

EDITORIAL

THE FUTURE OF PHYSIOTHERAPY

Physiotherapy has expanded in scope and numbers internationally. In South Africa it is expanding as well, but not rapidly enough to cope with the exploding health care needs resulting from rural development and resultant upgrading of country and mission hospitals.

At present there are less than 2000 registered physiotherapists to service a population of over 25 million. With seven schools of physiotherapy qualifying about 100 physiotherapists annually, there seem no hope of catching up on the backlog, even though another school (University of Western Cape) will start taking students in 1984 for a four year degree programme. Compare our situation for example with that of Holland where the number of practising physiotherapists trebled in seven years (Kerkhoff, 1982) from 1900 in 1975 to 6600 in 1982. The physiotherapist:population ratio in South Africa is lamentable. In Holland the ratio has been set at 1:3500, but appears to alter this to 1:3000 have been made in order to decrease patient waiting lists, to shorten working days, and to improve quality care.

Yet, physiotherapy in South Africa shows the signs of uneven growth as described by Peat (1981), namely leaving behind the scientific core in the general pursuit of a greater scope of practice, increased administrative control and more political influence. There is expansion of an already extensive and impressive area of clinical practice, but still a search for a well defined identity and status. The article on status in this issue clearly illustrates this search.

There is also constant expansion of fields of practice and specialization, as exemplified by the article and abstracts on Occupational Physiotherapy. This is commendable and it behoves us to continually develop further channels of practice where our expertise can be utilized, especially in primary and preventive health care. But the supporting base of existing physiotherapy practice is fragile and very small.

Peat (1981) maintains that the art of physiotherapy is its soul and the science and techniques are its body. He describes the art in terms of *human relationships*: the power of the patient-therapist relationship in rehabilitation, identifying with a common objective but requiring time; the therapist-therapist interaction, where role modelling and demonstration are used to transmit techniques. However, a vested interest in a specific technique can resist penetration by new knowledge and adaptation to it. An inverted pyramid situation can result where a technique becomes established in

clinical practice before its effect has been established. This often leads to its advocates supporting the technique with scientific knowledge from outside physiotherapy; this knowledge is essential, but not always relevant. Finally, the placebo effect is an effective tool in physiotherapy, which draws strength from a one-to-one relationship with patients. The physiotherapist's attitude, ability to convince the patient and confidence in his/her own techniques are powerful placebo influences. This constitutes the art of physiotherapy.

If we accept that science is characteristically an open system continually accommodating and modifying new information in an *objective* approach and by a *method* of reproducible experimental result, a conflict with the art of physiotherapy may be experienced.

Peart discusses the scientific dimension of physiotherapy in terms of six characteristics. The *acceleration of scientific growth* is now accepted to be a doubling of knowledge every 10 years; thus keeping abreast with new knowledge to prevent obsolescence is a real treadmill. *Dilution of the scientific base* of physiotherapy techniques originating from a physiological concept is very real if the technique is refined, elaborated and developed to the detriment of the basis.

Terminology should have a specific meaning and be generally accepted if communication of knowledge is to be effective. Thus a clear definition of terms is essential. Quantitative objective *measurement* of the criteria that demonstrate efficacy of treatments and accurate recording and analysis of clinical data need to be developed for systems unique to physiotherapy. *Research and advanced studies* to validate treatment techniques (before prescription and application) and to acquire technical skills, are lacking. Physiotherapy research to validate clinical practice is still limited in volume and quality. There is also *inadequate publication of results*, especially of original research. Techniques are taught in therapist-therapist interaction, rather than through the medium of print.

Finally, Peat concludes that science and art are essential for the survival and development of physiotherapy. To this end he suggests focusing in the future on research in the universities as a major component of their programmes; developing undergraduate curricula that will encourage critical evaluation and comparison of clinical methods; the acquisition of additional academic and research skills by faculty; establishing graduate programmes with a clinical

Contents - Inhoud

The Future of Physiotherapy	27	Book Review	39
A Study of the Professional Image	28	An Investigation of On-Duty Injuries	40
Industrial/Occupational Physiotherapy	31	Post-Menisectomy Rehabilitation	42
Occupational Therapy — Work Assessment	35	Correspondence	47
An Application of Physiotherapy	38	Classified	48, 49

science emphasis in order to disseminate scientific knowledge and its application to clinical problems. Clinical research can only be conducted in the clinical environment, for example by systematic enquiry as described by Gonella. Research co-ordinators could assist in the design and analysis of research projects, which should occur in both clinical and academic environments. Research can be enhanced further if specialization is encouraged by formal graduate education, elimination of clinical rotation, formal professional identification of areas of specialization and recognizing employment opportunities. The profession will have to set and recognize standards of specialization and continuing education courses at reasonable cost at attractive hours will have to be provided to maintain quality care and competency.

Hence we will have to come to terms with science as a growing, changing phenomenon and its consequent instability, confusion and ambiguity that upsets so-called established truths. If physiotherapy is to be credible, it has to progressively accumulate increasing quantities of knowledge, develop and use precise measurement systems and be subjected to argument, discussion and analysis in order to produce factual evidence to support both the art and the science.

References

- Kerckhoff, A. H. M. (1982). Huisarts en fisiotherapeut. *Medisch Contact*, 33, 991-997.
- Peat, M. (1981). Physiotherapy: art or science? *Physiother. Canad.*, 33, 170-176.