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Psychosocial complaints and physical therapy

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The aim of this study was to describe the disorders and the treatment of patients whose complaints were evaluated as being solely somatic in nature, as being somatic and having psychosocial consequences, or as being (at least partially) of a psychosocial origin. Data were used from a survey on physical therapy in Dutch primary health care, in which physical therapists collected data on their patients using a standardised registration form. The therapists evaluated approximately two-thirds of their patients' complaints as solely somatic, about one-sixth as having psychosocial consequences and about one-sixth as being at least partially of psychosocial origin. Systematic differences were found between these categories of patients with regard to the medical diagnosis, the physical therapist's diagnosis (in terms of impairments and disabilities) and the treatment. It is concluded that, in addressing the issue of physical therapy in patients with psychosocial complaints, one should make a distinction between complaints of psychosocial origin and complaints with psychosocial consequences. Furthermore, the therapeutic goals and interventions applied in patients with psychosocial complaints clearly belong to the domain of physical therapy.

INTRODUCTION

Psychosocial problems are highly prevalent among patients treated in primary care settings. Both general practitioners (Verhaak, 1995; Verhaak and Wennink, 1990) and physical therapists working in primary care settings in the Netherlands (Kerssens and Curfs, 1993) judge psychosocial problems to play a role in approximately one-third of their patients.

Although physical therapists seem to be well aware of these problems, there is no consensus on how to approach patients with psychosocial problems. On the one hand, it can be argued that physical therapists have been trained to evaluate and treat somatic aspects of their patients' complaints. Consequently, they should focus on the somatic aspects and they should refrain from discussing or treating psychosocial complaints. Even in patients with psychosocial complaints, the physical therapist should focus on the somatic aspects of the complaint or refer the patient elsewhere (cf. Eurelings, 1989). On the other hand, it can be argued that physical therapists are in a good position to give their patients advice: they see their patients regularly and the physical contact between patient and therapist may facilitate trust and disclosure of emotional problems (cf. Sonnen, 1986; Sluijs, 1991).

This issue is far from being solved. One important barrier to the settlement of this problem seems to be a lack of knowledge of how physical

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therapists actually approach patients with psychosocial problems. Knowledge regarding the diagnostic findings, the therapeutic goals and the interventions used in patients with psychosocial complaints may help to clarify and thereby solve the issue of how to approach patients with psychosocial problems.

Our approach was to use data from a large survey on physical therapy in the Netherlands, in which physical therapists gathered data on the treatment of their patients using a standardised registration form. Among other things, the physical therapists recorded their evaluation of their patients' complaints. Following Verhaak and Wennink (1990), a distinction was made between (1) solely somatic complaints, (2) somatic complaints which have psychosocial consequences and (3) complaints which are (at least partially) of a psychosocial origin. Such a distinction between these complaints has been shown to be rather illuminating in research on general practitioners (Goldberg, Kay and Thompson, 1976; Goldberg and Bridges, 1987; Skuse and Williams, 1984; Verhaak, Wennink and Tijhuis, 1990; Wright and Perini, 1987), and we expected it to be so in physical therapy as well.

With regard to somatic complaints with psychosocial consequences, it was expected that older patients would be well represented. Older patients, frequently suffering from chronic diseases, may experience disabilities in daily life (Jackson, 1987). These disabilities have consequences at the psychosocial level. For example, disabilities in walking may in the long run lead to social isolation. In their treatment, physical therapists are expected to focus on these disabilities, the alleviation of which is (or should be) an important therapeutic goal in elderly patients (Jackson, 1987). Indirectly, alleviation of these disabilities may contribute to a reduction in the psychosocial problems. Thus, with regard to somatic complaints with psychosocial consequences, it was expected that (1) older patients with rather long-standing complaints would be well represented, (2) these patients would frequently suffer from disabilities in daily life, and (3) treatment of these patients would focus on the alleviation of these disabilities.

Psychosocial factors are suspected to play a causal role in the origin or maintenance of disorders such as back pain, headache and neck/shoulder pain (Kerssens and Curfs, 1993; Gazendam and Westdijk, 1991). Increased muscle tone is supposed to be a key issue in these disorders (Flor and Turk, 1984). Patients are supposed to react to psychosocial stressors with increases in muscle tone. In turn, increased muscle tone leads to ischaemia and pain. Physical therapists are expected to focus on alleviation of the increased muscle tone. Massage and relaxation exercises are appropriate interventions to reduce muscle tone. Thus, with regard to complaints of a psychosocial origin, it was expected that (1) increased muscle tone would be a common diagnosis, and (2) that physical therapists would focus on alleviation of increased muscle tone by means of (3) massage and relaxation exercises.

In summary, the aim of the present study was to describe – based on a survey of physical therapy – the disorders and the treatment of patients whose complaints were evaluated as being solely somatic in nature, as being somatic and having psychosocial consequences, or as being (at least partially) of a psychosocial origin.

METHODS

Physical therapy survey

Data were collected from a physical therapy survey in Dutch primary health care (Dekker, van Baar, Curfs and Kerssens, 1993; van Valk, Dekker and Boschman, 1994), between 1989 and 1992. The data were gathered by 83 physical therapists working in 32 private practices in primary health care chosen on a random basis throughout the Netherlands. Throughout the study period, all newly referred patients were registered using a specially designed form comprising three main sections (van Triet, Dekker, Kerssens and Curfs, 1990; van Valk et al, 1994).

The first section of the form relates to general patient characteristics, complaints and the indication for referral established by the referring physician. The indication for referral is classified

using the International Classification of Primary Care (ICPC; Lamberts and Wood, 1987).

The second section of the form relates to aspects of the physical therapist's diagnosis (Dekker et al, 1993). The physical therapist's diagnosis is complementary to the medical diagnosis and is concerned with the consequences of disease, instead of the disease itself. The physical therapist's diagnosis is made in terms of the International Classification of Impairments, Disabilities and Handicaps (ICIDH; WHO, 1980). The diagnosis comprises two parts: impairments and disabilities. (Diagnosis in physical therapy seems to encompass more than a description of the patient's health status in terms of impairments and disabilities (Heerkens et al, 1993). However, in this paper, diagnosis is restricted to impairments and disabilities, which are an important part of the diagnosis.)

Impairments are the consequences of disease at the level of organs (e.g. muscle weakness or increased muscle tone). Disabilities are the consequences of disease at the level of the behaviour of individuals (e.g. disability in walking). The impairments and disabilities on the registration form are listed in Tables 4 and 5. Research into the reliability of the assessment of impairments and disabilities has shown that reliability is generally satisfactory to good. The items with a low level of reliability were adjusted in order to improve reliability prior to registration (van Triet et al, 1990).

The third section of the form concerns the treatment, which is recorded in terms of treatment goals and interventions. Treatment goals are a subset of impairments and disabilities: treatment is primarily directed towards alleviation of these selected impairments and disabilities (see Table 1). The interventions, which can be registered on the form, are listed in Table 7.

The first and second sections of the registration form were filled in at the start of treatment; the third section was filled in after each session of therapy.

Evaluation of psychosocial problems

The first section of the form also contains an item on the evaluation of the patient's complaints. Following the method used by Verhaak (1986; Verhaak and Wennink, 1990), the physical therapists evaluated the complaints as being solely somatic in nature, as being somatic with psychosocial consequences, or as being (at least partially) of a psychosocial origin. A fourth category, 'psychosocial complaint of somatic origin', was also used; however, this category was excluded from the analysis because it occurred in only 0.7% of the patients and it is difficult to interpret. The item on the evaluation of the patient's complaints was filled in in the course of treatment, because evaluation of this item might have been too difficult at the start of treatment.

Analysis

In each session, the therapist indicated treatment goals and interventions. These 'session' data were reduced to data at the level of the treatment of a patient (cf. Dekker et al, 1993). With regard to treatment goals, it was determined whether a treatment goal occurred at least once in the course of a patient's treatment. The data on the interventions were reduced to the level of the patient by calculating for each intervention the frequency of use of the intervention, divided by the total number of interventions used in the

Table 1
The relationship between diagnosis, treatment goals and treatment

Diagnosis	Treatment goals	Treatment
All impairments and disabilities which are observed in a patient	Subset of impairments and disabilities; the treatment is primarily aimed at recovery or alleviation of these impairments and disabilities	Application of interventions aimed at recovery or alleviation of the impairments and disabilities chosen as treatment goals

treatment of the patient. This resulted in the relative proportion of the specific interventions in the total treatment of the patient. For example, if a patient was treated 20 times with exercise therapy and 10 times with massage therapy, the relative proportion of exercise therapy was 66.6% (20 divided by 30) and the relative proportion of massage therapy was 33.3% (10 divided by 30).

In testing the differences between the groups, we used chi-square tests and *t*-tests with a significance level of $\alpha = 0.01$.

RESULTS

Subjects and evaluation of complaints

In this study, use was made of data on all patients registered between 1989 and 1992 (excluding patients with an ambiguous evaluation of their complaints; see Methods section). In total, 17,012 patients were included. Most patient complaints ($n = 11{,}354$, 66.7%) were evaluated as being solely somatic in nature. A much smaller number were evaluated as being somatic with psychosocial consequences ($n = 2583$, 15.2%) or as being (at least partially) of psychosocial origin ($n = 3075$, 18.7%).

Overall, 46% of the patients were male and 54% were female. The relationship between gender and the evaluation of the complaints is shown in Table 2. A higher proportion (70%) of patients with complaints of psychosocial origin were female. Approximately 60% of the patients with somatic complaints with psychosocial consequences were female, and approximately 50% of the patients with somatic complaints were female.

The mean age of the patients with somatic complaints was 43 years and that of the patients with complaints of a psychosocial origin 44 years. The mean age of the patients with somatic complaints with psychosocial consequences (49 years) was higher than the other two groups. The age distribution (not shown) showed that almost a quarter of these patients were older than 65; in the other two groups, about 15% were over 65.

Duration of disorders

In Fig. 1, the durations of the disorders are shown. For both categories of psychosocial complaints, the patients had been experiencing their disorders for a long time. Just over half the patients with complaints of a psychosocial origin (51.3%) and the patients with complaints with psychosocial consequences (54.7%) had had their disorders, at the start of treatment, for more than 1 year. Only 33.8% of the patients with somatic complaints had had their disorder for more than 1 year.

Indications for referral

Table 3 lists the indications for referral. In comparison with somatic complaints, patients with complaints of a psychosocial origin were relatively frequently referred with neck symptoms, back symptoms, syndromes of the cervical spine, shoulder symptoms, (tension) headache and hyperventilation. These disorders were also relatively frequently diagnosed in patients with complaints with psychosocial consequences, if one compares these patients with patients with somatic complaints. If one compares the two groups of patients with psychosocial complaints, it appears that these disorders occurred more frequently in patients with complaints of a psychosocial origin than complaints with psychosocial consequences.

Physical therapist's diagnosis

Impairments

Table 4 notes the occurrence of impairments. As expected, patients with complaints of a psychosocial origin suffered more frequently from increased muscle tone than the other patients. In addition, they suffered more frequently from respiratory problems (compared with both other groups) and from impairments of posture (compared with the somatic group). They suffered less frequently from a restriction in joint range of motion, diminished muscle strength and swelling than the other groups.

Table 2
Physical characteristics of the patients

	Somatic complaints ($n=11,354$)	Complaints with psychosocial consequences ($n=2583$)	Complaints of a psychosocial origin ($n=3075$)
Gender[a,b,c]			
male	51.3%	39.7%	30.4%
female	48.7%	60.3%	69.6%
Age (years)[a,b,c,d]	43.3 ± 18.2	49.4 ± 18.6	44.2 ± 16.1

[a]Significant difference between somatic complaints and those with psychosocial consequences ($P \leq 0.01$); [b]significant difference between somatic complaints and those of a psychosocial origin ($P \leq 0.01$); [c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P \leq 0.01$). [d]Mean ± SD.

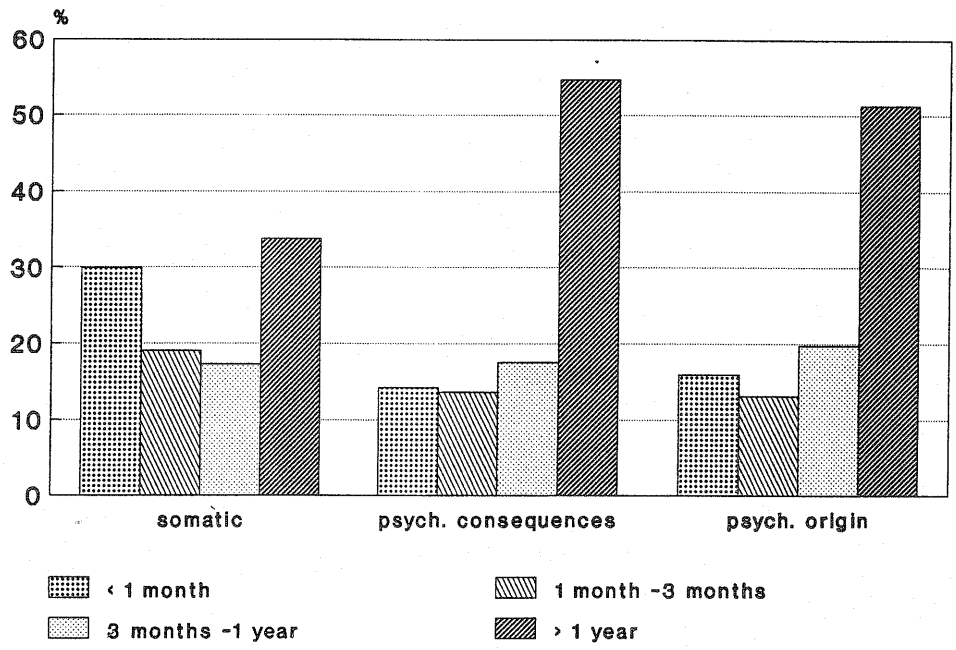

Fig. 1 Duration of disorders among patients with somatic complaints, complaints with psychosocial consequences and complaints of a psychosocial origin.

For patients with complaints with psychosocial consequences, they suffered more frequently from diminished muscle strength and decreased muscle tone (compared with both other groups); however, they suffered less pain than the other groups of patients.

Disabilities

Table 5 notes the occurrence of disabilities. As expected, patients with complaints with psychosocial consequences suffered more frequently from disabilities related to self-care, physical control and mobility (compared with the somatic group). They also suffered more frequently from disabilities related to household and professional activities; however, patients with complaints of a psychosocial origin suffered these disabilities even more frequently.

Table 3
The 15 most reported indications for referral of patients with complaints of a psychosocial origin, with corresponding percentages for the other patients

	Somatic complaints (%)[d]	Complaints with psychosocial consequences (%)	Complaints of a psychosocial origin (%)
Neck symptoms/complaints (excl. headache) (L01)[a,b,c]	9.2	12.9	24.2
Low back complaints without radiation (L03)[a]	14.1	12.5	14.1
Back symptoms/complaints (L02)[b,c]	7.2	7.7	10.8
Syndromes of the cervical spine (L83)[a,b,c]	5.1	7.4	10.0
Shoulder symptoms/ complaints (L08)[a,b,c]	5.9	7.5	9.5
Lumbar disc lesions, radiation (L86)[c]	8.9	10.1	8.3
Other disorders of the musculoskeletal system (L99)[b,c]	11.2	10.6	6.3
Headache (excl. R09, N89) (N01)[a,b,c]	1.2	2.5	4.9
Shoulder syndrome (L92)[b]	5.3	4.9	4.2
Tension headache (N02)[a,b,c]	0.5	1.8	3.9
Acquired deformities of the spine (L85)[b]	4.1	3.4	3.1
Hyperventilation (R98)[a,b,c]	0.1	0.4	3.5
Leg/thigh symptoms/ complaints (L14)	2.3	2.3	2.1
Tennis elbow (L93)[b]	3.3	2.6	2.0
Knee symptoms/complaints (L15)[a,b,c]	4.7	3.2	1.8
	$n=11,354$	$n=2583$	$n=3075$

[a]Significant difference between somatic complaints and those with psychosocial consequences ($P\leq 0.01$);
[b]significant difference between somatic complaints and those of a psychosocial origin ($P\leq 0.01$);
[c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P\leq 0.01$).
[d]Percentages of patients in whom a diagnosis was made.

Table 4
Frequency of impairments

Impairments	Somatic complaints (%)	Complaints with psychosocial consequences (%)	Complaints of a psychosocial origin (%)
Pain[a,c]	93.5	88.6	93.0
Restriction in range of joint motion[b,c]	79.7	79.7	74.5
Increased or decreased muscle tone[a,b,c]	63.3	71.3	82.5
increased[a,b,c]	57.2	61.8	79.3
decreased[a,b,c]	8.2	11.3	5.6
Diminished muscle strength[a,b,c]	39.2	46.4	27.3
Posture[a,b]	37.1	45.2	47.4
Swelling[a,b,c]	23.6	20.4	9.6
Respiratory problems[a,b,c]	2.7	6.5	8.0
Other impairments[a,c]	37.6	48.8	37.4
	$n=11,354$	$n=2583$	$n=3075$

Significant difference between somatic complaints and those with psychosocial consequences ($P\leq 0.01$);
[b]significant difference between somatic complaints and those of a psychosocial origin ($P\leq 0.01$);
[c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P\leq 0.01$)

Table 5
Frequency of disabilities

Disability	Somatic complaints (%)[d]	Complaints with psychosocial consequences (%)	Complaints of a psychosocial origin (%)
Self-care			
Washing[a,b,c]	15.5	22.0	14.0
Dressing[a,b,c]	20.4	28.0	17.3
Using lavatory[a,c]	7.1	2.5	6.2
Eating[a,b,c]	4.8	7.3	3.8
Physical control			
Sitting[a,c]	19.2	23.5	19.2
Standing[a,b,c]	23.1	30.7	19.1
Kneeling[a,b,c]	24.6	28.5	16.7
Bending[a,b,c]	31.9	38.2	34.4
Keeping balance[a,b,c]	10.7	20.0	12.6
Mobility			
Getting in and out of bed[a,c]	25.5	32.7	25.0
Walking[a,b,c]	34.7	41.7	25.1
Climbing stairs[a,b,c]	32.9	36.0	21.9
Cycling[b,c]	26.0	25.7	17.6
Driving a car[a,b]	23.8	19.1	17.5
Household and professional activities			
Doing shopping[a,b]	24.8	31.9	32.3
Preparing meals[a,b,c]	12.7	17.6	15.4
Changing beds[a,b]	19.1	27.2	28.0
Doing housework[a,b,c]	22.6	30.3	34.7
Caring for other household members[a,b]	7.8	12.7	13.1
Using telephone	3.0	3.4	3.4
Standing for long periods[b,c]	31.9	33.1	35.4
Sitting for long periods[b]	40.2	42.3	36.3
Lifting[b,c]	51.8	52.4	57.7
Maintaining a normal tempo during work[a,b,c]	51.3	56.8	44.7
Resistance to stress[a,b,c]	5.7	26.7	44.9
Sport/hobbies			
Sport[b,c]	30.2	16.7	14.3
Hobbies[a,b,c]	15.9	14.8	12.6
Other activities[a,b]	14.8	14.7	14.6
	$n=11,354$	$n=2583$	$n=3075$

[a]Significant difference between somatic complaints and those with psychosocial consequences ($P \leq 0.01$); [b]significant difference between somatic complaints and those of a psychosocial origin ($P \leq 0.01$); [c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P \leq 0.01$).

Treatment goals

Treatment goals at the level of impairments

In Table 6, the treatment goals at the level of impairments are listed. As was expected, regulation of muscle tone was frequently chosen as the treatment goal in patients with complaints of a psychosocial origin. Also, a reduction in pain, improvements in posture and a reduction in respiratory problems were more frequently chosen as treatment goals in these patients. In patients with complaints with psychosocial consequences, recovery of joint range of motion was

Table 6
Frequency of treatment goals in relation to impairments

Treatment goals	Somatic complaints (%)	Complaints with psychosocial consequences (%)	Complaints of a psychosocial origin (%)
Pain reduction[a,b,c]	61.2	57.1	64.3
Recovery of range of joint motion[a,b,c]	46.3	51.5	38.6
Regulation of muscle tone[a,b,c]	36.4	41.7	60.9
Improvement in muscle strength[b,c]	19.2	20.4	12.5
Improvement in posture[a,b,c]	11.1	13.3	16.9
Reduction of swelling[a,b,c]	11.4	7.0	2.8
Reduction of respiratory problems[a,b,c]	1.8	3.4	4.5
Improved function of spine and other joints[a,b]	25.0	18.0	17.8
Improved stabilisation of spine and other joints[a,b,c]	7.7	5.5	2.8
Alleviation of other impairments[a,c]	13.0	18.0	14.1
	$n=11,354$	$n=2583$	$n=3075$

[a]Significant difference between somatic complaints and those with psychosocial consequences ($P\leq0.01$); [b]significant difference between somatic complaints and those of a psychosocial origin ($P\leq0.01$); [c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P\leq0.01$).

chosen more frequently than in the other groups. Regulation of muscle tone, improvements in posture and a reduction in respiratory problems were chosen more frequently than in the somatic group, but less frequently than in the group of patients with complaints of a psychosocial origin.

Treatment goals at the level of disabilities

In general, treatment goals at the level of disability were seldomly chosen (not shown). Disabilities were chosen in less than 5% of the patients; the only exceptions were with disabilities related to walking (15.2%), sitting for long periods (5.6%), lifting (8.3%), maintaining a normal tempo during work (23.3%) and sports (6.3%). The expectation that disabilities would be chosen as treatment goals, especially among the patients with complaints with psychosocial consequences, was confirmed to a certain extent. The results with regard to dressing, eating, sitting, standing, keeping balance, walking, shopping, preparing meals and maintaining a normal tempo during work were in accordance with this expectation ($P\leq0.01$). However, kneeling, climbing stairs and sports were most frequently chosen as treatment goals in somatic complaints ($P\leq0.01$), while doing housework, caring, standing and sitting for long periods, lifting and stress resistance were most frequently chosen in patients with complaints of a psychosocial origin ($P\leq0.01$). These latter disabilities are all in the category 'household and professional activities'.

Interventions

Table 7 notes the application of interventions. In patients with complaints of a psychosocial origin, massage therapy was frequently applied, as expected. The expectation that exercise therapy (relaxation exercises) would also be more frequently applied in patients with complaints of a psychosocial origin was not confirmed. Physical therapy modalities were seldom used in patients with complaints of a psychosocial origin, the exception being heat- and cryo-therapy. Patients with complaints with psychosocial consequences were treated relatively frequently with exercise therapy and manual therapy.

Advice on daily living was given most fre-

Table 7
Frequency of interventions[d]

Intervention	Somatic complaints (%)	Complaints with psychosocial consequences (%)	Complaints of a psychosocial origin (%)
Massage therapy[b,c]	22.4	21.9	31.3
Exercise therapy[a,b,c]	19.1	22.9	20.1
Manual therapy[a,b,c]	11.9	14.9	6.1
Ultrasound therapy[a,b]	8.6	4.0	3.6
Interferential therapy[a,b,c]	6.1	7.0	5.1
Short-wave therapy (diathermy)	3.0	3.2	2.8
Heat and cryo-therapy[b,c]	2.1	2.4	5.4
Diadynamic current[e]	0.5	0.4	0.5
Instruction exercise[a,b,c]	10.1	9.3	7.8
Advice on daily living[b,c]	1.5	1.3	2.1
Other[a,c]	14.6	12.6	15.2

[a]Significant difference between somatic complaints and those with psychosocial consequences ($P \leq 0.01$);
[b]significant difference between somatic complaints and those of a psychosocial origin ($P \leq 0.01$);
[c]significant difference between complaints with psychosocial consequences and those of a psychosocial origin ($P \leq 0.01$).
[d]Percentages refer to the relative proportion of the specific intervention in relation to the total number of treatments.
[e]A form of electrical stimulation.

quently to patients with complaints of a psychosocial origin. 'Other' treatment was given least frequently to patients with complaints with psychosocial consequences. It should be emphasised that advice on daily living and other treatment (including the possibility of psychosocial counselling) showed only very minor differences among the three groups of patients. This means that there were no or only slight differences between the groups with regard to interventions more specifically addressing psychosocial problems.

Duration of treatment and number of sessions

The duration of treatment was longest for patients with complaints with psychosocial consequences (on average 79 days, $P \leq 0.01$). Also, the number of sessions was greatest among these patients (on average 16.5, $P \leq 0.01$). The duration of treatment was shortest for the patients with somatic complaints (on average 53 days); they also received the smallest number of sessions (on average 12.6). The average duration of treatment and number of sessions for the patients with complaints of a psychosocial origin were 59 days and 13.0 sessions, respectively.

The distribution of sessions showed that most treatments consisted of 12 or less sessions. The treatment of patients with somatic complaints and patients with complaints of a psychosocial origin consisted of less than 12 sessions in more than 70% of cases. The treatment of patients with complaints with psychosocial consequences consisted of less than 12 sessions in 60% of cases.

DISCUSSION

Physical therapists evaluated approximately two-thirds (66.7%) of their patients' complaints as being solely somatic; they evaluated about one-sixth (15.2%) as being somatic complaints having psychosocial consequences and about one-sixth (18.1%) as being (at least partially) of a psychosocial origin. The present study was not concerned with the validity of this evaluation; indeed, it is not known to what extent this evaluation reflects patients' actual psychosocial disorders. However, this study was concerned with the perception by physical therapists of their patients' psychosocial complaints and their therapeutic approach towards these patients. This means that, in the context of the present study, our measure of psychosocial complaints was an ap-

propriate one: it reflected the physical therapists' evaluation of their patients' psychosocial complaints. Similarly, the present study was not concerned with the appropriateness of physical therapy for patients with psychosocial complaints: no attempt was made to assess the outcome or quality of care. The present study, however, was descriptive in nature, which allows the following conclusion to be drawn: the distinction between solely somatic complaints, somatic complaints with psychosocial consequences and complaints (at least partially) of a psychosocial origin is a useful one, because both the diagnostic findings and the therapeutic approach were shown to differ in a meaningful way between the groups. This distinction may help to clarify the issue of physical therapy in patients with psychosocial complaints. Furthermore, the therapeutic goals and interventions applied in patients with psychosocial complaints clearly belong to the domain of physical therapy. We did not find any evidence of 'transgressions' of physical therapists into the domain of psychological counselling or psychotherapy. Below, we will elaborate on these conclusions.

With regard to somatic complaints which have *psychosocial consequences*, we have found that these patients were relatively old, their complaints were relatively long-standing and they experienced disabilities with regard to self-care, physical control and mobility. These findings are in accordance with our expectations: we expected psychosocial consequences to occur in older patients, suffering from chronic diseases, which cause disabilities in daily life. Physical therapists frequently made a diagnosis of diminished muscle strength and decreased muscle tone in these patients. As expected, alleviation of disabilities – particularly in the categories self-care, physical control and mobility – was chosen more frequently as the treatment goal in patients with psychosocial consequences. However, the results with regard to the category 'household and professional activities' were not in accordance with this expectation: alleviation of these disabilities was emphasised in patients with complaints of a psychosocial origin. However, it should be noted that, overall, alleviation of disabilities was rarely chosen as the treatment goal. Instead, most goals were directed at the level of impairments. The treatment of patients with complaints with psychosocial consequences lasted for a rather long time, both with regard to the number of sessions and total duration. One could speculate that a high therapeutic effort is required in these patients, who have long-standing and wide-ranging complaints. Exercise therapy and manual therapy were applied relatively frequently among these patients.

With regard to complaints having (at least partially) a *psychosocial origin*, we found that increased muscle tone was frequently diagnosed in these patients; regulation of muscle tone and massage therapy (but not exercise therapy) were relatively common ingredients of the therapeutic approach. Again, this confirms our expectations – that is, in response to psychosocial stressors, these patients were expected to show increased muscle tone, and physical therapists treat increased muscle tone by means of massage (and relaxation exercise, but this was not supported by our data). In addition, we found that physical therapists frequently made a diagnosis of pain (probably related to the increased muscle tone), impaired posture and respiratory problems. Alleviation of these impairments was also emphasised as a therapeutic goal. Unexpectedly, these patients were found to experience many disabilities relating to household and professional activities; one could argue that the psychosocial stressors (origins), the ensuing increases in muscle tone and other impairments interfered with household and professional activities. Interestingly, this interference was limited to such activities: disabilities relating to self-care, physical control and mobility tended to occur less frequently in patients with complaints of a psychosocial origin than patients with somatic complaints (with or without psychosocial consequences). It is tempting to interpret this as suggesting that stressors (origins) interfere with the more complex abilities (household and professional activities) and not with the more basic abilities (self-care, physical control and mobility).

Our findings also show that among patients with psychosocial complaints, physical therapists choose treatment goals and apply interventions which clearly belong to the domain of physical

therapy. For example, in patients whose complaints were psychosocial in origin, the treatment was focused on regulation of muscle tone and massage therapy. Similarly, in patients with complaints with psychosocial consequences, alleviation of certain disabilities and exercise therapy were emphasised. We did not find any evidence to suggest that physical therapists shift towards psychosocial counselling or psychotherapy. Of course, our registration form was not specifically designed for recording such interventions. This may have caused some underestimation of these interventions. Nevertheless, if psychosocial interventions were frequently applied, this would have been recorded under the category 'advice on living rules' or 'other interventions'. Because no or only small differences were observed between the groups of complaints, we conclude that physical therapists did not (or only to a very limited extent) apply such interventions. Although we do not know whether the physical therapy interventions were appropriate (effective) in these patients, it is clear that the patients' psychosocial complaints did not lead the physical therapists to apply interventions which are not part of their professional expertise.

Finally, we wish to comment on the treatment goals in patients whose complaints had psychosocial consequences. Although these patients clearly had severe disabilities, their alleviation was only seldomly chosen as the treatment goal. Alleviation of disabilities is considered to be an important treatment goal in elderly patients, who frequently experience a disability (Jackson, 1987). Apparently, physical therapists approach these patients' problems at the level of impairments, instead of directly at the level of disabilities. Whether this is the appropriate approach is an empirical issue, which cannot be decided on the basis of the present data.

CONCLUSIONS AND IMPLICATIONS

The major conclusions and implications of this study can be summarised as follows. First, the distinction between patients with somatic complaints, complaints with psychosocial consequences and complaints of a psychosocial origin is a useful one – both the diagnostic findings and the therapeutic approach have been shown to differ among these groups. Thus, in addressing the issue of physical therapy in patients with psychosocial complaints, one should make a distinction between complaints of a psychosocial origin and complaints with psychosocial consequences. This applies both to physical therapy practice and to research. For example, in developing consensus on how to treat patients with psychosocial complaints, these two groups should be distinguished. Similarly, in research on the outcome of physical therapy in patients with psychosocial complaints, it is essential to distinguish between these two groups.

Second, therapeutic goals and the interventions adopted in patients with psychosocial complaints clearly belong to the domain of physical therapy. It would appear that physical therapists choose to stay within their own professional domain; they do not 'transgress' into the domain of psychosocial counselling or psychotherapy. Thus, there is no need to admonish physical therapists to refrain from applying interventions for which they have not been trained. Of course, this does not mean that the effectiveness of physical therapy in patients with psychosocial complaints has been demonstrated. On the contrary, the outcome of physical therapy, with or without additional psychological counselling, remains to be evaluated.

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