

# Clinical Pharmacy and Clinical Pharmacology

William A. Gouveia  
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(editors)



NORTH-HOLLAND

# Clinical Pharmacy and Clinical Pharmacology

Proceedings of an International Symposium  
held in Boston, Mass., USA – September 17–19 1975

*editors*

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Y078026

1976



North-Holland Publishing Company – Amsterdam · New York · Oxford

© Elsevier/North-Holland Biomedical Press 1976

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### Library of Congress Cataloging in Publication Data

Main entry under title:

Clinical pharmacy and clinical pharmacology.

Bibliography: p.

Includes index.

1. Pharmacology—Congresses. 2. Pharmacy—Congresses. 3. Pediatric pharmacology—Congresses. 4. Information storage and retrieval systems—Medicine—Congresses. I. Gouveia, William A. II. Tognoni, Gianni. III. Kleijn, Eppo van der. [DNLM: 1. Drug therapy—Congresses. 2. Pharmacy—Congresses. 3. Pharmacology—Congresses. WB330 C638 1975]

RM300.C56 615'.1 76-40890

ISBN 0-7204-0596-3

(xiv + 464 pages, 146 Figures, 86 Tables)

### PUBLISHERS

Elsevier/North-Holland Biomedical Press  
335 Jan van Galenstraat, P.O. Box 211  
Amsterdam, The Netherlands

### SOLE DISTRIBUTORS FOR THE U.S.A. AND CANADA

Elsevier/North-Holland, Inc.  
52 Vanderbilt Avenue  
New York, N.Y. 10017, U.S.A.

Printed in The Netherlands

## Preface

This conference gives some examples of how many initiatives could be undertaken towards improving therapy. While new medical diagnostic procedures have been developed, relatively little has been done to cope with therapeutic needs, the dominant concept being that when the diagnosis is made the therapy is an automatic consequence. Yet, the development of powerful drugs which often produce marked side-effects and the multiplicity of possible treatments for the same symptoms make it imperative that therapy becomes a critical and specialized medical activity. The message from this meeting is that the therapeutic activity should be supported by adequate structures such as now exist in the hospitals for the diagnostic process. The recommendation is, therefore, that departments of therapeutics (the name is not essential) be created.

It is possible to envision at least four main functions for these departments.

1. *Drug information.* Few practitioners can keep up with the enormous amount of literature reporting new findings about the action and the clinical use of old and new drugs. This information may require very sophisticated approaches in the future, including the use of computers.

2. *Laboratory work.* It is becoming increasingly evident that measuring plasma levels of drugs may be of help for an individualized therapy. There are diseases, such as epilepsy and depression, which show a higher percentage of cures if monitoring of drug plasma is coupled with pharmacokinetic competence. In addition, biochemical tests may be of importance for certain types of therapy in predicting the results, e.g. the determination of estrogen receptors for the therapy of breast cancer.

3. *Monitoring of side-effects.* While it may be relatively easy to recognize common undesired effects of drugs, it requires a complex organization to determine rare and sometimes unexpected or latent effects of drugs. In this respect, the department of therapeutics can perform an important task as part of national or international programs aimed at detecting comparative data on toxic effects of drugs.

4. *Therapeutic trials.* There is a tremendous need to evaluate drugs, doses, and therapeutic protocols, in well-controlled conditions. Some of these trials can be performed inside the same hospital, but many require collaboration with other organizations. Hence, there is a need to have available scientists with competence in this particular area.

The establishment of departments of therapeutics does not necessarily require completely new structures, because frequently it may be enough to pool a competent staff already existing in a given hospital. It is important, however, that there be available at the service of the physician engaged in the difficult task of therapeutic delivery, pharmacologists, pharmacists, biochemists, and statisticians, in the effort to bring to the patient the best of the new scientific knowledge.

Silvio Garattini  
Milan, March 1976

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## Acknowledgements

A large number of individuals must combine their efforts in the arrangement of a meeting and the subsequent publication of proceedings of that meeting. Among those who made outstanding contributions to this work are:

Monica F. Loeb and R. Lynn Shumake of New England Medical Center Hospital.  
Dr. Norman S. Stearns and Emelie Born of Tufts University School of Medicine.  
Drs. Raymond A. Gosselin and Benjamin Hershenson of Massachusetts College of Pharmacy.

The financial support of the following companies is gratefully acknowledged.

Beecham Pharmaceutical Company  
Burroughs Wellcome Company  
Ciba-Geigy Corporation  
Dow Pharmaceutical Company  
Merck, Sharp and Dohme Company  
Organon International  
Roche Laboratories  
SAGO, S.p.A., Florence, Italy  
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