Progress in Clinical Pharmacy

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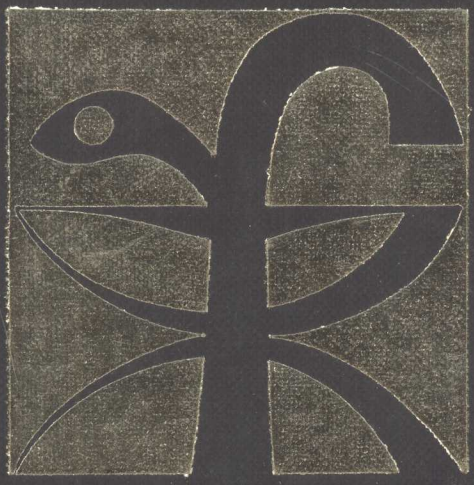

Concept and Practice of Therapeutic Teams

Edited by

H. DE CLERCQ J. W. POSTON JOAQUIN BONAL

PROGRESS IN CLINICAL PHARMACY: V

Concept and Practice of Therapeutic Teams

Proceedings of the 11th European Symposium on Clinical Pharmacy, Brussels 1982

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PREFACE

The 11th European Symposium on Clinical Pharmacy was held in Brussels, Belgium during 20–22 October 1982. The pre-congress and the symposium were attended by 254 scientists from 17 countries – USA, Norway, Sweden, Finland, Denmark, Iceland, Switzerland, Germany, Austria, Spain, Portugal, Italy, France, United Kingdom, Zimbabwe, the Netherlands and Belgium – all of whom actively participated in the meetings, poster sessions, learning resource center and scientific exhibition.

The general committee consisted of J. Bonal (Spain, President), G. Aulagner (France), H. Turakka (Finland), D. Schaaf (Germany), P. Amacker (Switzerland), B. Davidson (Sweden), H. De Clercq (Belgium), S. Ellis (United Kingdom), E. van der Kleijn (the Netherlands) and G. Ostino (Italy). The local scientific organisation for the meeting was carried out by H. De Clercq (Chairman), M. Delanghe (Secretary), P. Bruyneel (Treasurer), G. Algoet, A. Mathieu, and members of the staff at Brussels (AZ-VUB) and Leuven (AZ St Raphaël) University Hospitals, together with J. Van Nuwenborg and his colleagues at the AZ-St Jan Hospital Brugge.

The theme of the symposium was the concept of the therapeutic team and the relative contribution and responsibilities of pharmacists, nurses and physicians to the planning and implementation of drug treatment regimens. The scientific discussions were divided into eight main sections with 36 invited and 30 contributed papers. The meeting started with a detailed visit of the clinical pharmacy department of the AZ-St Jan Hospital in Brugge. This provided an opportunity to share achievements and experiences in the development of haemodialysis.

The first session of the symposium provided an introduction to the concept of the therapeutic team, and reflected the views of a pharmacist, of an academic, of a nurse, of a physician and of a clinical pharmacologist. Seven sessions covered the practice of the therapeutic team in parenteral nutrition, oncology, dermatology, epilepsy, internal medicine, nuclear medicine and drug selection. In addition, a series of exciting prospects in the practice of the teams were developed in the free communication and poster sessions.

This book contains all the lectures presented at the meeting. Therefore, it provides a very important document in clinical pharmacy; not only reviewing current achievements and experiences in clinical pharmacy services, but also providing stimulating discussions that look towards the exciting future of clinical pharmacy development in Europe.

I would like to express my thanks to all members of the organising committee for their assistance in organising the meeting, to Mady Gillet and the members of her staff for carrying out the local organisation, to the authors for promptly producing their manuscripts for this volume, and my secretary, Myriam Verhasselt, for her invaluable assistance.

Henri L. O. De Clercq

Academisch Ziekenhuis,
Vrije Universiteit Brussel
December 1982

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PHARMACOKINETICS, DIALYSIS, I.V. THERAPY

INTRODUCTORY REMARKS

Concept and practice of the therapeutic team.

H. De Clerq, J.W. Poston.

Team membership and the implying interprofessional relations are simple yet important concepts that many professionals have failed to develop and find difficult to systematically incorporate into their daily practice. As opposed to our great grandfathers 100 years ago, contemporary man generally does not have to battle the physical environment; modern man is more likely to be involved with other people than with physical objects. Indeed, the degree to which we succeed in life and in our profession is largely determined by how well we are able to understand, predict and cope with other people's demands and expectations.

Mass media such as radio, television, newspapers and contemporary educational systems all emphasise the growing role of behavioural sciences in modern society. Even our own professional journals regularly feature articles on the psychosocial forces modern pharmacists need to understand to get more closely involved in patient care, and to develop good interprofessional relations with other disciplines. (e.g. Hoop (1979), Provost (1980), Kilwein (1981,1982), Dolinsky (1982)).

At this point, and before discussing the principles of teams and the activities that could develop interprofessional relationships in hospitals, it is first necessary to have a definition of the team.

A team is an interdisciplinary group of individuals working together in order to study a distinct subject.

Since the orientation of today's symposium is a clinical one, we can translate this definition as follows:

A therapeutic team is an interdisciplinary group of qualified individuals, engaged in a collaborative system of providing health care.

The care is both direct, in the form of planning and

implementation of drug regimens for particular patients, and indirect in the form of policy and procedure development to monitor therapeutic activity.

One question raised, is for what reason did team approach develop in the delivery of health care? The major reason is obvious: the treatment of diseases is not a matter of isolated technical intervention, but depends on a large variety of disciplines. As a result of this multi-professional approach, fragmentation occurs, the patient's entity gradually fades away, and the total patient has to make room for a clustering of disease processes, drugs and all sorts of bits and pieces that vary with the perspectives of the practitioners involved.

Recent attempts such as an integrated approach to medicine, patient-orientated pharmacy or patient-centred nursing care may have succeeded in various degrees to humanise the health care system and to treat human beings instead of just diseases - they did as such not solve all of the practitioner's problems.

A second reason why team approach developed in the delivery of health care, is the ever increasing specialisation of our professions and the resulting fragmentary approach each discipline has taken in the provision of health care.

Let's take an example from pharmacy: with more of the hospital pharmacists participating in clinically orientated programs, the tasks of the pharmacists - especially in large university research orientated hospitals - become increasingly specialised. As a result, we can see now, within the same hospital, a pharmacist in charge of the I.V. admixture programme, another one responsible for the drug information centre, yet other pharmacists in charge of purchasing, manufacturing, quality control, unit dose distribution, radiopharmaceuticals, TPN, satellite pharmacies on the nursing units, patient interviews for accurate drug history, maintaining patient profiles, counselling patients on drug compliance and the proper use of drugs etc.

This example, taken from the recent evolution of hospital pharmacy, can of course mutatis mutandi equally apply to the advancing degree of specialisation that can be found in any other health care discipline.

As a result, the practitioner often grows over specialised in his own professional field, that within his own hospital he will hardly find any other expert he can talk with. Interacting communication becomes a problem then, and will eventually only be provided by either a horizontal flow process, i.e. within the specialisation area with other experts during symposia or congress meetings, or else by a vertical communication flow process i.e. a communication through all inter-dependant subsystems of the hospital.

At this point, team approach is the most efficient and effective structure to support this communication flow, thus fostering the development of what is called "interprofessional relations".

Multiprofessional team-work requires a few essential principles. One is that all of the members of the team are equal in the sense that each member is dependent on the activity and presence of the other members, and further, that the loss of one member (or activity) results in a lessening of the quality of services provided by the whole. As another principle, the team dynamic : the team composition changes as a function of the specific type of care that is to be provided.

This "team" then communicates and functions on two levels:

(1) through a formalised network of structures that exchange information consistently (e.g. departmental newsletters, medical rounds, committees etc.), and

(2) through an informal network without set form or consistency of exchange (e.g. coffee breaks, telephone conversations, hallway discussions etc.).

The department of pharmacy traditionally has directed its formal communications to members of the medical staff, reserved the informal patterns for nursing staff, and then often giving only perfunctory greetings to the remaining professional staff members.

These communication patterns tend to be ineffective for promoting interprofessional relationships and better patient care. This is however not the only problem.

Traditionally the medical and nursing professions have been defined as the team, and therefore must be presented with overwhelming evidence of the need to make room at the bedside for the pharmacist. Dispensing from the pharmacy will not provide evidence that pharmacists

have a sense of the clinical milieu, and the acceptance of the pharmacist as an equal team member requires more than membership by fiat.

Furthermore, and this opinion was expressed by F.W.H.M. Merkus in his inaugural editorial in Pharmacy International, pharmacists are generally rather passive, he said, "In spite of their long university training pharmacists refuse or hesitate to take responsibility for the optimal use of the drugs they dispense".

Although the current emphasis on patient-orientated education and practice appears to be having a salutary effect, mere observation of pharmacy practice confirms the accuracy of Merkus' statement in the majority of cases.

For social as well as for professional and economic reasons, we have reached a point where a therapeutic team approach has gradually become an obligation: not yet a legal obligation, however in many situations a budgetary obligation, and definitely a moral obligation for every professional who aspires to provide high quality health care.

We hope that the papers presented at this symposium will show the extent to which pharmacists have overcome their traditionally somewhat passive professional behaviour, acquired new knowledge and skills and become important members , making valuable contributions to many therapeutic teams.

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THE CONCEPT OF THE THERAPEUTIC TEAM

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Abstract

The therapeutic team concept is decribed as a practically feasible, dynamic team of physicians, nurses, pharmacists and other health professionals according to need. The team establishes the product range for drug selection,and designs calibration references for goals and objectives for treatment of patients with particular diseases, complaints or diagnoses. Therapeutic decisions still require much research on probabilities of the results. Clinical Pharmacokinetics have been helpful in establishing algorithms for decision making.

A good pharmaceutical service infrastructure in hospitals and communities with good management procedures, logistics, retrievable drug records and drug information and instruction are prerequisites for therapeutic teams

INTRODUCTION

Over 90% of patients visiting a general practitioner and of those admitted to hospitals, are prescribed drugs as the only or as support of treatment. The practice of treatment results from a decision process in which the complaints of the patients and the information, resulting from physical, anamnestic and laboratory investigation have been integrated. The complexity of diseases and of the personal variables in individuals requires coordination of expert information from different disciplines. Traditionally coordination is the task of the medical practitioner who is

consulted in first instance. Analyses of group dynamics have taught us methods to improve the efficiency and impact of the contributions of each expert. The financial strain on health care in the declining economy has put more emphasis than ever in order to meet the established budgets.

A change in attitude can be observed to grant more responsibility and executive tasks to para- or non-medical professionals in order to allow the physician to concentrate on his expert competencies.

In several areas of chronic medical care this has been the experience for a number of decades. Different disciplines have written information in patients records to enable them to monitor progress. Examples are epilepsy, diabetes, hematology and genetic diseases.

A change can be observed in the forces and powers structure of roles and competencies and of responsibilities and liabilities in these cooperative efforts. These social changes can also be considered consequences of the observed necessities and of the better technical conditions for recording and retrieving information. Prospective design of procedures and written guidelines tailored to the various professionals involved provide references for daily labor. Retrospective evaluation will lead to adaptations and correction of the procedures and/or of the references.

Calibration Policy

The process of establishing references for treatment of a particular medical indication e.g. a sub diagnosis in epilepsy requires input of neurologists, pathologists, nurses or patient attendants, sometimes parents, pharmacists, institution or general practice physicians, and clerks. Establishing and continuously adjusting references for every contributor is called 'calibration'. Daily practice is then routinely compared, tested (titrated) against the calibre It is agreed that intuitively many well experienced professionals will either consciously or unconsciously comply to this process. Written procedures however make

communication easier, more stable and reliable and may allow the expertise of traditionally dispersed professionals to contribute to treatment.

General objectives for treatment and services

The patient or his attendant that made the decision to seek advice of a physician will generally want to be cured or to have his complaints resolved in a rapid, safe and effective way at the lowest expenses. Institutions providing services to patients will try to comply to these wishes.

It is agreed today that the expenditure for National Health Care and Institutionalized care have disproportionally grown.

Governments are now seeking ways to cut on the expenses even if this should result in a lower performance level but preferably at the same quality.

In the past twelve years we have made attempts to propose and investigate ways to rationalize and economize drug selection, prescribing, preparation and dispensing, informatics, and drug documentation and consultation, monitoring and evaluation of effects in patients and of the fate of drugs in their body and drug epidemiology research (table 1).

Table 1.

Drug Selection	Formulary,Product range reduction
Prescribing	Protocols and Guidelines for treatment
Preparation	General Compounding I.V. admixtures Individualized formulation
Dispensing	Unit of use distribution Satellite Services
Informatics/Documentation	Management: Purchase Turn over Personnel Planning Work preparation Labelling Quality Control: Classification and Coding Batch Manufactoring Records Batch Distribution Records Scientifc Support: Current Awareness Problem solving Retrieval Literature Compilation Kinetic Analyses
Consultation	Ward rounds Patient conferences Seminars Symposia
Monitoring	Events registration Plasma concentrations and clearances (Clinical pharmacokinetics) Clinical Physiology Intensive Care and Emergency Medicine
Evaluation	Retrospective efforts leading to conclusions in all activities mentioned in this table.
Research	Pharmacokinetic and metabolism studies in patients and in pathological conditions Bio Analytical Chemistry
Drug Epidemiology	Drug Utilization Research Computer assisted Instruction Training and Instruction development.

These activities require development of organizational structures, new tools and adaptation of buildings and the training of new professionals with new knowledge, skills and attitudes.

In order to keep these activities economically feasible management decisions at different levels are required.