

Danish Centre for Evaluation and Health Technology Assessment

PAIN SCHOOL - A HEALTH TECHNOLOGY ASSESSMENT

Summary

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Background

Today, chronic pain is a condition of life to many people. According to a Danish epidemiology investigation from 2003*, 16-20% of the adult population in Denmark suffer from chronic pain. The level of chronic pain is often static in intensity to each individual person and the rate of cure is 5-7% per year. For a number of years, the Multidisciplinary Pain Centre at Herlev University Hospital has offered a cognitive-behavioural group treatment (called Pain School) to patients with chronic non-malignant pain. The objective of this treatment is to help patients accept their chronic pain and consequent loss of functions and to give them adequate tools to achieve a better health-related quality of life.

The purpose

The purpose of the Health Technology Assessment of the Pain School is to produce a documented basis for decision regarding the form of treatment at the Multidisciplinary Pain Centre and its dissemination to corresponding treatment units and the primary sector. The focus is on the effect of the Pain School to patients' health-related quality of life, patients' evaluation of the significance of the Pain School, patients' utilisation of the health care services during 8 months after their participation in the Pain School, costs of intervention and economic costs of the treatment, and final organisational conditions and consequences of carrying through the treatment and its dissemination.

Method

A systematic literature search of randomised studies of group treatment with cognitive-behaviour therapy of patients with chronic non-malignant pain was carried out. Data regarding effect of the Pain School on patients' health-related quality of life were collected at a clinical randomised cross over trial with 160 patients included. The questionnaire SF-36 (Medical Outcomes Study Short Form 36 Health Survey) was used. Data regarding patients' evaluation of the treatment were collected by means of a qualitative interview investigation of selected patients from the randomised trial. Data regarding patients' utilisation of the health care facilities in the secondary care sector were taken from the GS-Open system at Herlev University Hospital and Københavns County's register of utilisation of health care facilities in primary care sector. These data were analysed by means of a cost minimising analysis. Finally, the organisational aspect was investigated by means of an analysis of the technology's endogene relation to the organisation.

Results

Literature search

If the group treatment is added to the multidisciplinary treatment, the effect of the basis treatment is prolonged. The evidence for the independent effect of the group treatment when added to an individual multidisciplinary treatment is weak. Intensive treatment including physical rehabilitation has the largest effect. There is no documented optimal length of treatment.

Clinical randomised trial

Multidisciplinary individual pain treatment has a significant positive effect on patients' health-related quality of life. If a Pain School is added to the treatment, it looks as if the Pain School is prolonging the effect for at least six months. The investigation does not show an independent effect of Pain School to patients' health-related quality of life measured by SF-36.

Interview trial

The patients attach great importance to the group treatment. The Pain School is contributing to the following: the patients do better understand the complexity of the chronic pain, they do to a minor extent seek new ways of treatment, and they learn to live with the pain.

Analysis of the organisation

The Pain School is an endogene technology as it is continuously exposed to qualitative changes. At the same time, history of the technology has influence on the multidisciplinary individual treatment. This mutual influence is due to the personnel's many years of experience with the patient group, learning from discussions with patients and relatives at the Pain School, supervision and a sustained teamwork based on a common border of understanding and basis of value in a (minor) limited unit.

Financial analysis

The Pain School is an offer for treatment, which costs the Multidisciplinary Pain Centre 1,475.00 DKK (198 EUR) per patient participating in the treatment. If you use a cost minimising analysis, it is seen that the Pain School does not contribute to decrease patients' utilisation of services from the health care system. This is found when the group of participants in the Pain School is compared to the group on the waiting list to the Pain School. On the contrary, the Pain School represents an economic expenditure of 2,381.00 DKK (318 EUR) per patient all in all. On a total basis, the economic analysis cannot point to any economic reason why the Pain School should be maintained as part of the treatment on the Multidisciplinary Pain Centre.

Conclusion

The total results point in several directions. It is very uncertain if the treatment form Pain School has an independent effect of patients' health-related quality of life measured by SF-36 and on their utilisation of the health care system. On the other hand, the group treatment maintains the effect of the individual treatment for at least six months. The patients express that the Pain School contributes to a larger extent of understanding and acknowledgement of their chronic pain; an understanding which is important to their handling of the pain in their everyday. And the personnel give the Pain School credit in relation to the optimisation of their competences and knowledge of the patient group and their treatment.

The above urges the project group to recommend the administrative and the clinical personnel to thoroughly discuss the existence of the Pain School in its present form at the Multidisciplinary Pain Centre. At the same time, we believe that the Multidisciplinary Pain Centre should carefully consider a specific physical training programme for the Pain School if maintained. It is the aim of this to have an effect on patients' health-related quality of life by the group intervention beyond the effect of the individual treatment itself.

We will also recommend that new and existing multidisciplinary treatment units without standardised psycho-education do not introduce such a group treatment before the effect of this is better documented.

We will not recommend the Pain School to be spread to the primary sector, as we have not demonstrated an isolated effect of the Pain School. A dissemination is also made difficult by the technology's dependence of the organisation and its context. Therefore, intentions to introduce comparable psycho-educative group treatments in primary sector and social sector should not be introduced unless intervention studies with a clearly defined objective are made.

*Eriksen J, Jensen MK, Sjøgren P, Ekholm O, Rasmussen NK. Epidemiology of chronic non-malignant pain in Denmark. *Pain* 2003; 106:221-228.