# Cognitive behavioral approaches to the patients suffering from depression due to maladjustment in the work place : Two case reports

Masahito Tomotake, Masao Okura, and Hiromichi Okabe Department of Neuropsychiatry, The University of Tokushima School of Medicine, Tokushima, Japan

Abstract : The authors report two cases of depression in which Beck's cognitive therapy was effective. Case 1 was a 32-year-old man who had been troubled with the recurrent depression for about eight years in spite of regular medication. Case 2 was a 30-year-old man who had been chronically depressed for one year. Maladjustment in the work place was involved in the development of their depressive symptoms. Through the psychotherapeutic sessions, they were encouraged to identify their cognitive distortions such as emotional reasoning, all-or-nothing thinking and disqualifying the positive, and assisted to modify their cognitive distortions by means of cognitive behavioral techniques. Gradually gaining self-efficacy, they became able to cope well with their present problems. Both of them finally recovered from depression and, especially in case 1, he could overcome recurrence. The active ingredients in successful cognitive therapy were discussed. It was also stressed that the capacity to be sufficiently introspective to identify negative automatic thoughts and to be sufficiently logical to understand how the thoughts are distorted was requisite for this therapy. J. Med. Invest. 46 : 109-114, 1999

Key words : depression, maladjustment, cognitive therapy, automatic thought, schema

#### INTRODUCTION

Cognitive therapy, one of the most widely practiced forms of psychotherapy, was first introduced by A. T. Beck in the 1960s (1, 2). Most therapists had overemphasized treating patients 'feelings because depression had been regarded as a mood disorder throughout the history of psychiatry. Beck 's cognitive model, however, indicates that depression is the result of distorted negative thinking. Cognitive therapy encourages the patients to recognize connections between cognitions and affects because negative mood states usually involve negative automatic thoughts (3, 4). This therapy consists of cognitive and behavioral techniques by which therapists intend to help the patients modify cognitive distortions relevant to their present problems and schemas. Through the therapeutic sessions, the patients are assisted in gaining self-efficacy and in coping with their ongoing problems (5).

We report two cases of depression due to maladjustment in the work place and discuss the active ingredients in successful cognitive therapy.

#### CASE REPORT

*Case 1* : Mr. A, a 32-year-old research worker at a pharmaceutical company, had been suffering from recurrent depression. He had repeatedly fallen into depression a few times a year for the previous eight years and had stayed home for about two weeks whenever he was depressed. Moreover, he went to a clinic with elevated anxiety and tension a few times a month whenever he recognized some physical discomforts such as slight nausea, general fatigue and diarrhea. He had been on medication with antidepressants (maprotiline, setiptiline, sulpiride) and minor tranquilizers (etizolam, alprazolam) for the last four years. Nevertheless, his recurrent

Received for publication December 3, 1998 ; accepted December 25, 1998.

Address correspondence and reprint requests to Masahito Tomotake, M.D., Ph.D., Department of Neuropsychiatry, The University of Tokushima School of Medicine, Kuramoto-cho, Tokushima 770-8503, Japan and Fax : +81-88-633-7131.

depression had not improved. In December, 1996, he came to our clinic asking for psychotherapy in order to change his negative thinking and to subjugate the recurrence of depression.

Initially, he was diagnosed with depression because of the typical symptoms such as depressive mood, appetite loss, sleep disorder, loss of interests and chronic anxiety, meeting ICD-10 criteria for recurrent depressive disorder, current episode moderate (F33.1) (6), and then cognitive behavioral approaches were started. In parallel, he was administered sulpiride (150 mg/day) and etizolam (1.5 mg/day). His score on the Beck Depression Inventory (BDI) (7) at the first session was 18 points, indicating that he was moderately depressed. In order to overcome his undesirable mental habits creating a depressive mood and poor self-esteem, we set him a task of "Daily Record of Dysfunctional Thoughts" (Table 1) (4), which helped him to understand the relationship between affects and cognitions. He trained himself to recognize and write down his negative automatic thoughts as they went through his mind to learn how these thoughts were distorted. About two weeks later, we noticed that there were some patterns of daily life events in which his negative automatic thoughts accompanied by negative feelings came to be accelerated.

Negative automatic thoughts repeatedly seen, for example, included the following : 1. When he came back home from his office, he often thought," Today again, I did nothing useful at the office. " (disqualifying the positive), 2. When his work did not go well, his negative automatic thought was," I wonder if I can finish an assignment every six months? I m seriously worried about it. It must be impracticable. "(emotional reasoning), 3. When he felt some physical discomforts, he often thought," If I m not in perfectly good condition, I can't do anything useful. "(all-or-nothing thinking)

He gradually became able to identify these negative automatic thoughts, and subsequently, he trained himself in answering his negative thoughts with rational responses on a daily basis. This is one of the most important approaches of the cognitive techniques. It was crucial to write down the negative automatic thoughts and rational responses, because writing them down forced him to develop much more objectivity than he could ever achieve by letting responses swirl through his mind. In parallel, with a view to verifying the reasonability of the negative automatic thoughts, we set him a task of" Daily Activity Schedule "consisting of two parts. In a prospective column, he wrote out an hour-by-hour plan for what he would like to accomplish on each day, and in the other column, he estimated the degree of pleasure. Especially, that was useful in modifying the cognitive distortion of " disqualifying the positive "because looking back upon the past records enabled him to notice that there was not a little pleasure in each day. The process of looking critically at the negative automatic thoughts counteracted the negative impact of the dysfunctional thoughts as they occurred in problem situations. As he developed increasing skill in responding to the dysfunctional thoughts, he began to develop responses between the sessions soon after the problem situations occurred.

In the last stage, we could suppose that his schema was," If I in not perfect, I in of no value. "Through the sessions, he had gradually comprehended the connection between the schema and cognitive distortions, and became able to look at his negative automatic thoughts objectively without anxiety and

Table 1. Daily Record of Dysfunctional Thoughts -A sample in case 1-

1. Situation :

- Introducing president's speech, the director of his laboratory said, "Because most enterprises will face recession in the future, we must exert ourselves now."
- 2. Emotion (Rate degree of emotion 0-100%) : Anxiety. (60%)
- 3. Automatic Thought (Rate degree of belief in each thought 0-100%) :
  I must be dismissed for idleness, because I sometimes stayed home because of depression. (40%)
- 4. Rational Response (Rate degree of belief 0-100%) : I talked to our director about my dismissal, but it was found to be completely groundless. I 'm not worried about it. (70%)
- 5. Outcome (Re-rate automatic thought and emotion) : Automatic thought : (10%), Emotion : (10%)

tension. Three months later, he finally recovered from depression and conquered chronic anxiety, tension and melancholy. His BDI score fell down from 18 to 1 point at the end of the therapy and was maintained at less than 10 points thereafter.

*Case 2* : Mr. B, a 30-year-old man and a colleague of Mr. A, was introduced by him to our clinic in March, 1998. He had been chronically depressed because he could not adapt himself to his circumstances in the work place. He had felt difficulty in getting along with his colleagues and superior officers since he was employed five years previously, and sometimes visited a counselor to ask for advice. Especially, for the previous one year, he had suffered from chronic depressive moods and difficulty in concentration.

At the initial session, he was recognized as having a slightly depressive mood, insomnia, anxiety and loss of interests with his BDI score of 19 points, satisfying ICD-10 criteria for mild depressive episodes (F 32.0) (6). We decided to start cognitive behavioral approaches with him because he would not consent to drug treatment. Similarly to case 1, he was recommended to record a" Daily Record of Dysfunctional Thoughts "in order to establish the relationships between cognitions and affects. At the second session, he almost recognized the connection between the negative automatic thoughts and negative feelings. His negative automatic thoughts were often the following : 1. When he saw a person with an unfriendly look at his office, he became anxious and thought," I'm disliked by him. "(Emotional reasoning), 2. When he talked to someone with a stern face, he felt an elevated tension and anxiety and immediately thought," I must have hurt his feelings. He must dislike me. "(Emotional reasoning). On the other hand, he could have good communication with someone who was friendly towards him, but because of the inappropriate thinking, he could not successfully manage at the office and was chronically troubled about his poor communication. It was obvious that his depressive symptoms were caused by his maladjustment. We encouraged him to put the grounds of negative automatic thoughts on record repeatedly everyday, and at the same time encouraged him to list the people with whom he found it hard to get along and to inspect the manner of his communication with others. It was not long before he found out that there were no objective bases for his negative automatic thoughts. He could gradually overcome the chronic anxiety and tension which

caused his depressive moods, through the repeated training to modify his cognitive distortions.

In the present case, we assumed his schema to be," If a person likes me, he always smiles at me and is friendly to me. "This schema was thought to originate from his relationship with his family. There had been something in his father with a stern face that discouraged friendly advances, and he had never felt friendly towards him. At the session, he confessed that he disliked his father. The other members of his family, on the other hand, always smiled at him and he could feel their love. His thoughts and feelings attached to his father in the past were thought to form the basis of appraising a person in the present. He understood that the early experiences had formulated his dysfunctional schema and could become able to observe his negative automatic thoughts objectively in a daily life, feeling much less anxiety and tension in his work place. In this way, he could overcome his undesirable mental habits. His BDI score fell to 4 points two months later, showing no signs of depression.

## DISCUSSION

Cognitive therapy is based on a commonsense model of the relationships among cognitions, affects and behaviors. The theory of this therapy shows that affects and behaviors can be changed by gaining mastery over one s assumptions, beliefs and appraisals. In a therapeutic session, three aspects -what we call- automatic thought, cognitive distortion and schema, are emphasized (3, 5, 8). An individual s immediate and unpremeditated interpretations of events are defined as automatic thoughts. They occur spontaneously without apparent volition, and shape both affects and behaviors. In general, a depressive patient tends to have negative automatic thoughts relevant to negative feelings such as anxiety, tension, sadness and melancholy. For example, when Mr. A was summoned to his superior s room, he thought, "I must have blown it. I m really in trouble now," and felt anxiety and tension rising. If his interpretation is accurate, his response is appropriate. However, if he is overestimating, his affects and actions are thought to be inappropriate to the situation. Those inappropriate forms of cognitions are referred to as cognitive distortions (Table 2) (9). A schema is an unit of belief by which a person formulates his cognitions, and is thought to have been formed early in life through the influence of early experiences

#### Table 2. Definitions of Cognitive Distortions (quoted from Burns (9))

- 1. All-or-nothing thinking : You see things in black-and-white categories. If your performance falls short of perfect, you see yourself as a total failure.
- 2. Overgeneralization : You see a single negative event as a never-ending pattern of defeat.
- 3. Mental filter : You pick out a single negative detail and dwell on it exclusively so that your vision of all reality become darkened, like the drop of ink that discolors the entire beaker of water.
- 4. Disqualifying the positive : You reject positive experiences by insisting they " don't count " for some reason or other. In this way you can maintain a negative belief that is contradicted by your everyday experiences.
- 5. Jumping to conclusions : You make a negative interpretation even though there are no definite facts that convincingly support your conclusion.
- 6. Magnification or minimization : You exaggerate the importance of things (such as your goof-up or someone else's achievement), or you inappropriately shrink things until they appear tiny (your own desirable qualities or the other fellow's imperfections). This is also called the binocular trick. "
- 7. Emotional reasoning : You assume that your negative emotions necessarily reflect the way things really are :" I feel it, therefore it must be true. "
- 8. Should statements : You try to motivate yourself with shoulds and shouldn ts, as if you had to be whipped and punished before you could be expected to do anything." Musts "and" oughts "are also offenders. The emotional consequence is guilt. When you direct should statements toward others, you feel anger, frustration, and resentment.
- 9. Labeling and mislabeling: This is an extreme form of overgeneralization. Instead of describing your error. you attach a negative label to yourself: "I m a loser. "When someone else's behavior rubs you the wrong way, you attach a negative label to him: "He's a goddam louse. "Mislabeling involves describing an event with language that is highly colored and emotionally loaded.
- 10. Personalization : You see yourself as the cause of some negative external event which in fact you were not primarily responsible for.

and cultural factors. When depressed, a dysfunctional schema is accelerated, which results in a recognition of negative automatic thoughts about the self (Figure 1) (10). A therapist collaborates with his patient to reveal unconscious cognitive distortions which cause negative mood states, and by means of the training to get rational responses, the patient becomes able to reduce the negative feelings, thus coping with his present problems successfully.

Regarding clinical application of cognitive therapy to depression, severely depressive patients with inhibition of thought, suicidal ideas, irritability and delusion, we think, are beyond the reach of cognitive therapy because they never respond to verbal interventions. If a therapist forces a severely depressive patient to perform some tasks, the patient will be driven to despair because of the impossible request. Encouraging such a patient to engage in a formerly enjoyable activity often causes more severe depression. We also consider that it is difficult for a depressive patient with a personality disorder to accept systematic cognitive behavioral approaches because they often fail to engage regularly in the treatment,

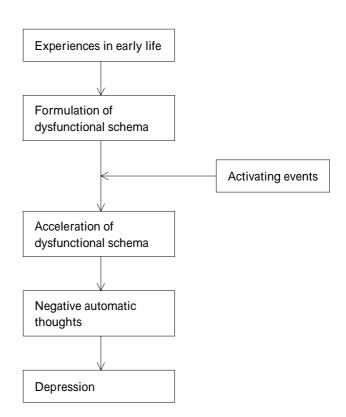


Fig.1. The relationships among dysfunctional schema, negative automatic thoughts and depression (modified after Inoue (10))

and are sometimes not able to be logical in the sessions. In the treatment, the capacity to be introspective is a requisite. If the patient can not identify automatic thoughts or can not work on a conceptual level, this approach will usually not be fruitful (11). In the present cases, both the patients were introspective and logical enough to be able to accept these approaches smoothly. They speedily identified their own negative automatic thoughts within a few sessions and could master how to execute self-monitoring. According to Schuylers' opinion, it seems take about three to five sessions to teach a motivated patient the cognitive model, and for a few, this will suffice as treatment (11). Our patients were so well motivated that they could accept verbal intervention easily. Slightly or moderately depressive patients like them without a personality disorder, we think, are suitable for this verbal intervention.

In general, antidepressants are often prescribed when depressive symptoms include sleep disturbance, appetite loss, loss of energy, general fatigue and loss of interests, and minor tranquilizers may supplement psychotherapy when anxiety is generated in reaction to some situations. Cognitive therapy is one of the first forms of psychotherapy that has been shown in clinical studies to be as effective as and in some cases more effective than drug therapy with antidepressants in the treatment of depression (12-17). Moreover, it has also been found to work well in combination with psychotropic medication (18). In case 1, the patient was given etizolam (1.5 mg/day) and sulpiride (150 mg/day) throughout the whole period of therapy. He had already been given some drugs such as antidepressants and minor tranquilizers, including etizolam and sulpiride. However, these could not prevent the recurrence of depression. In the present treatment, we performed both the cognitive behavioral approach and drug treatment in parallel, which was successful in preventing recurrence.

In order to assess the severity of depression, we used a BDI (Beck Depression Inventory) (7). A patient and his therapist sometimes disagree in their assessment of the effects of the treatment. As the depressed patient has a distorted, negative view of everything, including his progress in therapy, he frequently believes that he has failed in the therapy. A plot of his weekly BDI score that shows steady improvement can remind him that he has in fact improved (19). The BDI, consisting of 21 items, assesses mood, cognitive and physiological aspects of depression and it is found that the BDI score has high correlations with clinical ratings of depression severity (20). Murphy (18) set cutoff scores for interpreting the BDI scores as followings : BDI scores less than 10, not depressed ; 10 to 15, mildly depressed ; 16 to 24, moderately depressed ; 25 or greater, severely depressed. For example, in the case 1, the BDI score was 18 points at the first session, indicating that he was moderately depressed. However, it fell down to 1 point after the treatment, indicating no signs of depression. After the therapy sessions, we encouraged the patients to take the BDI test at regular intervals to assess their severity of depressive state in order to detect any signs of the recurrence at an early stage.

We especially emphasized the usefulness of cognitive behavioral approaches to those patients with depression apparently due to problems relating intimately to daily events, and the patient with a introspective and logical capacity, we conclude, is suitable for this therapy.

#### ACKNOWLEDGMENTS

We would like to extend our cordial thanks to Prof. Kazuomi Inoue of Naruto Educational University for his helpful advice regarding case 1.

## REFERENCES

- 1. Beck AT : Thinking and depression : 1. idiosyncratic content and cognitive distortions. Arch Gen Psychiatry 9 : 324-333, 1963
- 2. Beck AT : Thinking and depression : 2. theory and therapy. Arch Gen Psychiatry 10 : 561-571, 1964
- Beck AT : Cognitive therapy and the emotional disorders. International Universities Press, New York, 1976
- Beck AT, Rush AJ, Shaw BF, Emery G : Cognitive therapy of depression. Guilford Press, New York, 1979
- 5. Freeman A, Pretzer J, Fleming B, Simon KM : Clinical applications of cognitive therapy. Plenum Press, New York, 1990
- World Health Organization : The ICD-10 classification of mental and behavioural disorders : clinical descriptions and diagnostic guidelines, Geneva, 1992, pp. 311-387
- Beck AT : Depression inventory. Center for cognitive therapy, Philadelphia, 1978

- 8. Williams JMG : The psychological treatment of depression. Routledge, London and New York, 1992, pp. 91-93
- 9. Burns DD : Feeling good. Avon Books, New York, 1992, pp. 42-43
- 10. Inoue K : Invitation to a cognitive therapy (in Japanese). Kinpodo, Kyoto, 1992, pp. 16
- 11. Schuyler D: A practical guide to cognitive therapy. W. W. Norton & Company, New York, 1991
- Rush AJ, Beck AT, Kovacs M, Hollon SD: Comparative efficacy of cognitive therapy and pharmacotherapy in the treatment of depressed outpatients. Cog Ther Res 1 : 17-37, 1977
- Blackburn IM, Bishop S, Glen AIM, Whalley LI, Christie JE : The efficacy of cognitive therapy in depression. Br J Psychiatry 139 : 181-189, 1981
- Kovacs M, Rush AJ, Beck AT, Hollon S: Depressed outpatients treated with cognitive therapy or pharmacotherapy. Arch Gen Psychiatry 38 : 33-39, 1981
- 15. Beck AT, Hollon SD, Young JE, Bedrosian RC, Budenz D : Treatment of depression with

cognitive therapy and amitriptyline. Arch Gen Psychiatry 42 : 142-148, 1985

- Blackburn IM, Eunson KM, Bishop S : A twoyear naturalistic follow-up of depressed patients treated with cognitive therapy, pharmacotherapy, and a combination of both. J Affect Disord 10 : 67-75, 1986
- Simons AD, Murphy GE, Levine JL, Wetzel RD : Cognitive therapy and pharmachotherapy for depression. Arch Gen Psychiatry 43 : 43-49, 1986
- Murphy GE, Simons AD, Wetzel RD, Lustman PJ : Cognitive therapy and pharmacotherapy : singly and together in the treatment of depression. Arch Gen Psychiatry 41 : 33-41, 1984
- Persons JB : Cognitive therapy in practice. W. W. Norton & Company, New York, 1989, pp. 35-36
- 20. Carson TP : Assessment of depression. In : Ciminero AR, Calhoun KS, Adams HE, eds. Handbook of behavioral assessment. Wiley, New York, 1986, pp. 404-445