving individual and community health.

But it is not just the outcomes that make research rewarding. The research process itself—the process of exploring the unknown and discovering answers to previously unanswered questions—can be exciting. This book is a practical, step-by-step guide to the research process.

All research projects follow the same steps: identifying a focused research question, choosing a study design, collecting data that will answer the question, analyzing the accumulated evidence, and disseminating the findings. The investigation proceeds through these same basic steps regardless of whether it involves conducting a clinical trial, organizing a neighborhood survey, analyzing an existing data set, or synthesizing the existing literature through meta-analysis. The same steps are followed whether the researcher is trained in medicine, nursing, public health, dentistry, physical therapy, occupational therapy, speech-language therapy, respiratory therapy, radiation technology, pharmacy, podiatry, dietetics and nutrition, athletic training, health policy, psychology, sociology, counseling, optometry, audiology, or any other clinical or social science discipline. And the steps are the same regardless of whether the investigator is an undergraduate student, a master's or doctoral candidate, or a seasoned professional.

Health research is an intentional process that requires fastidiousness and perseverance, but it is not complicated. Anyone who is willing to

follow the steps outlined in this guidebook can conceptualize a research project and see it through to completion. This process can generate many personal benefits: the acquisition of new skills, the fulfillment of degree or work requirements, the satisfaction of personal curiosity, and even the opportunity to become a published author. And every project, no matter how modest, has the potential to contribute to expanding the knowledge base for the health sciences. That means that all researchers may eventually see their results translated into improved patient care, enriched organizational effectiveness, and enhanced community health. An increase in the number of active investigators who can conduct conscientious research and accurately communicate their findings to others will benefit us all.

This book is an invitation to make your own contribution to the evidence that will inform future decisions about preventing and treating disease, allocating health resources, and promoting health.

ABOUT THE AUTHOR

Kathryn H. Jacobsen, PhD, MPH, is a professor of epidemiology and global health at George Mason University in Fairfax, Virginia. She has written more than 100 peer-reviewed articles and is also the author of *Introduction to Global Health* (Jones & Bartlett Learning).

WHAT'S NEW IN THE SECOND EDITION

In this second edition of *Introduction to Health Research Methods*, every chapter from the 1st edition has been updated to improve content and clarity, and several new chapters and subsections have been added to provide more comprehensive coverage of health research methods. Step 1 (“Identifying a Study Question”) presents additional strategies for deriving research ideas from theoretical frameworks and clinical practice experiences, and it includes new chapters on collaborating and mentorship. Step 2 (“Selecting a Study Approach”) provides more examples and illustrations of the analytic strategies for each study design and features an expanded chapter on qualitative research theories and methods. Step 3 (“Designing the Study and Collecting Data”) includes new subsections on reliability, validity, and research ethics plus a new chapter on writing grant proposals. Step 4 (“Analyzing Data”) contains additional illustrations of how to calculate and interpret health statistics along with new chapters on regression analysis and other advanced analysis tools. Step 5 (“Reporting Findings”) highlights many more strategies for writing success.