
INTERNATIONAL PRACTICE

Physiotherapy in the Netherlands: an overview

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The number of physiotherapists is relatively high in the Netherlands, one for every 1350 people in 1981 and their number has been rising steadily ever since. About two thirds of them are working in private practice; they get their patients through referrals either from family physicians ($\pm 80\%$) or medical specialists (20%). In principle patients may only consult a physiotherapist after being referred, but in day to day practice direct contacts take place to some degree. There are around 20 schools of physiotherapy (vocational colleges; physiotherapy is not an academical study in the Netherlands) and together they deliver more than 1000 new physiotherapists each year. The growing number of unemployed physiotherapists is a big problem nowadays, resulting in emigration of Dutch physiotherapists to other EEC-countries and third world countries. Apart from the social problem of unemployment there are problems that relate to the content of physiotherapy itself. Growing costs of expenditures per patient for physiotherapy lead to critical questions as to the therapeutical effects of physiotherapy and the quality of care.

INTRODUCTION

In this article we will give an overview of physiotherapy in the Netherlands. The position of physiotherapists differs from country to country, but there are hardly any comparative descriptive analyses about this topic. It is therefore difficult to assess what aspects of the situation in the Netherlands may remain in the background and what aspects should be stressed with regard to differences from the situation elsewhere. Physiotherapy must be seen in the wider context of the health care system. We therefore start this article with a

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review of the Netherlands and its health care system in general (section 2). We then proceed to the legal status of physiotherapists (section 3) and the training of physiotherapists (section 4). In section 5 we will describe the practice of physiotherapy in the Netherlands. This section is divided in two parts, one on physiotherapy in primary health care and one on the practice of physiotherapy in the hospital or institutional setting. We close this article with a discussion of some important problems in Dutch physiotherapy.

THE NETHERLANDS AND ITS HEALTH CARE SYSTEM

The population of the Netherlands amounts to about 14.5 million people living on $\pm 36,000$ km², a relatively small and densely populated country.

The number of people per km² is 424, but in the highly urbanised western parts of the country it is much higher (e.g. in the province of Zuid-Holland 1080 people per km²). Important with respect to health care is the fact that the number of elderly people is rising and is expected to continue to do so (from 11.9% in 1986 to 13.7% in 2000). Nevertheless the problem of ageing in the population is small compared to neighbouring countries such as Belgium and the Federal Republic of Germany. It is difficult to indicate the health status of the population in a way that makes it possible for the reader to make comparisons. The only comparable indications are quite at the other pole: mortality rates. Infant mortality is very low in the Netherlands: 8.4 per 1000 livebirths (within the first year). General mortality is 8.12 per 1000 of the population (1980). The two most important causes of death are diseases of the circulatory system and neoplasms.

In the health care system of the Netherlands family physicians have a central position. The family physician is in most cases the first professional to contact in case of health problems, and the filter to other more specialised forms of health care through referral. The remuneration of family physicians is in part through a capitation fee (for 70% of the population who are publicly insured) and in part on a fee for service basis (for the privately insured part the population). There is one family physician for every 2370 people. Medical specialists are only accessible after a referral by a family physician (at least for the publicly insured part of the population, but most private insurance companies require a referral before restituting the costs of specialist care). Medical specialists are mostly in private practice, although their work is with a few exceptions (such as ophthalmology), hospital based. Rooms and services of the hospitals are hired. There is one medical specialist for every 1450 people and the number of beds in general and teaching hospitals is 4.4 per 1000 people (1983). It is government policy to reduce the capacity of the hospital sector in favour of strengthening the primary care sector consisting of family physicians, dispensing chemists, dentists, physiotherapists, public health nurses and social workers. Physiotherapists work in both sectors, as will be pointed out in section 5.

Health insurance is in part private, in part a public affair. All employees under a certain income level are compulsorily insured under the public scheme; others under that income level and elderly people may voluntarily opt for the public scheme. Public insurance entitles the insured to benefits in kind (with co-payment only for a limited number of services such as pharmaceutical prescriptions). The rest of the population is privately insured; they have to pay for all services and are reimbursed, according to the coverage of their policy. The position of physiotherapy in this system will be made clear in the course of this article.

THE LEGAL STATUS OF PHYSIOTHERAPISTS

The profession of physiotherapy is acknowledged under the Act on the Paramedical Professions (1963) and the Decree of Physiotherapists (1965). A number of developments have led to a legal regulation of the profession of physiotherapy. They can be summarised under the following headings (Kortenhoeven, 1982):

- (a) The growing body of knowledge of medical science and new medical techniques has led to specialisation and differentiation; specialisation within the medical profession and differentiation between the medical profession and supplementary professions;
- (b) The Act on Medical Practice (1865) gives the monopoly of medical practice to physicians; delegation of certain medical acts is possible under the construction of the 'manis magistri';
- (c) By working more or less independently of physicians, physiotherapists violate the Act on Medical Practice. Prosecution is difficult and moreover not grounded in the sense of justice.

These developments led to the necessity to adapt legislation to the actual situation. The new legislation regulates the terms of education of physiotherapists and the important point of the relation vis-à-vis the medical profession. With regard to this last point it is stated that physiotherapists may only treat a patient after a written

instruction of a medical doctor. After a modification in 1977 the term instruction was changed in referral, which does more justice to the discretion of both physiotherapists and doctors. This means that physiotherapists are not directly accessible to patients, except through referral. However, in day to day practice there are to some extent direct contacts (although there are no data to quantify this assertion). Situations in which direct contacts take place, are:

- (1) Sports injuries.
- (2) Some categories of chronic patients.
- (3) Some private patients, who are not insured for physiotherapy services or whose private insurance company does not ask for a certificate of referral.
- (4) In a few integrated health centres the physiotherapists keep a weekly consulting hour; patients may directly consult the physiotherapist, but actual treatment starts only after the physiotherapist has talked things over with the patient's family physician.

All in all, the question as to whether the services of physiotherapists should or should not be directly accessible to the patients, is still in debate.

THE TRAINING OF PHYSIOTHERAPISTS IN THE NETHERLANDS

There are about 20 schools of physiotherapy in the Netherlands. They are not often directly connected to hospitals. Unlike the situation in nursing there is no in-service training. Since 1975 the training of physiotherapists is part of the system of vocational colleges under direction of the Department of Education and Sciences. The minimal qualification for entrance is senior secondary school, but schools of physiotherapy may require additional qualifications. Recently the number of people applying for entrance has exceeded the training capacity (although there is no formal limit to the number of entrants). Physiotherapy is not an academic course in the Netherlands; physiotherapists are not awarded a degree, but gain the legally protected right to bear the title of physiotherapist. Universities are,

however, involved in the continuing education of physiotherapists. The content of training is gathered from the Decree on Physiotherapists (mentioned in the last section) and from proposals of a Committee concerning the training of physiotherapists. The training takes 4 years, divided in eight semesters, consisting of the following courses:

- (1) Physiotherapy (1170 h) including general knowledge (about legislation, professional ethics), exercise therapy, massage, the uses of physical agents, examination and treatment, emergency care. The ratio of theoretical and practical courses is 1:1½.
- (2) Physics (40 h).
- (3) Behavioral science (290 h) including psychopathology.
- (4) Organisation of health care (40 h).
- (5) Basic medical subjects (590 h), such as anatomy, kinesiology, biomechanics, physiology and biochemistry.
- (6) Medical subjects (240 h) including general pathology, orthopedics, traumatology and neurology.
- (7) Sports (120 h).
- (8) Dutch language (80 h).
- (9) Optional courses (60 h).

The discussion will be restricted to the first and most important topic—physiotherapy.

Exercise therapy includes the theory and practice of the use of movement to a therapeutic end; this may be increase of muscular power, regulation of tonus, relaxation, mobilisation, increase of performance, correction of movement or posture and easing of pain. To achieve these ends students are educated in general methods of treatment as well as specific methods such as manual therapy and therapeutic methods of Bobath, Frenkel-Maloney, Bugnet, Becker, Niederhöffer and Klapp. Massage consists of the mastering and therapeutic application of manual skills. Apart from the general principles of massage special skills are taught (e.g. connective tissue massage, periosteum massage, manual lymph oedema drainage).

The use of physical agents consists of the application of high and low frequency electrotherapy, ultrasound, light-therapy, thermo-

cryo-, balneo- and hydrotherapy, myofeedback and different methods of traction. The course in examination and treatment aims at teaching the student the principles of physiotherapeutic examination (on the basis of the diagnosis of the referring physician—the physiotherapist is not allowed to diagnose medically). The students are taught to develop and apply a course of treatment on the basis of this examination.

The last half of the 3rd and the first half of the 4th year of training are learning-in-practice-periods. Practice training is possible in the institutional setting (hospital, rehabilitation clinic, nursing home) as well as in private practices affiliated to the schools of physiotherapy. Students are examined upon physiotherapeutic examination and treatment, evaluation of the practice period, an essay and a concluding interview. The number of students passing the examination, amounts to around 1000 per year. Not all of them find work in Dutch health care and a number of physiotherapists leave the country to find work abroad (e.g. in the Federal Republic of Germany, Switzerland or third world countries) or decide to take up another study, e.g. medicine. There are a large number of courses in continuing education, e.g. in Cyriax methods, manual therapy, manual lymph oedema drainage, acupuncture, rehabilitation of stroke patients, and the Bobath approach.

THE PRACTICE OF PHYSIOTHERAPY

After the more general sections a number of aspects of the practice of physiotherapists in the Netherlands, such as common fields of work, specialisation, structure of practice, place of delivery of services will be covered. There are no exact figures on the total number of physiotherapists actively practising in the Netherlands. In 1981 the number was estimated to be approximately 10,500 (Van Brunschot, 1981). With a population of M 14.2 this amounts to a population of 1350 per physiotherapist, a much higher ratio than in most of the other European countries; the density of physiotherapists is only higher in Denmark and Belgium.

Physiotherapists in primary care

The number of physiotherapists in primary care was estimated as approximately 6000, a population of 2350 per physiotherapist. These physiotherapists in primary care are in part the owners of a private practice and in part those who work in the practice of an owner either as employee or for a percentage of the fees. At the moment their number is estimated to be 6700 (Department of Welfare, Public Health and Culture, 1984). A number of physiotherapy practices (circa 100) are part of an integrated health centre and therefore have a close relationship with the family physicians working in these centres.

The number of physiotherapists in primary care has been rising very fast. During the past 10 years the estimated growth of the total number of physiotherapists is over 300%, while the growth of the number in primary care is estimated to be still higher. The growth of the total number of physiotherapists will go on in the years to come; as the number of newly admitted students was 1700 in the year 1984/1985. On this subject the profession has not attempted to establish barriers to entry in the professions. However, the number of physiotherapists active in primary care is stabilised by a restriction of the number of physiotherapists who can obtain a contract to provide services for publicly insured patients. Therefore the number of unemployed physiotherapists is expected to grow very fast during the next decade.

Physiotherapists in primary care are remunerated on a fee for service basis. In the case of private patients fees are directly charged to the patients, who then, depending on their insurance policy, may or may not claim (part of) the fee for reimbursement. Publicly insured patients do not pay directly to the providers of health care; physiotherapists declare their service to the health insurance funds and are paid by them.

The level of the fees is the result of yearly negotiations between the professional organisations and the organisation of public health insurance funds. The fee structure is based on the time the different kinds of services are supposed to take; more time consuming services are costed higher. The structure of the fees is such that the total

income of physiotherapists in an average practice with normal working hours should be around Hfl 60,000 (or \$24,000) per annum. Data on actual incomes are not available. Although most of the patients come to the practice for treatment, around 15% of the treatments are at the patient's home. Most treatments consist of massage and/or exercise therapy combined with the application of a physical agent. A treatment consists of an average of 12–18 sessions, taking place twice or three times a week. Officially specialisation does not exist, but in practice a lot of physiotherapists are more or less specialised either in certain treatments or approaches—manual therapy, acupuncture—or in certain patient categories such as young children, stroke patients. In most private practices equipment for the application of the physical agents, summed up in the section on training, will be found. The range of complaints which are treated by physiotherapists is very wide, but the most frequent complaints in private practice are back pain and neck/shoulder pain (estimated to be half of the complaints treated by physiotherapists).

Tasks that are not undertaken by physiotherapists are activities of daily living—(advice) on aids and similar matters and these tasks are being performed by occupational therapists.

Physiotherapy in hospitals and institutions

Some 3000 physiotherapists are working in hospitals, rehabilitation institutes, extended care hospitals (mainly for the elderly) and some smaller categories of institutions. Their salaries vary between Hfl 2,900 (\$1,050) per month for a physiotherapist at the beginning of a career to Hfl 5,200 (\$1,890) for a head of a big physiotherapy department. Most of the physiotherapy departments not only treat hospitalised patients, but also out patients; these are either treated in continuation of inpatient care or have been referred by medical specialists who treat them in the outpatient clinic; a number of physiotherapy departments also treat outpatients referred to them by family physicians. The reasons are either ease of access for the patient, specialisation of the physiotherapists or better equipment of the

physiotherapy departments. Although private practices are reasonably well equipped, they do not have equipment such as a Hubbart tank, and in most cases the practice space is small. As far as specialisation is concerned, the same applies as to the primary care physiotherapists. Moreover, working in rehabilitation centres and extended care hospitals in itself leads to some kind of specialisation. It is therefore understandable that more than half of the outpatients treated in extended care hospitals are older patients referred by family physicians. In these cases the differences between primary care and physiotherapy in hospitals disappear.

SOME PROBLEMS OF PHYSIOTHERAPY IN THE NETHERLANDS

In conclusion we would like to discuss three problems: financial problems relating to the tariff structure, quality assurance and scientific research in physiotherapy. Physiotherapy is relatively small, but at the same time the fastest growing item in total expenditures per insured person in the Netherlands in the past decade. With the contraction of the economy, there is a rising pressure on physiotherapy. Discussions have been about the removal of physiotherapy from the package of free services for publicly insured patients and the introduction of out of pocket payments. However, these measures at the demand side were not taken. In contrast a number of measures were taken at the supply side in respect of the tariffs and the volume of services. A restructuring of the tariffs resulted in higher fees for some and lower fees for other services. The effects of the change have been studied (Kerkhoff & Hagenstein-'t Mannetje, 1983; Curfs, 1985) and the results reveal that those services for which the tariffs were raised increased in frequency and the lower priced services decreased in frequency. The overall effect was still a rise in costs. A clear restriction of the volume of services was reached by limiting the number of combined treatments (that is: massage and/or exercise therapy combined with the application of a physical agent) that can be billed to the health insurance funds.

This has led to a lowering of the costs, although this measure also resulted in some substitution of lower by higher paid services.

This sensitiveness of what physiotherapists do (or at least: what they declare for payment by the health insurance funds), to changes in tariffs points to questions as to what relation there is between the kinds of complaints of the patients, the treatment by the physiotherapists and the results of treatment. At the level of day to day practice the response to this question is found in initiatives for quality assurance through peer review, systematic structuring of the treatment series and recording of the patient's problem, diagnosis and treatment. The counterpart of this development on a more global level is scientific research into the effects of physiotherapy. Only the combination of the two can prevent the demolition of the position of physiotherapy in Dutch health care.

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