

Using Cognitive-Behavioral Therapy as Additional Treatment for Chronic Medical Conditions

Andra Crăciun

Titu Maiorescu University, Bucharest, Romania

Abstract

The present paper focuses on the utility of applying cognitive-behavioral therapy as support in the case of patients diagnosed with chronic medical conditions, by presenting a series of arguments sustained by the professional literature regarding the fact that psychological interventions can be critical to the success of medical treatment.

Specific cognitive-behavioral therapy techniques such as modifying maladaptive thoughts, changing risky behavioral patterns and the global aim of increasing the feeling of autonomy support chronic patients in adjusting their psychological resources to better cope with their condition.

We support the idea of including psychotherapy specialists in all health care facilities in order to allow the patients to benefit from results such as higher treatment compliance and increased quality of life, developing effective self-management skills, finding resourceful meaning to the present situation. Such intervention offers the potential of helping patients to adjust more easily to the new conditions of life experienced after being diagnosed with chronic illness.

Keywords: *cognitive-behavioral therapy, chronic medical conditions, psychosomatic medicine*

Corresponding author: Andra Crăciun

Phone number: -

Email address: andra.craciun.psi@gmail.com

I. INTRODUCTION

It has already been established that there is a strong connection between the mind and body which involves a relationship of co-determination of the state of health. Such discussions have occurred since the 50's when Alexander has formulated one of the first basic lines of psychosomatic medicine: his hypothesis were based on the psycho-dynamic paradigm and suggested that psychological conflicts have the potential of affecting the proper functioning of certain parts of our organism, idea known today as the specificity theory (Brown & MacHale, 2008). Alexander also discussed the possible importance of psychological factors on an etiological level, but keeping in sight that the emergence of a disease is caused by multiple factors. Therefore, the psychological mechanisms interfering with the general medical state have already been studied by several generations of psychologists, and such psychosomatic theories have been applied in the study of conditions such as hypertension, rheumatoid arthritis, peptic ulcer and asthma since the occurrence of the first studies in the field. On the other hand, the reverse mechanism is also observable: according to Katon and Sullivan (as cited in Brown & MacHale, 2008), significant correlation has been identified regarding chronic illness and the occurrence of psychiatric disorders (depression seems to be the most common emotional issue in such cases) and such conclusions are highly valuable for a complete and efficient approach of most of the chronically ill patients. According to Kroenke and Swindle (2000), the cognitive-behavioral therapy has the highest potential of psychologically supporting the treatment of psychosomatic disorders (including the ones with chronic symptomatology). They have based their conclusion on a meta-study of trials which attempted to test the cognitive-behavioral therapy's efficiency in such conditions showing greater improvement of the patients with physical symptoms compared to control groups. Another conclusion of the authors states that the obtained benefits remained available for a period of one year ulterior to the psychotherapeutic intervention.

According to White (2001), chronic medical conditions have been correlated to high levels of uncertainty – an important result considering that the patients should apply changes to their behavior in order to follow a new life-style and self-care pattern adapted to the diagnosis and treatment. However, these are only a few of the factors considered when deciding to apply cognitive-behavioral interventions to chronically ill patients. Besides these, we should also note: psychological symptoms (whether or not related to physical morbidity); the potential diagnosis of secondary depression (which puts the patient at risk of increased psychosomatic symptoms or suicide); the beginning of a long-term cycle of changing and regulating thoughts, feelings and behavior specific to the process of adapting; mood disorders and fatigue due to the symptoms; avoiding certain types of activity which used to be regular (White, 2001). We might also add the

experience of pain which is specific to several chronic illnesses, considering the fact that cognitive-behavioral therapy techniques such as relaxation training have been proven to be effective in reducing such discomfort (Halford & Brown, 2009).

The issue of ameliorating chronic pain by using cognitive-behavioral specific interventions has also been studied by Nicholas, Wilson and Goyenc (1992) who applied relaxation training in the context of psychotherapy group treatment for the benefit of patients suffering from chronic lower back pain. The intervention also included back-education and establishing an exercise program. The authors concluded the combination of cognitive-behavioral treatment with physiotherapy may lead to significantly better improvement; the results have been maintained to a six months follow-up providing the use of active coping strategies.

Halford and Brown (2009) state that cognitive-behavioral therapy offers the possibility to improve the outcomes for patients experiencing such conditions, and, as we may add, to increase the level of life quality reported by the mentioned population. Holdevici (2009) mentions that besides the medical issues, patients also confront other sources of stress such as death of somebody close, divorce or separation, being unemployed or experiencing financial problems; all these should be considered in the treatment of chronically ill patients as factors that might contribute to the enhancement of some psychosomatic symptoms if perceived as highly disturbing.

II. COMMON PRINCIPLES AND METHODS OF COGNITIVE-BEHAVIORAL THERAPY APPLIED IN CHRONIC MEDICAL CONDITIONS

Usually, it seems that the medical personnel tends to try to encourage the chronic ill patients, but only by pointing out general truths or addressing phrases which might motivate the patients, also of general nature - but such messages don't suggest an action plan and don't help the patient develop any kind of coping skills (Sharoff, 2004). Therefore, medical services should be accompanied, for the patient's best interest, by psychological services such as applying cognitive-behavioral psychotherapy as a method able to develop the patient's coping skills and support him, both during the short-term situation of the hospitalization but also as a complete psychotherapy intervention program, conducted independently from the time spent in hospital.

Halford and Brown (2009) mention several studies which have proven cognitive-behavioral therapy to be effective as additional treatment of chronic conditions such as cancer, rheumatoid arthritis, multiple sclerosis and ischemic heart disease; the trials have sighted the control of depression and anxiety correlated to these conditions which have the potential of making the symptomatology worsen in time. Sharoff (2004) notes the major changes which

follow receiving a chronic disease diagnosis regarding the previous way of living, changes of the level of general satisfaction, the impairing effects of pain and general discomfort, the changes on viewing one's own identity and future perspectives. All such changes, according to the author, should be accompanied by the development of new coping skills to support the patient in adapting to the new medical condition.

Cognitive -behavioral therapy is described as a “focused, structured, collaborative and usually short -term” (White, 2001) form of intervention and its main general objective is to offer the possibility of developing effective and adapted problem-solving skills and to modify dysfunctional behavioral patterns and cognitive schema. The approach of chronically ill patients will sight developing self-management skills which will support the treatment compliance and adjusting to the new conditions of life due to the illness symptoms and also developing a new set of beliefs in order to reduce the inherent stress levels. Thus, any protocol will sight the control of the factors that might “trigger, maintain or exacerbate symptoms” (White, 2001).

The cognitive-behavioral paradigm is built around the idea that two people think differently about the same event, which leads to differences in their emotional responses. Therefore, one person may be affected by an event perceived as being stressful or traumatic leading to emotional distress, depression or anxiety while another person, experiencing the same event might evaluate it as being a challenge and overcome it experiencing a healthy level of stress. According to White (2001), this principle also applies to physical health problems and it's reflected in the fact that two different people might show highly different psychological responses to the same diagnosis. For instance, out of two people receiving the same diagnosis, one might become depressed, while the other might realize he has to operate a few life-style changes in order to better adapt. Such thinking patterns find their sources in the past experiences and several aspects of the situation which are differently evaluated (Halford & Brown, 2007). As the same authors summarize, the intervention is based on the idea that there is a strong connection between thinking, mood, physical symptoms and behavior. Holdevici (2009) also supports this idea and reminds us that the physical condition itself is not a situation of crises, but the crises is given by the patient's evaluation and perception of own resources as being insufficient and not effective enough. According to the author, previously defined thoughts are critical to the appearance of a crisis or avoiding it. Behavior is also essential as many of us are not involved in sanogenic patterns due to several causes: not perceiving threat and denying the need of change; lack of correct evaluation of vulnerability; lack of correct informing and financial resources which block active seeking of medical guidance; lack of compliance to treatment after receiving diagnosis.

Halford and Brown (2009) suggest several indications of using this type of intervention for chronically ill patients, such as: comorbid psychiatric disorder – among the correlated clinical

disorders we might encounter depression, anxiety, post-traumatic stress disorder and sometimes psychotic disorders (physical illness has been found to be a risk factor of such disorders); adjustment to illness which correlates to uncertainty about the future, searching for meaning, loss of control and very specific needs; behavior patterns related to illness – or the way people act on their physical symptoms; adherence to treatment by adjusting beliefs related to it.

The therapeutic alliance should be built with great attention, offering complete information to the patient regarding the way psychotherapy can help them in the context of chronic illness. Some of the patients might begin psychotherapy on a basis of emotional tension and feelings of exhaustion caused by failure to adapt to the new condition (Holdevici, 2009). The author specifies the basic elements of the therapeutic alliance: the accord regarding the treatment objectives; accord regarding the tasks accomplished during and outside of the therapeutic sessions; the emotional bond settled between the therapist and patient. The latter seems to be essential, as its failure might bring an aggravation of the symptoms instead of their remission. On the other hand, successful therapeutic alliance increases compliance and involvement of the patient towards the treatment, whether we speak of the psychotherapy or the medical intervention.

As for the setting of objectives, Holdevici (2009) also points out that they should be realistic and oriented to concrete problem-solving in order to enforce the patient's trust with respect to the fact that the intervention is focused on overcoming the difficulties. The realistic approach should also sight the patient's understanding on his problems, differently from a positive manner which might imply a minimization of the context.

Specific cognitive-behavioral therapy methods should be applied by professionally trained and supervised psychologists, but we note that some of them (such as using an agenda) can also be applied by physicians (White, 2001). In addition, the same author states that setting the agenda brings effectiveness to the intervention and shortens the necessary time to find a solution. Working on an agenda together with the patient enhances their feeling of collaboration with the doctor or therapist. Such agenda is destined to help the patient monitor the treatment objectives and course.

According to Halford & Brown (2009), the first step of the intervention should consist of the assessment of how suitable a cognitive-behavioral approach might be. Also, such assessment should result in the patient's better understanding of referral. In addition, the assessment will overlook symptoms, evaluate beliefs regarding the condition (namely cause of illness, duration, seriousness, effects on the patient's life etc.); locus of control, behavior related to the illness (frequency of appointments, treatment, avoiding risky behavior); assessment also regards the social impact of the condition, namely the employment status, change in regular activities and the effects on relationship dynamics and also self-concept under the aspects of one's own role

changes, body image issues, meaning of the condition and the self-worth level. The authors bring to attention the suicide risk which is higher among chronically ill patients, based on feelings of hopelessness, depression, inevitability of death, painful symptoms which are hard to tolerate. According to Holdevici (2009), suicide potential correlates to the following factors: rigid thinking patterns, problem-solving difficulties, psychotic symptoms, lack of hope, reduced interests and pleasure, passive attitude, lack of affective support and formulating concrete plans of self-destruct.

The same author states that clinical assessment should be focused on the nature, debut, intensity and frequency of symptoms in order to formulate a correct strategy and reminds of the importance of dividing the objectives into small steps so they would be easier to achieve by the patient.

Another utilized technique is the homework given to the patient, namely keeping a diary with the purpose of self-monitoring; such diary records changes of mood and behavior, thoughts and images, all associated to unwanted negative emotional states (White, 2001). Chronically ill patients will be encouraged to register not only psychological issues but also physical ones, related to their condition. Such information will guide the intervention to developing better self-management skills. Another method proposed by White (2001) is experimentation – including homework tasks centered on identifying symptoms' triggers (such as the correlation between medication and mood changes).

Holdevici (2009) reminds that an important strategy is helping the patient reveal his own resources and start putting them at use; such approach seems to be different from the medical one, which mostly regards symptoms and pathogenic factors. Also, the therapist should help emphasize past strategies used by the patients who succeeded in obtaining positive results. Other methods recommended by Holdevici (2009) include: reduction of uncertainty related to the medical condition, as it is one of the most stressful aspects in this context; applying techniques of negative affect management; using psychological support by sharing similar experiences, which can contribute to great relief; offering positive feedback to any signs of progress obtained by the patient; self-monitoring the evolution of the symptoms, depression and anxiety for a better record of evolution.

According to Sharoff (2004), coping skills should be the main target of a psychotherapeutic intervention, based on the fact that they are valuable resources which help all of us feel good about ourselves, reach better functioning and experience less problems on an interpersonal and intrapersonal level. The same author defines the coping skills in relation to problem-solving; they should help reduce the weight of experienced stress and fight any types of stressors encountered by the individual, including the stress of confronting chronic medical conditions. The author indicates the cognitive-behavioral therapy as a type of intervention that

includes building coping skills, which he finds to be the main resources of a chronically ill patient; he mentions the cognitive restructuring as one of the main techniques which such therapies appeal to, focusing on the processes of thinking and their impact on the emotional, physical and behavioral levels of functioning.

Other authors (Halford & Brown, 2009) emphasize the importance of techniques such as behavioral activation as opposed to reduced general activity due to change of roles as a consequence of illness; acceptance and commitment therapy and compassionate mind training are also recommended in order to help patients better tolerate their emotions. Also, mindfulness-based stress reduction is increasingly applied in the treatment of chronic pain and physical medical conditions.

Cognitive-behavioral therapy, because of its specific interventions regarding pain management, is also recommended in the case of chronic pain conditions, such as rheumatoid arthritis (Evers, Kraaimat, van Riel & de Jong, 2002). The authors suggest that the psychotherapy treatment should be applied as early as possible and, probably most importantly, in a customized manner. A research study has been conducted to support the suggested types of treatment, study which has been initiated by evaluating the psychosocial risk profiles of patients; they received the standard medical treatment from rheumatology specialists and also were involved in individual cognitive-behavioral sessions. The psychotherapeutic intervention has been adapted according to the patients' objectives. The mentioned objectives mostly regarded aspects secondary to the medical condition such as fatigue, experiencing negative mood, changes related to social relationships, pain and functional disability. Each objective was approached through a specific module. The reported results have shown significant improvement as depression and fatigue were reduced, as shown during a 6-month follow-up. Similar to Sharroff's (2004) directions, Evers et al. (2002) have reached an increased level of active coping (in relation to post-treatment stress), but they have also recorded lower levels of helplessness and better compliance to medication. Therefore, we may notice once again proofs of cognitive-behavioral therapy effectiveness as additional treatment of medical conditions.

Literature mentions the importance of a complete-level communication between the patient and the psychotherapist who conducts the cognitive-behavioral intervention (Halford & Brown, 2009). Thus, the authors mention that near the end of treatment, the psychologist will have to inform his patient about the possibility of relapse and a plan of prevention will be structured. In some conditions, relapses are to be expected so the patient should be prepared. Therefore, in these cases, treatment is ended when the patient has developed the set of skills needed to cope with his condition.

It seems that even one session of cognitive-behavioral therapy can make a difference from the matter of anxiety and depression levels experienced by chronically ill patients. In order

to study this possibility, Kunic, Brawn, Stanley, Wristers, Molinar, Stoebner and Orengo (2001) have analyzed the impact of a two-hour therapy sessions with a six weeks follow-up conducted in the benefit of chronic obstructive pulmonary disease patients. The two hour cognitive-behavioral therapy session had the main objective of reducing specific manifestations of anxiety, and consisted in applying relaxation training, cognitive interventions, gradual practice and included homework and regular class for a month and a half. The results of the group have been compared to a control group which has received education related to the patients' condition, for an equal period of time. The authors report that the group which received the cognitive-behavioral therapy session has shown lower levels of depression and anxiety but no physical changes as was expected prior to the data analyzes. Even so, the efficiency of cognitive-behavioral therapy in the management of depression and anxiety is worth to be mentioned and should benefit from in-depth analysis; the possibility of obtaining positive emotional results even after one session is a valuable conclusion, especially in the cases when the patients can only benefit from psychotherapy while being hospitalized. In these cases, the intervention period should be shortened and highly adapted to the conditions (especially temporal but also technical, such as the personnel available for such interventions) in order to support the patients' best possible results.

III. INTERVENTION DIRECTIONS IN THE TREATMENT OF DIABETES

Diabetes is a syndrome characterized by high levels of glucose or sugar in the blood resulting in impairment in the activity of insulin. Three types are known (I, II and gestational). Diabetes correlates to serious medical and psychiatric comorbidities and several limitations due to medical management (Sperry, 2009). The same author proposes a guideline of psychotherapy intervention in the case of patients suffering from diabetes. Understanding the nature of the illness, appropriate food intake and glycemic control are essential to proper self-management. The most challenging aspect seems to be the glycemic control as constant and immediate positive feedback is needed to support the patient's commitment. On a cognitive level, it is important to enforce the patient's understanding that glycemic control leads to lower risk of complications, their confidence in achieving beneficial outcomes and self-efficacy; all these levels seem to contribute to better treatment compliance. On the other hand, glycemic control seems to be influenced by family dynamics and conflict whereas children within peaceful families obtain better outcome.

As mental health specialists, we should always take into account medical recommendations affirmed by other medical professionals and accordingly develop intervention protocols. Due to the major life style changes which are implied by the condition of diabetes, the

patient should be able to understand properly the causes, symptoms and complications related to diabetes. Hinchageri (2012) suggests that, since diabetes seems to increase as prevalence among the developing countries and it represents the major chronic illnesses which imply life-term medical care, educating the patient should be one of the main concerns of the medical staff treating the patient. This way, major complications have higher chances of being prevented. The patient needs to be educated about subjects such as the importance of diet, exercise, weight control, blood glucose monitoring, medication use, foot and eye care Hinchageri (2012). The same author mentions a study whose results have shown that increasing basic information of the patient regarding diet, his condition and medication later improves the laboratory test parameters of the body functioning – all due to better knowledge of the patient regarding his condition and the aspects of his life that he should continuously monitor and take care of. We expect that, when medical education is accompanied with specific cognitive coping strategies which help reduce the impact of the condition on the patient's general well-being, as well as with specific strategies which support behavioral changes according to the medical prescriptions, such education should reach better and more stable outcomes for the patient. As Sharroff (2004) mentioned, medical personnel usually tends to give psychological support from a rather general perspective, but sometimes what the patients need is a specific solution to the experienced impairment.

Diabetes also affects younger population which needs the same careful approach as the adult patients, and sometimes even more care. Children and teenagers are usually confront the type 1 diabetes which has an autoimmune basis (Hacia, Cichoń, Nowak, Fuchs, Jarosz-Chobot & Janas-Kozik, 2013). The same authors remind us that the younger diabetes patients are more vulnerable to depressive episodes due to the major life changes which occur after being diagnosed with the condition. On the other hand, depression is not the only emotional issue among diabetes patients, as anxiety symptoms may also be present. Hacia et al. (2013) note that children suffering of type 1 diabetes show low self-esteem and self-confidence, lack of hope that they are able to reach goals; the family dynamics is also affected as these children may be overly protected, which on a long term rises the risk of impairing the children's general autonomy; the risk of being emotionally rejected by the parents is also noted.

One major difference between the adult diabetes patients and the younger ones stands in the self-aggressive behavior and its specific (Hacia at al., 2013) - the authors include in the self-aggressive behavior tendencies such as lack of compliance to treatment, considering that the correct measurement of blood glucose, correct insulin intake and proper diet must strictly follow the prescribed parameters or may put the patient's life at risk.

Lustman, Griffith, Freedland, Kissel and Clouse (1998) have brought to attention the fact that depression is an emotional consequence in the case of diabetes diagnosed patients, and have tested the efficiency of cognitive-behavioral therapy among the type two diabetes mellitus

condition. At the point of their study, the effects of psychotherapy regarding depressed patients diagnosed with depression were poorly known. Therefore the authors have conducted a controlled trial in order to explore the degree of efficiency of applying cognitive-behavioral therapy for this group of patients. The participants were either included in a psychotherapy group (with a 10 weeks length) or benefited from individual cognitive-behavioral psychotherapy; medical education support was also offered. The results have reported better emotional outcomes among 85% of the patients who were part of the cognitive-behavioral group; at follow-up 70% of the mentioned patients reported remission. Also, the glycosylated hemoglobin levels (which trigger mood changes in diabetes) were also improved ulterior to the cognitive-behavioral group intervention. Therefore, Lustman (1998) was able to conclude that cognitive-behavioral therapy and medical education adapted to the condition of diabetes is a viable non-pharmacologic treatment in the case of depressed diabetes patients.

In addition, Sperry (2009) outlines the importance of responsibility of the patient which can be supported by psycho-education including correct informing (together with diet, exercise and self-monitoring), relaxation training (proven to reduce hyperglycemia and increase glucose tolerance), blood glucose awareness training (both by cognitive and behavioral methods aimed to self-management and decision making, detection of relevant symptoms) and smoking cessation, as smoking increases the risk of death. Sperry notes that failure in self-management is frequent among diabetic patients. Therefore, cognitive-behavioral intervention can bring great value to their life quality by the nature of its methods. Negative perception on one's self and efforts is overcome in order to support the patient in self-management and autonomy development which are essential to such medical condition.

IV. CONCLUSIONS

The role of psychologists in supporting chronic ill patients stands in the fact that such conditions represent, most of the times, a real threat to the patient's mental stability (Sharoff, 2004). Therefore, specific intervention protocols should be continuously perfected in order to increase the levels of quality of life among these patients. Even though several of the problems faced by medical patients are not likely to be ameliorated (such as chronic pain and physical disability, the progressive deterioration of functioning - to name a few), the health care personnel should take into account the negative emotion reactions which are inherent to such symptomatology (Sharoff, 2004).

As previously shown, adding psychological intervention (and specifically cognitive-behavioral therapy techniques) may contribute in the treatment of chronically ill patients by breaking the cycle of symptomatology: whether we speak of psychosomatic disorders, where the

chronic symptoms are psychologically based or we refer to psychiatric disorders caused by the difficulties raised by chronic medical conditions. Having in sight the importance of the psychological factors and their contribution to the general health condition and medical compliance, health specialists will be able to direct their patients to the best treatment outcomes; we recommend further research investigations to support this conclusion and to continuously improve psychological interventions in the case of chronically ill patients, including the cognitive-behavioral strategies.

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