

Experiences with physiotherapists' consultation: Results of a feasibility study

H.J.M. Hendriks, J.W. Brandsma, C. Wagner, R.A.B. Oostendorp
and J. Dekker

Ongoing developments in physiotherapy practice make it impossible for general practitioners (GPs) to remain adequately informed of the indications for physiotherapeutic intervention. To improve the quality of care, physiotherapists should be consulted if GPs are uncertain of the indications for physiotherapy. We conducted a feasibility study as part of a larger project on the effects of the consultation of physiotherapists in primary health care. The overall objective of the study was to establish whether consultations of physiotherapists by GPs would influence the number of referrals made by GPs to medical specialists and physiotherapists in either a qualitative or quantitative way. The aim of the smaller feasibility study was to assess the consultation procedure between 14 GPs and 8 physiotherapists. The data were collected using questionnaires and registration forms. On average, the GPs requested one consultation every 2 weeks (total referrals = 93, range 1-30; mean referral rate = 12 per 1000 patients). The GPs found both the consultation procedure and the standard consultation forms to be suitable for the purpose of consulting a physiotherapist. In 93% of cases, GPs felt the outcome of the consultation to be satisfactory. Eighty-nine percent of GPs followed the advice of the physiotherapist; in 58% of cases, this resulted in a different management of the patient than that intended prior to consultation. The present results suggest that the quality of care can be improved by written communication between a GP and physiotherapist.

INTRODUCTION

The policy of current Dutch primary health care is for accessible and quality care that is both

H.J.M. Hendriks, J.W. Brandsma, R.A.B. Oostendorp, National Institute of Allied Health Professions, Research and Development, Postgraduate Education and Documentation, PO Box 1161, 3800 BD Amersfoort, The Netherlands
H.J.M. Hendriks, C. Wagner, J. Dekker, Netherlands Institute for Research in Health Care (NIVEL), PO Box 1568, 3500 BN Utrecht, The Netherlands

(Reprint requests to HJMH at Amersfoort)

Accepted for publication February 1996

efficient and effective. Cost containment, however, is often the aim of policy initiatives and directives. This makes it necessary to make choices in the provision of care by physiotherapists and to develop policies that will improve the efficiency of that care.

In the Dutch health care system, general practitioners (GPs)/family physicians have a key role to play as 'gatekeepers' to other health care services. They are usually the first health workers to be contacted for health-related problems. Within GP practices, patients most often present with locomotor and respiratory complaints

(Dekker, Baar, Curfs and Kerssens, 1993; Kerssens and Groenewegen, 1990). Other health workers, including physiotherapists and medical specialists, are only seen by patients after referral by their GP. As 80% of patients seen by a physiotherapist are referred by their GP, the physiotherapist-GP relationship is an important one.

Problems relating to communication, indications for physiotherapy and GPs' knowledge of physiotherapeutic possibilities have been identified (Anderson and Campbell, 1992; Ritchey, Pinkston, Goldbaum and Heerten, 1989; Stanton et al, 1985). One main aim of government primary health care policy is to improve communication between physiotherapists and GPs. Research has shown great variability in the kinds and numbers of patients referred by GPs to physiotherapists and the knowledge GPs have of physiotherapy practice (Anderson and Campbell, 1992; Kerssens and Groenewegen, 1990; Ritchey et al, 1989; Uili, Shepard and Savinar, 1984). Many GPs also doubt the efficacy of physiotherapeutic interventions. One possible solution is for GPs, when in doubt about the indications for physiotherapy, to consult a physiotherapist prior to possible referral for treatment.

At present, GPs decide on the basis of a medical diagnosis whether physiotherapy is indicated or not. Physiotherapists' unique knowledge and skills in the area of human locomotion allows them to offer a complementary, or even refined, diagnosis. This is important, because the GP's medical data and diagnosis may not be sufficient to direct a physiotherapeutic intervention (Bowler-Hulme, Wackemagel and Lewis, 1988; Delitto et al, 1993; Magistro, 1989; May and Dennis, 1991; van Mischner-Ravensberg, Paauw and van Gestel, 1988; Rose, 1987; Sahrman, 1988).

Physiotherapy is often directed at the consequences of a disorder or disease rather than at the disorder or disease itself. As in rehabilitation medicine, the International Classification of Impairments, Disabilities and Handicaps (ICIDH) is increasingly being used to describe the health status of patients at three distinct functional levels: impairment (organ), disability (person) and handicap (society) (WHO, 1980). In physiotherapy, the results of physical examination and treatment goals are increasingly being formulated within the framework

of the ICIDH (van Gisbergen and Dekker, 1992; Heerkens et al, 1993a; Hendriks et al, 1993a; Hendriks, Wagner and Brandsma, 1993b; van Mischner-Ravensberg et al, 1988; van Triet, Dekker, Kerssens and Curfs, 1990).

The Ministry of Health, Welfare and Sports has requested the National Institute of Allied Health Professions and the Netherlands Institute for Research in Health Care (NIVEL) to assess the outcome of GPs consulting physiotherapists. The Physiotherapy Act 1977 (Fysiotherapeutenbesluit, 1977) only mentions referrals by GPs to physiotherapists for treatment. By enabling GPs to consult physiotherapists, a new dimension to the relationship between GPs and physiotherapists will be introduced (Ministerie van WVC, 1989). Consultation of a physiotherapist by a GP is defined as follows: 'a written request by a GP to a physiotherapist to examine and evaluate a patient to generate information regarding a diagnosis and prognosis to facilitate the treatment plan of the GP, specifically when it concerns the possibilities for physiotherapeutic interventions'.

The overall objective of the project was to establish whether consultations of physiotherapists by GPs would influence the number of referrals made by GPs to medical specialists and physiotherapists in either a qualitative or quantitative way. To our knowledge, no comparable research has been conducted on the effects of GPs consulting physiotherapists and the practicalities of the consultation procedure (Hendriks et al, 1992). We therefore planned two related studies, the first of which was to evaluate the feasibility of the consultation process and the practicality of the standard consultation forms. The second main study evaluated the effects of such consultations on the primary health care system.

This paper presents the results of the feasibility study, which are representative of the size (power) and design of the main study (field experiment). The questions we wished the feasibility study to answer were as follows:

1. Is the new consultation procedure feasible and how practical are the standard consultation forms?
2. How often are consultations requested? What sort of information is requested and what advice

does the physiotherapist give? Are GPs really interested in consulting physiotherapists in the future?

3. How do GPs treat the advice of physiotherapists and does it contribute to the decision-making process?
4. How can patients referred by GPs to physiotherapists be characterised? For example, in terms of type of complaint, localisation of complaint, age, etc.?
5. What is the relationship between the medical diagnosis or referral data and the diagnosis established by the physiotherapist?

METHODS AND MATERIALS

Design and research population

An exploratory descriptive research design was employed. The study, which was conducted in a rural area, was of a pre-experimental nature (i.e. no control group was employed) and lasted 13 weeks. A questionnaire was developed to identify background characteristics of the participating GPs and physiotherapists. The 14 GPs (13 males, 1 female) were aged 30–50 years (mean 40 years) and had 1–23 years (mean 11 years) experience. The mean number of patients on their registers was 2400 (range 800–3500). The eight physiotherapists (7 males, 1 female) were aged 25–44 years (mean 38 years) and had 6–20 years (mean 12.5 years) experience. To guarantee continuity of consultations, two physiotherapists were selected for each of the four participating private practices. An important prerequisite for participation by the physiotherapists was a willingness to cooperate, because non-cooperation would have defeated the object of the study. A request by a GP for a consultation could be for information regarding the indications for physiotherapy, diagnostic information, or both.

Procedure and standard consultation form

The procedure to request a consultation with a physiotherapist was as follows. The GP, having

decided to consult a physiotherapist, completed a consultation request form. At the same time, the GP was asked to put in writing the reason for his or her request and what course of action they would have taken had they not consulted the physiotherapist. The patient then took the consultation request form to the physiotherapist, who conducted an examination after taking a patient history. The physiotherapist also analysed the patient's health status in terms of impairment (including localisation of involved tissues), disability and handicap using ICDH (WHO, 1980). The physiotherapist recorded his or her findings on two standard forms: one was used for the patient's personal and sociodemographic characteristics and the other for a description of the patient's health status. The physiotherapist then advised the GP, using a standard report form, of the indications for physiotherapy, treatment goals and management, and prognosis when applicable. The GP assessed the standard report form and indicated his or her preferred management of the patient on a 'consultation-evaluation' form.

The standard form used to request a consultation was developed according to the guidelines set out in a protocol of the Netherlands Association for General Practitioners (NHG, 1989). The International Classification of Primary Care (ICPC) was used to record the medical diagnosis/referral data (Lamberts and Wood, 1987). The various types of complaint were evaluated by means of open-ended questions. The data were coded according to the main ICPC categories. The health status of the patients, which was part of the physiotherapist's diagnosis, was described using the ICDH (WHO, 1980). The reliability of the assessment forms based on the ICDH has been shown to be satisfactory for a number of different health professions (van Gisbergen and Dekker, 1992; van Gisbergen, Dekker and Zuijderduin, 1993; van Triet et al, 1990). The physiotherapists were asked to indicate which of the impairments or disabilities recorded would have formed the basis of their treatment plan.

Data relevant to the feasibility and usefulness of the procedure were obtained from the standard forms and the questionnaires completed by the

participants before and after the study. The questionnaires completed prior to the feasibility study concerned the personal characteristics of the participating physiotherapists and GPs, the organisation of their respective practices, cooperation between them, knowledge of each other's specialism, referral data and postgraduate qualifications. The questionnaires completed immediately following the study concerned the appropriateness and practicality of the forms, possible changes to the relationship between GPs and physiotherapists, and the willingness of both groups to adopt the procedure in the future.

Data analysis

Because of the nature of the feasibility study, the results are presented in a descriptive manner.

RESULTS

Procedure and standard forms

Thirteen of the 14 GPs and 6 of the 8 physiotherapists believed the consultation procedure could easily be incorporated into their daily routines. The GPs were asked how they had informed their patients of the physiotherapist's report: five GPs made an appointment with their patients at the time of referral, five asked their patients to contact them, whereas two contacted their patients directly. Two GPs did not indicate a preferred method.

The GPs were generally satisfied with the outcome of consultation and the time within which they received the physiotherapist's report. Evaluation of the consultation request form revealed that 11 GPs thought the form satisfactory for allowing the physiotherapist insight into the patient's condition. The average amount of time taken to complete the form was 3 min (range 1–5 min). The physiotherapists thought the form provided sufficient information regarding the nature and course of a patient's complaint and possible psychosocial information to allow them to agree to a consultation request. Despite its relative unfamiliarity, seven of the eight physio-

therapists were happy to describe the health status of the patients using ICIDH terminology. On average, the physiotherapists required 40 min (range 30–50 min) for history-taking and a physical examination. The time taken to write the report ranged from 10 to 30 min.

Frequency of use of consultation

During the 13 week study, 93 patients were referred to the physiotherapists. The number of consultations requested varied from 1 to 30 (median 5) between GPs. This amounts to one request per GP every 2 weeks. Alternatively, this can be expressed as a mean of 12 referrals per GP for every 1000 patients each year. The referral rate for physiotherapeutic treatment in The Netherlands has been estimated to be 110 referrals per GP for every 1000 patients each year (Kerssens and Curfs, 1993).

Consultation and advice

Of the 93 patients referred to a physiotherapist, 12 (13%) were referred for further diagnostic information. For a further 47 (51%), the GPs wished to know whether physiotherapy was indicated or not. In the remaining 34 (36%) cases, the GPs requested both types of information.

The physiotherapists advised physiotherapy in 55 (59%) cases, including advice/information ($n=7$); in 7 (8%) cases, there was no indication for physiotherapy. In 10 (11%) cases, the physiotherapists thought a consultation by a medical specialist would be the most appropriate course of action; in 15 (16%) cases, the GPs were advised to consult or refer to another allied health care professional. Finally, in 4 (6%) cases, the physiotherapists requested further information from the referring GP before offering advice.

In the case of 78 (86%) patients, the GPs followed the advice of the physiotherapists.

Eleven GPs indicated that they would like the possibility of consulting a physiotherapist, one was not convinced of the need to and the other two did not express an opinion. All eight physiotherapists expressed the view that they would like

GPs to consult them on a regular basis. Six physiotherapists indicated a preference for joint consultations, with the GP and physiotherapist seeing the patient together.

Quality of consultation and patient management

Ninety-three percent of the GPs were of the opinion that the physiotherapists' reports had answered their questions satisfactorily. Twelve GPs indicated that the possibility of consulting a physiotherapist was a useful additional option in their choices of treatment. After receiving the physiotherapist's report, the GPs adopted a different treatment plan compared with that intended in 54 of the 93 (59%) referrals (see Table 1). For example, before the consultation process, the GPs had intended referring 28 patients to medical specialists; however, after consultation, only 14 patients were referred. The GPs' intended treatment plan was unchanged in six patients. Of the 39 patients originally intended to be referred to a physiotherapist, 27 were referred following consultation.

Characteristics of the patients

The medical diagnosis/referral data were classified using the ICPC (Lamberts and Wood, 1987). Eighty-nine percent of the patients ($n=82$) presented with disorders of the locomotor system, 8% ($n=7$) with neurological disorders and 3% ($n=3$) with general unspecified complaints or vascular disorders. The GPs requested a consultation for just over 50% of the patients presenting with chronic complaints: duration of complaint more than 4 months, 19 patients; duration of complaint more than 12 months, 28 patients. There was no obvious relationship between age and request for a consultation, but the GPs requested a consultation for twice as many women as men. Most patients had a recurring condition, with no history of previous trauma or accident. The main reason for contacting their GP was pain (95%). These patients were characterised as having previous medical

diagnostic procedures (e.g. X-ray) and as having received medical treatment (i.e. drugs, etc.) for the same complaint.

Similarity between the two diagnoses

Table 2 shows the relationship between the medical diagnosis of the GP and that of the physiotherapist at the level of impairment, disability and handicap (WHO, 1980). The table reveals a discrepancy between the medical diagnosis and the number of impairments, disabilities and handicaps for each diagnostic group. By listing the impairments, disabilities and handicaps, localisation of the condition and organs/tissues affected, it is possible to gain insight into the ways in which a particular disorder or disease affects individual patients or patient groups. Such a diagnosis can serve as the starting point for the formulation of a treatment plan based on an analysis of the relevant data. Table 2 shows the impairments and disabilities amenable to physiotherapeutic intervention. It would appear that physiotherapists most often decide to treat patients at the level of impairment, occasionally at the level of disability but never at the level of handicap.

DISCUSSION

Improvements in care-giving efficiency are receiving more attention within health-related policy. Physiotherapy can be used more efficiently if GPs use physiotherapists' expertise at an earlier stage (Bertels et al, 1985; Hendriks et al, 1993a, 1993b). Ritchey et al (1989) conclude: 'greater professional autonomy is likely to be acquired by physical therapists making physicians aware of the extent of therapists' capabilities'. A number of studies have shown a deficit in GPs' knowledge (Kerssens and Curfs, 1993) and resident physicians' knowledge (Stanton et al, 1985) of physiotherapy. There is evidence to suggest that knowledgeable physicians refer more patients and that they tend to be prescriptive, directing the physiotherapist in the direction of which treat-

Table 1
Treatment policy of GPs following consultation

	Intended policy prior to consultation	Policy following consultation	Intended policy not changed
Continue own treatment	6	4	4
Consultation by telephone			
medical specialist	2	—	—
physiotherapist (informal) ^a	5	—	—
Referral			
medical specialist	28	14	6
physiotherapist ^a	39	55	27
other	1	13	1
Joint examination	2	—	—
Doubt/uncertainty ^b	9	—	—
Adjustment of treatment policy ^c	NA	5	—
Total	92	91 ^d	38

^aIncluding one time advice/information by physiotherapist.

^bReferral to, for example, chiropracist, remedial exercise therapist.

^cGP did not specify treatment policy.

^dThe treatment policy following consultation of one patient is not known.

NA, Not applicable.

ment to apply (Uili et al, 1984). This may explain why knowledge about physiotherapy, close co-operation and number of referrals appear to be linked. The introduction of a new aspect of cooperation – referral for a physiotherapist's consultation – could be instrumental in enhancing the efficiency of care (Bertels et al, 1985; Ministerie van WVC, 1989; Kerssens and Groenewegen, 1990; Kerssens and Curfs, 1993), particularly if the GP is uncertain whether physiotherapy would be beneficial. Consulting physiotherapists could even be educational for GPs, as it may improve their knowledge of the indications for physiotherapy, the skills of the physiotherapist and the therapeutic potential of physiotherapy. Hence the quality and appropriateness of referrals may improve (Bahrami et al, 1993; Hendriks et al, 1992, 1993a, 1993b; Stanton et al, 1985).

The feasibility study has shown that there is considerable variation between GPs in the way they make use of physiotherapist consultations. Much research has shown the wide variations in the treatment policies of GPs (Campbell, Anderson and Gardner, 1992; Kerssens and Curfs, 1993; Kerssens and Groenewegen, 1990; Ritchey et al, 1989). The rate of referrals for consultation was low compared with the rate of referrals for treatment (12 vs 110 referrals per

GP for every 1000 patients per year). The GPs were very positive about consulting physiotherapists in the future if they are in any doubt as to the indications for physiotherapy. Both the GPs and physiotherapists found the consultation procedure and reporting forms to be suitable for the purpose of consulting a physiotherapist. The standard consultation form and reporting form are both considered valid reporting instruments.

In general, the GPs were satisfied with the way in which the physiotherapists answered their queries and how relevant that information was for directing treatment. In 54 of 93 (59%) referrals for consultation, the GPs changed their initial treatment plan based on the information provided by the physiotherapist. When the data for referrals for consultation are compared with the national figures for consultations for treatment (Kerssens and Curfs, 1993), some differences can be noted. For example, twice as many women as men were referred for consultations (67 vs 33%), whereas almost equal numbers of women and men are referred for treatment (52 vs 48%). In general, the patients referred for consultations tended to come from the younger age groups. And those referred for consultations tended to have recurring and more chronic complaints. The main field study may show similar trends.

Although a GP's medical diagnosis determines

Table 2
Relation between medical diagnosis and referral data^a and the health status of the patient as part of the physiotherapist's diagnosis^b

Health status	GP referral diagnosis					
	Back complaints (n=13)		Neck complaints (n=11)		Shoulder complaints (n=9)	
	Frequency ^d	Goals ^e	Frequency ^d	Goals ^e	Frequency ^d	Goals ^e
Impairments (n=10)^c						
Pain	13	7	9	6	9	6
Decreased range of motion	9	6	10	6	5	3
Shortened muscle	6	4	6	2	4	3
Hypertone muscle	3	2	4	2	3	2
Decreased muscle strength	3	1	3	—	5	2
Change in posture (body)	5	4	5	2	4	1
Change in position (joint)	6	5	6	2	3	2
Decreased active stability	5	3	2	2	2	2
Impaired coordination	2	1	4	2	3	1
Pliability of skin	—	—	3	2	1	1
Disabilities (n=9)^c						
Walking	7	2	—	—	—	—
Kneeling	4	—	2	—	—	—
Changing position when lying down	10	—	4	—	5	—
Changing position when sitting	10	4	3	1	—	—
Maintaining a specific posture	7	—	5	1	—	—
Lifting/carrying	9	3	5	—	7	—
Picking up/grasping	10	1	3	—	6	2
Reaching	8	—	4	—	7	2
Domestic activities	13	1	7	—	6	—
Handicaps (n=4)^c						
Physical independence	—	—	1	—	—	—
Mobility	6	—	1	—	2	—
Occupation	10	—	5	—	5	—
Social integration	4	—	2	—	1	—

^aThe referral data were classified using the ICPC.

^bAn inventory of the health status in terms of impairments, disabilities and handicaps.

^cA selection of the most frequent impairments (n=10), disabilities (n=9) and handicaps (n=4).

^dFrequency of the recorded impairments, disabilities and handicaps.

^eTreatment goals at the level of impairments, disabilities and handicaps.

to a large extent the physiotherapist's approach to assessment and treatment, it is now evident that medical information alone (i.e. diagnosis and referral data) is sometimes an inadequate starting point for efficient physiotherapeutic intervention (Delitto et al, 1993; Heerkens et al, 1993a; Kerssens and Curfs, 1993; Dekker et al, 1993). In rehabilitation medicine and allied health professions, the concepts and terminology of the International Classification of Impairments, Disabilities and Handicaps (ICIDH) are increasingly being adopted because of the excellent conceptual framework they offer for the assessment of functional health status. Recently, Heerkens et al (1993a) defined a diagnosis by a physiotherapist as follows; 'The professional opinion of a therapist about the health status of a patient taking into consideration the underlying pathological process, based on referral data, data from history, data from physical examination and additional medical and psychosocial data'.

On the basis of the physiotherapist's diagnosis, it will be possible to justify physiotherapeutic intervention, to formulate treatment goals and to indicate which impairments, disabilities and handicaps can be addressed. Table 2 shows how a medical diagnosis based on the International Classification of Primary Care (ICPC) can be linked to the health status of a patient in terms of impairments, disabilities and handicaps. Patients with the same medical diagnosis (e.g. back, neck or shoulder pain) may present with different impairments, disabilities and handicaps. But based on the physiotherapist's diagnosis, a treatment plan can be formulated. Although physiotherapists are primarily concerned with the prevention and treatment of physical disabilities (Kerssens and Curfs, 1993; Saunders and Maxwell, 1988; Sahrman, 1988), this preliminary study has shown that they often decide to treat patients at the level of impairment.

Because the terminology used by the ICIDH is not always equivocal and many impairments and disabilities relevant to physiotherapists are missing altogether, the main field study will make use of a proposed adapted ICIDH for the allied health professions (Heerkens, Brandsma and Ravensberg, 1993b).

It became apparent that physiotherapists will

need to be reimbursed for the time they spend examining patients and compiling their written reports to GPs. In their consultations with patients, physiotherapists will assess their health status and any indications for physiotherapy, suggest a treatment plan and possibly a prognosis. In their written report to the GP, they will also have to take account of any ethical considerations together with the prevailing regulatory framework. The final responsibility for a patient's treatment, however, lies with the GP.

How important are the results of this study? At conferences in The Netherlands in 1989 and 1990 (Leidschendam Conferenties, 1989/90), policy was formulated concerning the future quality of health care. In a review article, Sluijs and Bakker (1993) suggest that a start has been made with the development of quality assurance policies within physiotherapy. According to Sluijs and Bakker, the physiotherapist's consultation affects different components of quality assurance, namely efficiency and working methodologically. We suggest other ways of ensuring quality physiotherapeutic care, including a uniform registration system, the use of classifications, the development of the cooperation between GPs and physiotherapists, and reporting to GPs. There are important practical implications for all concerned. In particular, GPs will be better informed of the physiotherapeutic possibilities and will thus be able to treat their patients more rationally. The consultation process is relevant because it provides insight into the physiotherapeutic diagnostic and decision-making process, which will help to enhance professionalism (Kerssens and Groenewegen, 1990; Ritchey et al, 1989).

The consultation process suggested here will have an effect on the proposed cost containment. The impact that such consultations will have on health care costs will be investigated in the main study. Ways to limit this impact will need to be sought and may include a more efficient referral system and substitution of care.

The nature of this feasibility study does not allow generalisation of the results, due to the optimal conditions in which it was performed and the small numbers of GPs and physiotherapists, between whom there was already good communication and cooperation. However, the aim

of the feasibility study was simply to test the consultation procedure and standard consultation forms developed. The procedure does, however, appear justified.

Acknowledgements

We would like to thank Y.F. Heerkens and J.C. de Fouw for their helpful comments and suggestions during the preparation of the manuscript. The standard consultation forms and accompanying manuals are available from the authors.

References

- Anderson J, Campbell SK 1992 Correlates of physician utilization of physical therapy. *International Journal of Technology Assessment in Health Care* 8: 10-19
- Bahrami J, Hamid Husain M, Clifton S, Pringle M, Hill FE, Richards DWL 1983 Access to physiotherapy services. *British Medical Journal* 287: 25-28
- Bertels M, Brummeler L ten, Dijkum C van, Giebels R, Mannen J van der 1985 Tijd voor kwaliteit: evaluatie-onderzoek fysiotherapie in gezondheidscentra in Amsterdam (Time for quality: Evaluation of physiotherapy in health centres in Amsterdam). Stichting Interuniversitair Instituut voor Sociaal Wetenschappelijk Onderzoek, Amsterdam
- Bowler-Hulme J, Wackernagel B, Lewis JW 1988 Communication between physicians and physical therapists. *Physical Therapy* 68: 26-31
- Campbell SK, Anderson JC, Gardner HG 1992 Use of survey research methods to study clinical decision making: Referral to physical therapy of children with cerebral palsy. *Physical Therapy* 69: 610-615
- Dekker J, Baar ME, Curfs EChr, Kerssens JJ 1993 Diagnosis and treatment in physical therapy: An empirical investigation of their relationship: *Physical Therapy* 73: 568-577
- Delitto A, Guccione AA, Jette A et al. 1993 Diagnosis in physical therapy: A roundtable discussion. *Magazine of Physical Therapy* 58: 58-65
- Fysiotherapeutenbesluit. In: Staatsblad van het Koninkrijk der Nederlanden, 1977, No. 432: Besluit van 1 juli 1977 tot vaststelling van nieuwe reglen inzake het beroep van fysiotherapeut (Physiotherapy Act 1977)
- Gisbergen van MJWM, Dekker J 1992 Reliability of the diagnosis of impairments and disabilities by exercise therapists. *Journal of Rehabilitation Sciences* 5: 67-73
- Gisbergen van MJWM, Dekker J, Zuijderduin W 1993 Reliability of the diagnosis of impairments in survey research in the field of chiropody. *Disability and Rehabilitation* 15: 76-82
- Heerkens YF, Brandsma JW, Bernards ATM, Hendriks HJM, Lakerveld-Heyl K, Ravensberg CD, Wams HWA, Oostendorp RAB, Helders PJM 1993a. Zin en onzin van het gebruik van de ICIDH (Sense and non-sense of the use of the ICIDH). *Fysiopraxis* 18: 18-21
- Heerkens YF, Brandsma JW, Ravensberg CD 1993b Proposal for adaptation of the Internal Classification of Impairments, Disabilities, and Handicaps from the perspective of five Dutch health professions. Dutch Classification and Terminology Committee for Health (WCC), National Council for Public Health (NRV), Zoetermeer
- Hendriks HJM, Wagner C, Brandsma JW, Dekker J, Wams HWA, Oostendorp RAB 1992 Consultatief Fysiotherapeutisch Onderzoek (CFO) in de eerste lijn: Introductie van het CFO-project en informatie uit de literatuur (Consultative physiotherapy evaluation (CPE) in primary health care: Introduction of the CPE-project and information from the literature). *Nederlands Tijdschrift voor Fysiotherapie* 6: 176-183
- Hendriks HJM, Brandsma JW, Wagner C, Dekker J, Oostendorp RAB 1993a Eerste ervaringen met het consultatief fysiotherapeutisch onderzoek (Preliminary experiences with physiotherapeutic consultations). *Nederlands Tijdschrift voor Fysiotherapie* 103: 190-200
- Hendriks HJM, Wagner C, Brandsma JW 1993b Consultatie van de fysiotherapeut: Een middel voor betere samenwerking tussen huisartsen en fysiotherapeuten (Consultation of the physiotherapist: The cooperation between general practitioners and physiotherapists). In: *Jaarboek Fysiotherapie 1993*, pp 11-32. Bohn van Loghum, Houten
- Kerssens JJ, Curfs EChr 1993 Extramuraal fysiotherapie (Physiotherapy in primary health care). PhD dissertation, Netherlands Institute for Primary Health Care, Utrecht
- Kerssens JJ, Groenewegen PP 1990 Referrals to physiotherapy: The relation between the number of referrals, the indication for referral and the inclination to refer. *Social Science and Medicine* 30: 797-804
- Kwaliteit van zorg 1990-1991 (Quality of care 1990-1991). *Verhandelingen van de Tweede kamer, vergaderjaar 1990-1991*, 22 113, nos 1-2
- Lamberts H, Wood M 1987 *International Classification of Primary Care*. Oxford University Press, Oxford
- Leidschendam Conferenties 1989/90 Afspraken over kwaliteitsbeleid (Agreements about quality policy). *Medisch Contact* 45: 872-874
- Magistro CM 1989 Clinical decision making in physical therapy: A practitioner's perspective. *Physical Therapy* 69: 525-534
- May B, Dennis JK 1991 Expert decision making in physical therapy: A survey of practitioners. *Physical Therapy* 71: 190-202
- Ministerie van WVC 1989 Notitie Ontwikkeling Fysiotherapeutische Hulpverlening (Note on the development of physiotherapeutic care). Rijswijk
- Mischner-Ravensberg van CD, Paauw HJM, Gestel JLM van 1988 De fysiotherapeutische werkdiagnose in relatie tot de medische diagnose (Physiotherapist diagnosis in relation to medical diagnosis). *Nederlands Tijdschrift voor Fysiotherapie* 98: 104-107
- NHG 1989 De verwijfsbrief naar de Tweede Lijn (Referral letter to the Institution of Health Care) - Standard 001. Nederlands Huisartsen Genootschap, Huisarts en Wetenschap 32: 102-105
- Ritchey FJ, Pinkston D, Goldbaum JE, Heerten ME 1989 Perceptual correlates of physician referral to physical therapist: Implications for role expansion. *Social Science and Medicine* 28: 69-80
- Rose S 1987 Physical therapy diagnosis: Role and function. *Physical Therapy* 7: 535-537
- Sahrmann SA 1988 Diagnosis and classification by physical

- therapist: A special communication. *Physical Therapy* 11: 1703-1706
- Saunders C, Maxwell M 1988 The case for counseling in physiotherapy. *Physiotherapy* 74: 592-596
- Sluijs EM, Bakker D 1993 De ontwikkeling van kwaliteitssystemen in de fysiotherapie (The development of quality systems in physiotherapy). *Nederlands Tijdschrift voor Fysiotherapie* 103: 13-18
- Stanton PE, Fox FK, Francois KM, Hoover DH, Spilecki GM 1985 Assessment of resident physicians' knowledge of physical therapy. *Physical Therapy* 65: 27-30
- Triet EF van, Dekker J, Kerssens JJ, Curfs EChr 1990 Reliability of the assessment of impairments and disabilities in survey research in the field of physical therapy. *International Disabilities Studies* 12: 61-65
- Uili RM, Shepard K, Savinar E 1984 Physician knowledge and utilization of physical therapy procedures. *Physical Therapy* 64: 1623-1530
- Werken aan zorgvernieuwing: actieprogramma van het beleid voor de zorgsector in de jaren negentig; bijlage: notitie inzake stelselwijzigingen zorgsector (Working towards health care innovation). Tweede Kamer, vergaderjaar 1989-1990, 21 545, nos 1-2
- WHO 1980 The International Classification of Impairments, Disabilities, and Handicaps: A manual of classification relating to the consequences of disease. World Health Organisation, Geneva