



Editorial comment

Combination of physiotherapy and cognitive therapy in chronic pain

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Cognitive behaviour therapy is a structured form of psychotherapy, which is useful in the management of most mental disorders, especially anxiety and depression, and also in the management of chronic pain. The evolution of CBT started with the development of behaviour therapy in United Kingdom in the 1950s, with focus on treatment of adults with neurotic disorders. The main contributors were Wolpe [1], whose laboratory studies laid the basis of fear-reducing techniques, and Eysenck [2], who provided a therapeutic structure and rationale for this new therapy. They started their work with agoraphobia. In contrast to psychoanalysts, who considered the disturbed behaviour (avoidance) as a symptom of underlying processes, behaviour therapists considered the disturbed behaviour as the whole problem. Neurotic behaviour was considered as learned behaviour, which could be unlearned. The learned behaviour was the problem and the solution was unlearning.

Behaviour therapy in the form of exposure was effective in the management of agoraphobia and other phobias, but was not so useful in the treatment of depression. Disturbances in thinking are prominent in this disorder, and to deal with these aspects cognitive therapy was developed [3].

The American psychiatrists and psychoanalysts Aaron T. Beck and Albert Ellis were the main contributors to the development of *cognitive therapy*. Ellis [4] developed rational psychotherapy, where the aim was to maximize rational and minimize irrational thinking. Beck [5] developed cognitive therapy. He discovered that depressed patients had a special pattern of thinking. They tended to think negatively about themselves (I am a failure), the world (Other people don't like me) and the future (It will always be like this). This is called Beck's depressive triad. Therapy aimed at helping people identify and correct their distorted thinking and improve their information processing and reasoning. Beck also included behavioural exercises to obtain new corrective information. But in contrast to behavioural therapists, who considered behaviour changes as the essence in therapy, Beck considered behavioural methods as aims to obtain changes in thinking. Cognitive therapy had considerable success in the treatment of depression. And the cognitive and behavioural forms of therapy merged in the form of *cognitive behaviour therapy* (CBT) in the successful treatment of

panic disorder [6]. CBT has been used in the treatment of various mental and other disorders, and the documentation is increasing.

In the following years various variants or schools of CBT have been developed. Two of the most important will be described shortly. *Mindfulness* based cognitive therapy (MBCT) was introduced by Teasdale et al. [7]. The treatment is an integration of Teasdale's interacting cognitive subsystems model, mindfulness based stress reduction [8] and traditional CBT. Instead of learning to identify, challenge and test their thoughts, as in traditional CBT, patients are trained to experience their thoughts and feelings in the present as psychological events passing through consciousness, from which they can distance themselves. Patients learn to meditate and can thereby easier distance themselves from rumination and depressive thoughts, leaving them less vulnerable to depression. This method is considered to be especially valuable in people with recurrent depression.

In *metacognitive therapy* (MCT) focus is on cognitive processes and how one relates to personal thoughts and emotions. In contrast to traditional CBT, which emphasizes what you think, the content of thoughts, focus in MCT is on how you think [9]. MCT focuses on repetitive, cyclic patterns of thoughts, as rumination (about the past) and worrying (about the future). Depressive rumination and focus on self-critical thoughts are labelled cognitive attentional syndrome, and this is considered to be the most important mechanism for maintaining depression. People have developed these strategies as attempts of mastery, as they have experienced that rumination and self-critical analyses are useful methods to find out about life and themselves. This is called positive metacognitions. But worrying and rumination initiate and worsen negative affect and depression, leaving people with a feeling of hopelessness and shortcoming, and they feel unable to control these processes (these are called negative metacognitions). In MCT focus is on helping people to change cognitive attentional strategies, as well as to challenge the positive and negative metacognitions underlying these.

In all forms of CBT *treatment sessions are structured*, and sessions usually start by setting the agenda. Use of homework assignments is common, most people would say mandatory. Various approaches vary in their focus on behaviour versus cognitions, and in how they deal with these. Some therapists use mostly behaviour methods, while others have stronger emphasis cognitions [10].

A major debate within the field of psychotherapy is about what are the *effective ingredients in therapy* [11]. It is common to divide these into common and specific factors. Among common factors,

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the *therapeutic alliance* is central, in addition to *expectations* and *hope for change*. The work of Bordin [12], describing three central components in the development of the therapeutic alliance, has been influential. It is essential that patient and therapist agree on the aims of treatment and on how to work to get there. In addition the emotional bond between therapist and patient must be good enough [13]. A consistent finding is that encouragement, support and sympathy are important in the healing process [14], and therapeutic alliance is central. Several studies have shown that the quality of the therapeutic alliance predicts outcome of treatment [15], and many consider this to be the most important contributor to the therapeutic effect. The quality of the therapeutic alliance can be improved when the therapist gives *unconditioned accept* and is warm and genuine, helping the *patient to feel validated and taken care of* in the therapeutic setting [16].

Some have questioned whether there has been too much emphasis on the alliance, as the correlations between therapeutic alliance and treatment outcome in general are between 0.22 and 0.25, explaining 6–8% of treatment outcome [15]. The importance placed on the relation between therapist and patient varies across therapeutic directions. A common view among CBT therapists is to look at the therapy as a *collaborative project*, where patient and therapist constitute a working team *aiming to reach specific goals* [10]. Others consider the therapeutic relation and the clarification of the transference reactions as the goal of the treatment itself.

While there is general agreement that both common and specific factors are important contributors to the therapeutic effect, opinions diverge about which is most important. Some argue that common factors are most important [17], others have the opposite view [18]. A common view among CBT therapists is that the common factors are necessary, but not sufficient. Specific factors, such as specific therapeutic techniques addressing thoughts and behaviours, are needed [10].

Exercise is a form of behavioural intervention, which has been forwarded as a treatment method for mental disorders. Most people with mental disorders are sedentary, and for these physical exercise is a form of behavioural change. This fits well with CBT-theory as a behavioural intervention. Most studies addressing the therapeutic effect of exercise have studied anxiety and depressive disorders [19,20], but studies indicate a therapeutic effect in chronic pain as well, for instance chronic low back pain [21] and fibromyalgia [22].

In this issue Haugstad et al. [23] present a promising treatment approach to chronic gynaecological pain, a combination of physiotherapy and psychotherapy which they label *somatocognitive therapy*. The roots of the physiotherapy go back to the time of Freud, when his contemporary Bess Mensendieck established her form of physiotherapy. Haugstad et al. integrated this with cognitive therapy, and this combined therapy was tested in a RCT, comparing it with treatment as usual. The intervention group experienced significantly larger reductions in pain scores and more improvement in motor functions, indicating that the program was effective. The patients kept their gains and tended to improve during the one-year follow-up, indicating that they had learnt new behaviours and coping strategies.

The content of CBT element in their program is described in some detail. One of the specific features of CBT, which they have incorporated, is the clear structure of sessions [10]. All sessions start with setting the agenda, and then the patient reports from last week, including homework done. The session continues with learning new exercises followed by applied relaxation, and finally new homework assignments for the following week are described. In addition to this very well integrated structure, their treatment program also has a clear behavioural profile. To what degree and at what level cognitions are addressed is not so clearly described, but they refer to the traditional form of CBT according to Beck.

The study of Haugstad et al. [24] evaluated the effect of a treatment program consisting of several elements. This study provides answer to some questions, among these the most important: The treatment program was effective. But other questions, such as which of the elements in the program have been important, are left open. The effective elements might be the physiotherapy exercises. Other studies have found that physiotherapy alone may be useful in chronic pelvic pain [25]. Another element is that patients in the intervention group had more regular contact with therapists, enabling the establishment of a therapeutic alliance. They were offered to take part in a new form of treatment, and this might give rise to optimism and hope. Within CBT, effective elements might be the psychoeducation part, giving patients an alternative understanding of their problems. From a CBT perspective, the physiotherapy exercises might be understood as exposure treatment to cope with movement phobias, and the new experiences during the exercises might stimulate changes in thinking. New studies are needed to elucidate these important questions.

In *chronic pain physiological as well as psychological factors interact* [26]. Combined treatment programs, like the one of Haugstad et al., addressing body as well as soul, is an interesting approach with promising results. The method should be further tested and developed in research as well as clinical practice.

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