

# Clinical Research Made Easy

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## A Guide to Publishing in Medical Literature

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Mumbai • New Delhi • St Louis (USA) • Panama City (Panama) • London (UK) • Ahmedabad  
Bengaluru • Chennai • Hyderabad • Kochi • Kolkata • Lucknow • Nagpur

*Published by*

Jitendar P Vij

**Jaypee Brothers Medical Publishers (P) Ltd**

**Corporate Office**

4838/24 Ansari Road, Daryaganj, **New Delhi** - 110002, India

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**Clinical Research Made Easy—A Guide to Publishing in Medical Literature**

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First Edition: **2010**

ISBN 978-81-8448-890-6

Typeset at JPBMP typesetting unit

Printed at

Dedicated to

*our Parents*

Their endless love and support have been  
a constant source of inspiration to us

*our Patients*

Without their cooperation we would not have been  
able to improve health care standards  
through evidence-based medicine



# Foreword

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I am very glad and congratulate the authors for writing such an informative book on a subject so close to my heart. In my opinion this book will be able to satisfy the needs of every clinician, medical student and clinical research personnel who is interested in conducting and publishing a scientific research.

My clinical practice has now spanned over decades and my keen interest in clinical research has helped me to keep a finger on the pulse of the research scenario. The last few decades have seen development of a more scientific and evidence-based approach with an inclination for collaboration and cooperation towards development of a better health care system. In India too there has been a change, however lack of infrastructure and basic education in research are a major obstruction for us. This book, even though it is quite concise, will fill this lacuna in research education to a great extent. The precise writing and accurate and practical approach that the authors were able to maintain throughout is the most unique point of this book. The simple flow of explaining the complex ideas and methods goes to indicate the excellent grasp of the authors on the topic and keeps the reader engrossed.

I am sure every clinician and medical student interested in organizing a scientific study and publishing its result will find this book extremely helpful. This book

will also be a landmark in the developing clinical research scenario in India.

I wish the authors all the success.

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# Preface

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Since its inception approximately 20 years ago, evidence-based medicine (EBM) has become a standard part of many educational curricula world-wide. In his original document to trainees at McMaster University, Professor Gordon Guyatt described EBM as an attitude of 'enlightened scepticism' toward the application of diagnostic, therapeutic, and prognostic technologies in their day-to-day management of patients." The concepts of EBM empower us to formulate appropriate clinical questions, appraise the literature using the hierarchy of evidence, and apply the study results to their practice. The application of evidence-based medicine is not easy. It requires a fundamental understanding of research methodology and critical appraisal. Critical concepts for health care providers include the strengths and limitations of meta-analyses, randomized trials, cohort studies and case series.

Although we may perceive that evidence-based medicine mandates a strict adherence to randomized trials, it more accurately involves informed and effective use of all types of evidence (from meta-analysis of randomized trials to individual case series and case reports). With the ever-increasing amount of available information, we must consider a shift in paradigm from traditional practice to one that involves question formulation, validity assessment of available studies and appropriate application of research evidence to individual patients.

For those of us wishing to produce high quality evidence to guide patient care, the good research practice is paramount. From beginning to end, the development of a quality study protocol, an appropriate statistical evaluation of sample size, the use of a valid outcome measure and sound ethical practices are basic requirements.

With the ever-increasing demands to adopt evidence-based medicine in practice, health care providers require educational resources that present the concepts of the EBM, research methodology and guides to publishing medical research in a simple and easy to understand format.

***Clinical Research Made Easy*** is one resource developed with the busy health care provider in mind. We have assembled a group of leading researchers, surgeons and physicians with the aim of providing high quality content to our readers. Whether a practising surgeon, physician, physiotherapist, student or allied health care provider, this book bridges your knowledge gaps and facilitates practical application of EBM and clinical research. Led by practising physicians and researchers, we understand the challenges in research and provide simple guides for success. We distil complexities of clinical research into simple facts. Our question and answer format uses commonly asked questions in each topic area and provides focused summaries.

In an emerging era of innovation in medicine and health care we have a responsibility to engage in the process of research acquisition, conduct and dissemination. We should no longer consider clinical

research as only occurring in high profile institutions around the world, but rather occurring in every health care setting in all environments. Clinical research must be made easy to become widely accessible and widely applied.

We hope this book provides one step in the right direction—and stimulates a new generation of evidence users and evidence providers!

**Mohit Bhandari**  
**Parag Sancheti**



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