

Patients' opinions of the care and their own well-being before and after the introduction of pain advisers into the primary health care system

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The aim of this study was to investigate the opinions of patients with chronic pain conditions, as regarded the following points: the feeling of having their pain experience unconditionally accepted (confirmed) at the meeting with the district nurse, their opinions regarding the treatment and knowledge of the chronic pain and the well-being related to the chronic pain condition, and whether their opinions changed after the introduction of trained district nurses as 'pain advisers'. A study area (SA) with five primary health care centres (PHCCs), and a control area (CA) with seven were selected. Before and after the introduction of one 'pain adviser' at each PHCC within the SA, the district nurses in both areas were asked to register all the patients older than 16 years with chronic pain conditions whom they were in contact with. A total of 84 (34 SA, 50 CA) patients in 1996 (67% of all the patients who received a questionnaire in 1996) and 60 (43 SA, 17 CA) patients in 1998 (77% answered a questionnaire. The study showed that patients with chronic pain conditions felt confirmed at the meeting with the district nurse. Furthermore, the patients considered that the pain influenced their well-being to a rather great extent. The advice and recommendations and/or information and education received were also found to be valuable to these patients. After the introduction of 'pain advisers' into the SA, some improvements were found in both areas. In the SA only, the patients reported less pain and more knowledge with which to understand the pain as a result of the advice and recommendation and/or the information and education.

Key words: chronic pain; confirmation; district nurse; pain advisers; primary health care; satisfaction; well-being

Introduction

Chronic pain conditions are a common problem in the general population (Brattberg *et al.*, 1989; National Board of Health and Welfare 1995). It is well known that chronic pain conditions have a tremendous potential to affect patients' quality of

life (Ferrell 1991; Ferrell 1995; Ross and Crook 1998) and they may be associated with, for example, depression (Ross and Crook 1998), sleep disturbances (Ferrell *et al.*, 1998; Ross and Crook 1998), decreased socialization and impaired mobility (Seers and Friedli 1996; Ferrell *et al.*, 1998).

Pain is a complex, multidimensional phenomenon which requires a holistic approach (McCaffery and Beebe 1994; Gagliese and Melzack 1997). For patients with chronic pain conditions, pain management is a struggle for control and nurses must have a knowledge of pain man-

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agement to make the interventions that help the patient (Ferrell *et al.*, 1993; Ross and Crook 1998; Walker *et al.*, 1990). For example, a patient's ability to control a situation is influenced by the available information and pain-controlling skills or actions (Walker *et al.*, 1990). Education and information are also important to enable the patients to manage their self-care and to achieve the best possible well-being (The Swedish Nurses Association SSF and The Swedish institute for health services development Spri, 1996). Furthermore, the patients' possibilities of having their pain experience unconditionally accepted (confirmed) at the meeting with the nurse is regarded as a prerequisite for good care and the patients' self-esteem may be affected if he or she is not believed, taken seriously or understood (Gustafsson and Pörn 1994; Paulsson *et al.*, 1999; The Swedish Nurses Association SSF and The Swedish institute for health services development Spri, 1996). Confirmation implies that 'you exist', which means that the nurse accepts the patients' experiences and meanings in her/his life situation (The Swedish Nurses Association SSF and The Swedish institute for health services development Spri, 1996). Moreover, by showing trust in the patient, the nurse can help the patient to become aware of and discover his/her own resources and capacity for self-care (Gustavsson, 2000).

The district nurse is a well known and integral part of the primary health care system in Sweden. It has been stated that the primary health care should be the basic setting for investigations and treatments of chronic pain conditions (National Board of Health and Welfare, 1995). Despite this, studies have shown that the district nurses' preparedness and knowledge in caring for people with chronic pain conditions may be insufficient (Walker *et al.*, 1990; Törnkvist *et al.*, 1998). Moreover, it has been found that home-care patients may not be fully satisfied with pain alleviation (Törnkvist *et al.*, 2000). In a review of the literature evidence has also been found that many elderly patients do not receive adequate pain management (Gagliese and Melzack, 1997).

In the Stockholm County Council, a project was initiated which included the training and designation of district nurses to become so-called 'pain advisers' at the primary health care centres (PHCC). The overall aims of the introduction of the pain advisers were to improve the possibilities

of giving the patients with chronic pain conditions a high quality of care and to promote the best possible well-being for them.

In this study, as one part of the project, it was decided to investigate the opinions of patients with chronic pain conditions as regarded the following points: the feeling of being confirmed at the meeting with the district nurse, their opinions regarding the treatment and knowledge of the chronic pain and the well-being related to the chronic pain condition and whether their opinions changed after the introduction of the 'pain advisers'.

Material and methods

Study design

The South-western Health-care Region of Stockholm County Council consists of 22 primary health care centres (PHCCs). A study area and a control area were selected. The selection was not made at random but was based on the areas' geographical locations and the requirement that there should not be any regular meetings for the district nurses between the two areas. Two areas fulfilled the criteria, one with seven PHCCs and the other with five PHCCs. The area with five PHCCs was selected by drawing lots to be the study area (SA) and consequently the other area with seven PHCCs became the control area (CA). The five pain advisers at each PHCC were recruited by asking all the district nurses working at all PHCCs in the SA if any of them were interested in becoming a 'pain adviser'. Data were collected before (October 1996) and 15,5 months after (January 1998) the training and introduction of the 'pain advisers' at the PHCCs in the SA.

The Swedish Nurses' Association (SSF) organized training for nurses to become 'pain advisers'. The four-day course included education in how to write a pain history, how to assess and analyse the patient's pain and how to implement, evaluate and document the pain control. The education also included pain physiology, pharmacology, nonpharmacological methods, possible effects of chronic pain conditions on the patients' well-being and attitudes, and how to communicate with patients. Other important aims of the training were to enable the pain advisers to participate in the evaluation of the quality of the pain control and to help colleagues to increase their knowledge. In

summary, the pain advisers' role was to be an educational resource to their colleagues at their own PHCCs and thereby give the patients with chronic pain conditions an individual, high quality of care, in order that they might have the best possible well-being (Östlinder, 1996). After completing the course the 'pain advisers' continued to work as district nurses which included both caring for patients at home and having an outpatient clinic of their own. They individually had to arrange how to perform their task with regard to the present conditions and possibilities at their own PHCCs within their usual working hours. No extra resources were given to the 'pain advisers'. However, to support the five designated, 'pain advisers' after the completed course, one of the authors (L.T.) arranged regular meetings (2–4 hours each) during the study period. These meetings (10 in all) comprised discussions between the 'pain advisers' regarding the literature on and strategies for improving pain management and pain documentation at each PHCC. They also included visits to two different pain clinics. The 'pain advisers' worked to improve the nursing care and the nursing documentation at their own PHCCs from 15 October 1996 onwards. We found it interesting to investigate whether the concept described above was useful in achieving changes regarding the opinions of the patients with chronic pain conditions.

Patients

All the district nurses in both the SA and the CA were in September 1996 and in January 1998 asked to register on a study-specific protocol all patients older than 16 years with chronic pain conditions with whom they were in contact (outpatient clinic and/or home care). Chronic pain was defined as pain which had lasted for more than three months. The district nurses were also asked to state the reason why the patients were having chronic pain.

A total of 145 (57 SA, 88 CA) patients were registered in 1996 and 104 (76 SA, 28 CA) patients in 1998. In the study-specific protocol, the district nurses were also asked to mark which of the patients they considered unable to answer a questionnaire and also to state the reason why. A total of 17 patients (7 SA, 10 CA) in 1996 and 26 (26 SA, 0 CA) in 1998 were excluded owing to medical and/or cognitive impairments or were considered unable to answer the questionnaire by the

district nurses without them writing down any specific reasons why.

The remaining 128 patients (50 SA, 78 CA) registered in 1996 and 78 patients (50 SA, 28 CA) registered in 1998 were given verbal information about the questionnaire by the district nurses and asked if they were willing to answer it. The patients who agreed to participate – 126 patients (49 SA, 77 CA) in 1996 and 77 patients (49 SA, 28 CA) in 1998 – were told that the questionnaire would be sent to their homes. Each patient was given a code number. This number was also recorded on the questionnaire before it was sent to the patient. Two reminders were sent, when necessary.

Questionnaire

For the study, 17 questions were selected from three already existing instruments; the Patient Questionnaire on Confirmation (10/15 questions) (Gustafsson and Pörn, 1994), the Treatment-satisfaction Questionnaire (2/8 questions) (Bradley, 1994) and the Health-index Questionnaire (5/11 questions) (Nordström *et al.*, 1992). The questions were slightly modified in order to focus them on pain and the meetings with the district nurses. Seven additional questions were added by the authors of the study. The study-specific questionnaire was pilot tested on and discussed with eight nurses. No significant changes were made after this.

The final questionnaire consisted of 24 questions. There were three questions about sex, age and the reasons for contacting the district nurse; six questions about whether the patients felt confirmed at the meeting with the district nurse (7-point scale, 0 = 'Not at all' to 6 = 'To a high degree'); two questions about whether the patient had been given any advice, recommendation and/or information/education regarding their chronic pain by the district nurse (answered by 'Yes' or 'No'); two questions about whether any of this advice, recommendation and/or information/education had resulted in less pain and/or more knowledge with which to understand the pain (7-point scale, 0 = 'Not at all' to 6 = 'To a high degree'); one question about whether the district nurse had arranged any contact with any other health care personnel with the intention of alleviating or reducing the patients' pain (answered by 'Yes' or 'No'); two questions about satisfaction with the present pain treatment, knowledge and understanding of the pain (7-point

scale, 0 = 'Very dissatisfied' to 6 = 'Very satisfied'); eight questions about the patients' degrees of well-being related to the chronic pain condition (7-point scales, for example, pain influencing sleep, 0 = 'Sleeps very poorly' to 6 = 'Sleeps very well').

The study was approved by the local Ethical Committee.

Statistical analysis

The scales used in the questionnaires were ordinal scales, and median values are therefore presented. The Wilcoxon summary-ranking test (comparison between two groups) and the Wilcoxon signed ranks test (individual comparison) were applied. The limit of statistical significance was $p < 0.05$, but, as regarded subgroups, owing to the problem of multiple significance testing, we arbitrarily chose the limit of statistical significance as $p < 0.01$. Chi-square tests were used to test the significance of differences in proportions.

Results

Patients who answered the questionnaires

A total of 84 patients (34 SA, 50 CA, 67% of all the participating patients) in 1996 and 60 patients (43 SA, 17 CA, 77% of all the participating patients) in 1998 answered the questionnaire. The majority of the patients in both areas were women (1996 76%, 1998 75%, Table 1). No statistically significant differences could be found regarding sex or age, on comparing the patients who returned with the patients who did not return

Table 1 Description of the patients with chronic pain. Data are given as the number and percentage of patients answering the questionnaire

	1. SA96		2. SA98		3. CA96		4. CA98	
	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)
Sex								
Women	30	(88)	34	(79)	37	(74)	12	(71)
Men	4	(12)	9	(21)	13	(26)	5	(29)
Age								
24–50	7	(21)	9	(21)	6	(12)	2	(12)
51–65	6	(18)	14	(33)	9	(18)	6	(35)
66–80	12	(35)	13	(30)	23	(46)	6	(35)
81–	9	(26)	7	(16)	12	(24)	3	(18)

the questionnaire. A significant difference was found on comparing the patients who answered the questionnaire and the patients considered unable to answer the questionnaire, the latter being older ($p < 0.001$) in the SA in 1998.

According to the district nurses, the registered patients ($n = 247$) were having chronic pain with various diagnoses/reasons ($n = 330$). The pain was most frequently located in the lower part of the leg, in the knee and/or hip joint (38%) in the back, shoulders and/or neck (26%), in joints (12%) in muscles (11%) and others, for example, pain according to cancer, stroke, migraine and shingles (13%).

The most frequent reasons for the contacts ($n = 185$) with the district nurses stated by the patients who returned the questionnaire ($n = 144$) were getting help with wound dressings of the leg (25%) and management of chronic diseases, e.g., diabetes (10%), injections (9%), measuring blood pressure (6%) drug management (5%), and blood tests (4%).

Confirmation at the meeting with the district nurse

Among the patients in both the SA and the CA, in 1996 as well as in 1998, median scores of 5–6 (maximum 6) were obtained in five out of six questions asking whether the patients felt confirmed at the meetings with the district nurses. Lower median scores were obtained from the patients in both areas (1996 and 1998) when they were asked if they had experienced increased capacity to manage their life situations after the contacts with the district nurses (Table 2).

On comparing the patients in the SA with those in the CA before the introduction of the 'pain advisers' it was found that the patients in the SA experienced the district nurses as being more understanding regarding the patients' own life situations as compared with the patients in the CA ($p < 0.05$, Table 2). No statistically significant changes were found within the different areas between 1996 and 1998.

Treatment and knowledge of the chronic pain

Satisfaction with the treatment and knowledge of the pain

The patients in both areas, in 1996 and 1998, rated median scores of 3–4.5 (maximum 6)

Table 2 The patients' experiences of being confirmed at the meeting with the district nurses. The results are presented as median, range and number of patients answering each question. The higher the score, the better the satisfaction (0 = 'Not at all' to 6 = 'To a high degree')

Questions		1. SA96 <i>n</i> = 34	2. SA98 <i>n</i> = 43	3. CA96 <i>n</i> = 50	4. CA98 <i>n</i> = 17
Do you feel that...					
... you have been received with interest and carefulness regarding you as an individual and your situation in life?	md range <i>n</i>	6 1-6 33	6 0-6 43	6 1-6 47	6 4-6 17
... you were given the opportunity to bring up the questions and problems regarding your pain as you desired?	md range <i>n</i>	6 0-6 32	5 1-6 42	5 0-6 45	6 1-6 17
... you were believed and taken seriously regarding your pain?	md range <i>n</i>	6 0-6 32	6 3-6 42	6 0-6 44	6 3-6 17
... you were understood, i.e., that the district nurse understood how you perceive your own life situation owing to the pain?	md range <i>n</i>	6 ^a 0-6 32	6 2-6 42	5 ^a 1-6 42	6 3-6 17
... you received professional and competent caring regarding your pain?	md range <i>n</i>	6 0-6 30	5 0-6 39	6 0-6 39	5 2-6 17
... your capacity to manage your life situation has increased since you received contact with the district nurse?	md range <i>n</i>	4 0-6 31	4 0-6 39	4 0-6 41	4 0-6 16

^a1 vs. 3, $p < 0.05$.

regarding satisfaction with present treatment or knowledge and understanding of the pain. No statistically significant differences were found within or between the different areas 1996 or 1998.

Advice and information

The majority of the patients in both the SA and the CA in 1996 and 1998 answered 'Yes' to the question whether they had received advice and recommendations from the district nurses regarding the pain (55–76%), but fewer stated that they had received information/education (25–53%). No statistically significant differences regarding these questions were found within or between the different areas in 1996 or 1998.

After the introduction of the 'pain advisers', the patients in the SA who stated that they had received advice and recommendations from the district nurses considered that this had resulted to a greater extent in less pain ($p < 0.05$) and that the received information/education had resulted in more knowledge with which to understand their chronic pain, compared with 1996 ($p < 0.05$, Table

3). No statistically significant changes were found in the CA.

Referral to other health care personnel

Approximately half of the patients in both areas in 1996 and 1998 stated that the district nurses had arranged contacts with other health care personnel with the intention of alleviating or reducing the chronic pain (47–56%). No statistically significant differences regarding referrals were found within or between the different areas in 1996 or 1998.

Perceptions of own well-being

In general, the patients stated that their chronic pain condition influenced their well-being (Table 4). No statistically significant improvements of the different aspects of the patients' well-being could be found in the SA after the introduction of the 'pain advisers'. In the CA98 the chronic pain influenced the patients' energy less, as compared with the patients in the CA96 ($p < 0.05$). It was also found that the chronic pain influenced the patients' mood more negatively in the SA both in

Table 3 Patients who had received advice and recommendations and/or information/education from the district nurses. The results of the patients' opinions are presented as median, range and number of patients answering. The higher the score, the better the satisfaction (0 = 'Not at all' to 6 = 'To a high degree')

Question		1. SA96 <i>n</i> = 34	2. SA98 <i>n</i> = 43	3. CA96 <i>n</i> = 50	4. CA98 <i>n</i> = 17
To what extent have...					
...these advice and recommendations resulted in less pain?	md range <i>n</i>	2 ^a 0–6 15	4 ^a 0–6 25	3 0–6 24	3 1–5 13
... this information/education resulted in more knowledge to enable you understand the pain?	md range <i>n</i>	2 ^b 0–5 9	5 ^b 1–6 15	4.5 0–6 8	3 0–6 9

^a1 vs. 2, $p < 0.05$, ^b1 vs. 2, $p < 0.05$.

Table 4 Self-rated well-being related to chronic pain among patients. The results are presented as median, range and number of patients answering. Answering alternatives for each question are given

Questions		1. SA96 <i>n</i> = 34	2. SA98 <i>n</i> = 43	3. CA96 <i>n</i> = 50	4. CA98 <i>n</i> = 17
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For A-E, the lower the score, the better the self-rated well-being

A. Pain at the time? 0 = no pain at all 6 = worst possible pain	md range <i>n</i>	5 0–6 33	5 0–6 42	4 0–6 43	4 1–6 17
B. Pain when at worst? ^a 0 = no pain at all 6 = worst possible pain	md range <i>n</i>	— ×— —	5 0–6 42	— — —	5 0–6 16
C. Painless when resting? 0 = no pain at all 6 = not at all painless	md range <i>n</i>	4 0–6 32	4 0–6 42	4 0–6 47	3 0–6 16
D. Pain influencing mobility? 0 = not at all hindered 6 = very difficult to move	md range <i>n</i>	5 0–6 34	4 0–6 43	4 0–6 47	4 1–6 17
E. Lonely and isolated owing to the pain? 0 = not at all lonely 6 = very lonely	md range <i>n</i>	4 0–6 32	3 0–6 42	3 0–6 47	2 0–6 17

For F–H, the higher the score, the better the self-rated well-being.

F. Pain influencing sleep? 0 = sleeps very poorly 6 = sleeps very well	md range <i>n</i>	3 0–6 33	3 0–6 41	2 0–6 46	3 0–6 17
G. Pain influencing energy? 0 = capable of nothing 6 = capable of almost anything	md range <i>n</i>	2 0–5 32	2 0–6 42	2 ^b 0–5 45	3 ^b 1–4 17
H. Pain influencing mood? 0 = as sad as one can be 6 = as happy as one can be	md range <i>n</i>	3 ^c 0–6 32	3 ^d 0–6 42	4 ^c 0–6 44	4 ^d 0–6 17

^aThe question was not asked in the initial study in 1996.

^b3 vs. 4, $p < 0.05$. ^c1 vs. 3, $p < 0.05$. ^d2 vs. 4, $p < 0.05$.

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1996 and in 1998, as compared with the patients in the CA ($p < 0.05$ and $p < 0.05$ respectively, Table 4).

Methodological considerations

A total of 11 patients (6 SA, 5 CA) answered the questionnaires in both 1996 and 1998. No statistically significant differences could be found regarding any item, between these patients within the SA or within the CA (1996, compared with 1998).

In the CA98, patients were registered at only four out of the seven PHCCs. According to the district nurses at the three PHCCs that did not register, the reason for this was lack of time and resources. No statistically significant differences for the year 1996 were found regarding the distribution of sex and age among the patients when the four PHCCs were compared with the three nonparticipating PHCCs. The statistical results presented in this study differ regarding the three following questions when the three nonparticipating PHCCs are excluded from the CA in 1996; compared with the patients in the CA96, the patients in the CA98 were found to be (1) less influenced by their chronic pain condition, as regarded their mood ($p < 0.05$), (2) more influenced by their chronic pain condition when resting ($p < 0.05$), and (3) more often conscious that they had received information/education from the district nurses ($p < 0.01$).

Subgroups

Age and sex

No significant differences could be found regarding any question when the patients within each area and at each time point were divided into two groups according to age (24–65 vs. 66–97 years) and compared. The number of men was too small to analyse the subgroups according to sex.

Advice and information

The patients in the SA98 and the CA98 who answered 'Yes' to the question about whether they had been given any 'advice and recommendations' or 'information/education' by the district nurses were compared, as regarded the items in the questionnaire, with those who had answered 'No' to these questions. It was found that the patients in both areas in 1998 who had received this care mentioned a statistically significant higher degree of

satisfaction in their answers to some questions concerning 'confirmation' and 'satisfaction with received treatment', compared with those who had not (Table 5). No statistically significant differences were found regarding the questions concerning the patients' well-being.

Discussion

In this study, we asked for the opinions of patients with chronic pain conditions regarding some aspects of care and their own well-being and we also investigated whether their opinions changed after the introduction of district nurses trained as 'pain advisers' at the PHCCs.

To experience that others believe that you are suffering from a painful condition is most important to many patients (Seers and Friedli, 1996; Carson and Mitchell, 1998). To listen and talk about what the pain means to the patients may also be a helpful approach for nurses (Seers and Friedli, 1996; Carson and Mitchell, 1998). It has been found that elderly patients in chronic pain and living at home place a high value upon having someone willing to listen, who understands their feelings and provides information and encouragement (Walker, 1994). In our study, in both areas, it seems that the district nurses to a large extent fulfilled the patients' desire to feel confirmed at the meeting with them. However, we are aware that the patients could have had a sense of dependence and/or felt eager to express their satisfaction with the district nurses, which might have had an impact on their expressions of satisfaction (Owens and Batchelor, 1996).

Walker have stated that what matters to the patient in chronic pain is not only the actual level of pain but whether he or she feels that the pain is under control or not (Walker *et al.*, 1990). If the patients are unable to cope with the pain their well-being might be influenced. Many of the patients in our study rated high scores on the scales regarding their pain at the time when they were answering the questionnaire and when the level of pain was 'worst'. Furthermore, in general, the patients' self-reported well-being related to their chronic pain condition must be regarded as rather poor and many of the patients were not satisfied with the treatment or the knowledge to understand the pain. These results might indicate that they did not feel that their pain was under control.

Table 5 Statistically significant differences found when patients who replied 'Yes' were compared with patients who replied 'No' to the questions whether they had received advice and recommendations and/or information/education regarding their chronic pain

	SA98		CA98	
	Yes <i>n</i> = 26	No <i>n</i> = 17	Yes <i>n</i> = 13	No <i>n</i> = 4
<i>Received advice and recommendations</i>				
Patients who replied 'Yes' stated to a greater extent that they:				
Were given the opportunity to bring up questions and problems regarding their pain as they desired.		**		—
Received professional and competent caring regarding their pain.		**		—
Felt satisfied with the present treatment of their pain.		**		**
<i>Received information/education</i>				
Patients who replied 'Yes' stated to a greater extent that they:				
Received professional and competent caring regarding their pain.		—		**
Experienced a better capacity to manage their life situation since they made contact with the district nurse.		**		—

** $p < 0.01$.

The importance of information for patients with chronic pain conditions has been emphasized in several studies (e.g., Marcer *et al.*, 1990; Walker, 1994; Seers and Friedli, 1996). In one of these studies, which was designed to identify the factors influencing the quality of life of elderly people suffering from painful conditions, it was found that information was a major cause of concern among those who had not been well informed about their painful condition (Walker *et al.*, 1990). It was also stated that elderly patients, as compared with younger ones, are no exception in their desire for knowledge (Walker *et al.*, 1990).

After the introduction of the 'pain advisers' into the SA, the patients stated that the district nurses' advice and recommendations had led to less pain and that the information/education received had led to more knowledge that made it possible to understand the pain. This was the only aspect of improvement that was found in the SA. However, our study also showed that those who had received advice and recommendations and/or information/education were more satisfied regarding some aspects of the care. An interesting finding in the SA98 was that the patients who had received information/education stated that they had an increased capacity to manage their life situations: One interpretation of these results may be that these patients really felt confirmed, which also means that they felt trust in the meeting with the district nurses and therefore assimilated the advice and recommendations and/or information/

education given. The results also indicate that these nursing interventions (advice and recommendations and/or information/education) when they were received, were highly valued by the patients. However, since the patients did not rate their well-being as better, compared with those patients who reported that they had not received this interventions, it seems that the district nurses did not at this point of time succeed in giving the patients the feeling that they had a better control of their pain.

The results from our study indicate the important role that district nurses could play vis-à-vis patients with chronic pain conditions and the necessity of great knowledge and competence in pain management among district nurses. Another reason for this is the ability to know when to refer a patient to another health care instance and to facilitate co-operation with other personnel. According to the patients in this study, the district nurses had helped approximately half of them to make other contacts, in order to alleviate or reduce their chronic pain. However, we do not know in what way the district nurses did follow up these referrals.

The selection of patients for the study was performed by the district nurses at the PHCCs. Another method of selecting the patients with chronic pain conditions, for example by interviewing the patients, was considered to be too time consuming. However, with regard to for example lack of knowledge (Törnkvist *et al.*, 1998), time and resources, it is possible that some of the

patients with chronic pain conditions were not registered by the district nurses and were thereby not included in the study.

One explanation of the lack of improvement regarding the patients' feeling of being confirmed was that the patients already were to a great extent satisfied regarding this aspect, both before and after the introduction of the pain advisers. Neither was any improvement found in the SA regarding satisfaction with treatment or the patients' well-being related to their chronic pain condition. However, in the CA, improvement was found regarding the patients' energy. It is possible that the introduction of the pain adviser in the SA also affected the district nurses in the CA. We could not be sure that the district nurses did not have any contacts between the SA and the CA, for example, when attending courses arranged outside the region. We knew that the district nurses had regular meetings as usual within the SA and the CA but not between the areas. However, the improvement in the CA may also reflect the fact that the subject of pain has received increased attention in Swedish society within the last few years.

Due to the small sample size especially in the CA some anticipated changes might not have been detected. Also only patients who were in a condition to answer a questionnaire were investigated.

There may be several reasons why the introduction of the pain advisers did not lead to more improvements in the SA. The time limit for the study may have been too short, since the pain advisers had to educate themselves when the study period had already started and they also had to educate their colleagues before this knowledge could be of use to the patients. Other reasons may have been the lack of resources and the increased pressure on the primary health care system. Furthermore, although the pain advisers received support from each other and the project leader, they were working alone in their tasks at their PHCCs. Satisfactory communication and co-operation have been reported to be important goals for effective pain control in home care (Ferrell *et al.*, 1993).

Conclusion

The conclusions from this study are that the patients with chronic pain conditions felt confirmed at the meeting with the district nurse. The

patients considered that the pain influenced their well-being to a rather large extent and many patients were not satisfied with their treatment or knowledge of the pain. Furthermore, the study showed that the advice and recommendations and/or information/education received were of great value to these patients. After the introduction of 'pain advisers' into the SA, some improvements were found in both areas. In the SA only, the patients reported having less pain and receiving more knowledge to enable them to understand the pain as a result of advice and recommendations and/or information/education. However, no significant effect was found on the patients' experiences of being confirmed at the meeting with the district nurses, the patients' satisfaction with treatment or on their self-rated well-being related to their chronic pain.

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