

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 researchers. One of the reasons that engaging in health research is satisfying is because 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, there would be no evidence about the risk factors for various disorders, no certainty about whether new vaccines protect against infection, and no ability to identify and map areas that have a high rate of various diseases. There would be no way of knowing which therapies have the best outcomes or whether survival rates for various conditions are improving. And there would be no scientific basis for selecting the tools that most effectively support 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, 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 dataset, or synthesizing the existing literature through meta-analysis. The same steps are followed whether the researcher is trained in medicine, nursing, public health, physical therapy, psychology, or any other clinical or social science discipline. And the steps are the same regardless of whether the investigator is an undergraduate student or a seasoned professional.

Health research is an intentional process that requires meticulous attention and persistence, 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. And every project, no matter how modest, has the potential to contribute to the knowledge base for the health sciences—and perhaps to eventually translate 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 disease, allocating health resources, and promoting health.

About the Author

Kathryn H. Jacobsen, MPH, PhD, is an associate professor of epidemiology at George Mason University in Fairfax, Virginia. She earned an MPH in International Health and a PhD in Epidemiology from the University of Michigan. Her research portfolio includes field projects in Africa, Asia, and the Americas as well as systematic reviews of the global burden of disease. She has published the results of her research in a variety of journals, including *International Journal of Epidemiology*, *Journal of Health Economics*, *Journal of Medical Ethics*, *Health Promotion International*, and *Vaccine*. She is also the author of *Introduction to Global Health*, published by Jones & Bartlett Learning.

