



Effectiveness of Using a Mixed of CBT, CT-R, and Oral Treatment in Reducing Depression and Anxiety

Juliana Hindradjat^{1*} , P. H. Livana² 

¹Department of Christian Education, Sekolah Tinggi Teologi Kharisma, Bandung, Indonesia; ²Department of Nursing and Professionals Undergraduate Study Programs, Sekolah Tinggi Ilmu Kesehatan Kendal, Sijeruk, Indonesia

Abstract

Edited by: Branislav Filipović

Citation: Hindradjat J, Livana PH. Effectiveness of Using a Mixed of CBT, CT-R, and Oral Treatment in Reducing Depression and Anxiety. Open Access Maced J Med Sci. 2022 Mar 25; 10(B):1-12.

<https://doi.org/10.3889/oamjms.2022.8401>

Keywords: Anxiety; Cognitive behavior therapy; Depression; Recovery-oriented cognitive therapy

*Correspondence: Juliana Hindradjat, Effectiveness of Using a Mixed of CBT, CT-R, and Oral Treatment in Reducing Depression and Anxiety, E-mail: julianahindradjat@gmail.com

Received: 26-Dec-2021

Revised: 15-Feb-2022

Accepted: 15-Mar-2022

Copyright: © 2022 Juliana Hindradjat, P. H. Livana

Funding: This research did not receive any financial support

Competing Interests: The authors have declared that no competing interests exist

Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

AIM: This qualitative research with case study method aims to determine the effectiveness of the combined use of cognitive behavioral therapy (CBT), Recovery-Oriented Cognitive Therapy (CT-R), and oral treatment to reduce depression and anxiety.

PATIENT And METHODS: The subject in this study was a 55-years-old woman. Data were obtained through observation, interviews, and measurement of depression and anxiety levels using the Depression Anxiety Stress Scale (DASS) and Millon Clinical Multiaxial Inventory IV (MCMI-IV) instruments.

RESULTS: The results of this study showed that the combined use of CBT, CT-R, and oral treatment reduced depression level and anxiety as indicated by a decrease in persistent depression scores 75–14, major depression scores 102–12, and generalized anxiety scores 115–30 on MCMI-IV scale. Measurements using the DASS show a decrease in depression scores 25 as major depression to 3 as normal depression, and a decrease in anxiety 16 as severe anxiety to 4 as normal anxiety.

CONCLUSION: The measurement results supported by physical, psychological, and behavioral changes. In addition, there are changes in personalities from borderline, melancholic and dependent to turbulent, histrionic, and compulsive on MCMI-IV scale.

Introduction

Depression is one of the most common forms of psychological disorders in humans worldwide [1]. According to the World Health Organization (WHO; 2012), more than 350 million people of all ages suffer from depression globally. It is estimated that depression will become the most burdensome disease in developed countries by 2030 [2]. Based on Beck's Cognitive Theory, depression is a pathological disorder that causes changes in the emotional, motivational, behavioral, cognitive, and physical aspects of a person's life. It is one of the most common psychiatric disorders with a lifetime prevalence of 15.8% and is identified with low levels of positive emotions, such as happiness and self-confidence [3]. Anxiety, with a lifetime prevalence of 28.8%, is another common psychiatric disorder. Depression is an unpleasant feeling of vague fear of unknown origin experienced by the individual and includes uncertainty, helplessness, and physiological arousal. Anxiety is a common symptom of anxiety, whereas depression is characterized by a decrease in a person's willingness to engage in daily activities, socializing, recreation, exercise, eating, and sexual desire [4], [5], [6].

One of the most common mental health problems in adult women is depression [7].

Unfortunately, there are still many adults who have not been diagnosed with depression even though they are already showing signs and symptoms of depression. Epidemiological data on prevalence rates in the United States indicate that approximately one in every five (20%) working adults has a diagnosed mental health disorder and/or substance abuse problem. Some of the most common of these disorders are depression and related mood disorders, 7.4% prevalence [8], social anxiety disorder, 7.1% prevalence [9] and generalized anxiety disorder, and 5.7% prevalence [8]. Although not a mental health disorder, acute symptoms of sleep deprivation affect nearly 30% of adults in the United States, and 10% of adults in the United States have chronic insomnia problems [10]. For each of these disorders, women have a higher prevalence rate than men [11]. This is corroborated by the results of research Nolen-Hoeksema, Susan. *Abnormal Psychology*. Boston: McGraw-Hill, 2007 [12]. which shows that men are more likely to divert their minds when they are depressed, while women are more likely to enlarge depression, reflect on feelings, and possible causes.

Anxiety and depression are the most common forms of mental disorders. Even the WHO reminds us that depression has been ranked as the third burden of disease on a global scale since 2004. It is estimated

that cases of depression will continue to increase to become the burden of disease in 2030. The WHO data show that currently there are 121 million people experiencing depression, of which 5.8% are men and 9.5% of women in the world have experienced a depressive episode in their lives. Effective treatments and medications for anxiety and depression are urgently needed. This is done so that individuals who experience the disorder can return to being productive in meeting the needs of life, not depending on others, and being able to carry out daily activities. Depression is a mood disorder characterized by feelings of deep sadness and a sense of indifference. A person is declared depressed if he has been experiencing symptoms of depression continuously for 2 weeks. Depression is a mood disorder that, if not treated properly, in the long term, can affect mood, thinking or behavior disorders that can interfere with social function and work productivity. Negative consequences associated with anxiety disorders in youth include lower levels of social support, low academic achievement, underemployment, drug use, and high comorbidity with other psychiatric disorders [13].

Depression can be triggered by biological, psychosocial, or environmental factors. People with depression view themselves, the world, their future in a negative way and view themselves as powerless, lonely, and worthless. Life is seen as unpleasant, unsatisfactory, pessimistic about the future, and the belief that current problems will not improve [14]. This condition can also trigger depression sufferers to commit suicide. Depression also has an impact on the appearance of physical symptoms, such as lack of energy, feeling tired and weak, is also associated with negative thoughts [15], and is a chronic and disabling disease [16]. Research on depressive psychiatric disorders states that 37% of depressed clients experience a relapse. The interesting thing is that recurrent depression (relapse) is assumed to be due to less successful treatment because appropriate and continuous treatment is needed [17].

Research Method

This is a single case study report. The intervention was carried out in a span of 3 months consisting of 12 weekly meeting sessions with a duration of 60 min each. Meetings are held face-to-face. The number of sessions is in accordance with Beck's recommendation which states that the number of cognitive behavior therapy (CBT) sessions is generally between 6 and 16 sessions to obtain a therapeutic effect [18], although, for recovery-oriented cognitive therapy (CT-R) with serious mental disorders, the number of sessions could reach 18 months.

Subject selection was carried out using a purposive method, with high depression in both scale,

The depression anxiety stress scale (DASS) and the millon clinical multi-axial inventory IV (MCMI-IV), undergo sleep oral treatment for at least 1 month with the consideration that the subject was willing to participate in all counseling sessions to completion and predicted between 10 and 16 sessions. If the effect of the intervention has been significantly positive then the therapy will be discontinued. At the eleventh session, the subjects had shown significant changes; therefore, the intervention was discontinued at the twelfth session.

Research subject

The subject of this research is a married woman who is 55-years-old and has 3 daughters, two of whom are married. The three research subjects were out of town. The subject's husband is a successful private employee and holds the position of head of a branch of a national company. At the beginning of the intervention, the subject experienced severe sleep disturbances, eating disorders, thought disorders, and behavior disorders, easily felt tired, unmotivated, easily suspicious, tended to give up hope, and even had suicidal ideation at any time. Subjects often procrastinate and accumulate homework and are more often silent and do not do activities.

Before experiencing the disorder, the subject had an independent part-time job as a property agent and felt quite satisfied and competent in doing his job, and generating a significant income for him. In addition to money, the subject has also been awarded as the best agent several times for achieving the highest sales rating in the company where he works. However, the COVID-19 pandemic has reduced public interest in investing in property due to the sluggish economy, so the subject decided to stay at home more and not do his work as before.

At present, the subject only lives alone with her husband, who is considered very regulating and difficult to communicate with and tends to take the subject matter lightly. The subject feels that the husband is hiding many things from himself, including financial matters, considering that their three children are independent so that the husband's financial burden becomes much lighter and the husband states that he wants greater freedom in managing finances without involving his wife. Although in general, the husband is quite good with the subject, but once the husband had an affair with another woman. Even though this happened several years ago, it still leaves scars on the subject's heart, and sometimes suspicions and fears arise that it will happen again. Especially when the husband is not open and difficult to communicate with, the subject's suspicions are getting bigger and cause anxiety and on the other hand, the subject is also depressed because he feels that his husband does not respect him and does not allow the subject to enter into his husband's life. The subject feels that he is not allowed to make

any decisions in the household and even his husband is considered to often disapprove of what the subject is doing and as a result, the subject is forced to do some negative things, even though it is not a violation of laws and norms, secretly without the husband's knowledge.

Although very supportive, the three subject children who are already quite successful in both careers and families, cannot often gather with the subject because they live in different cities. Sometimes the subject and her husband went to visit their children while on business trips. The subject is allowed to stay for a few days in the city where his son is domiciled, while the husband continues his business trip to another city. Her husband's job often makes him have to work outside the city. Sometimes, the subject forces her husband to let her participate, but not infrequently the subject is only left in the city where their child or extended family is in another province and does not continue to follow her husband's official trip. The subject wanted to participate in accompanying his husband on an out-of-town service. However, the subject tries to accept the husband as he is.

When alone at home, the subject feels very lazy to do anything and prefers to stay silent, feels easily tired, uninspired and his mind is haunted by various suspicions that he cannot prove the truth but does not know how to prove it because it seems that all doors of explanation are closed for him. Subjects feel sad continuously, hopeless, hopeless, feel there is no point in living longer because they feel that their responsibility for the main thing, namely, children, has been completed.

Collecting Data

Data on the level of depression and anxiety were obtained from two measuring instruments, namely DASS and MCMI-V. Data were taken before starting the 1st session and after the 11th session. During the counseling process, in each session, observations and interviews were carried out using a combined CBT and CT-R approach conducted in 12 counseling sessions of 60 min each. In addition, only in the 1st month, the subject took sleeping pills given by a psychiatrist, 2 months later the subject stopped using sleeping pills altogether.

DASS

The DASS, developed by Lovibond and Lovibond in 1995, consists of a 42-item self-report questionnaire designed to measure the severity

of various symptoms common to depression and anxiety. The DASS in Indonesian has been validated in 2006 [19]. In completing the DASS, subjects were asked to indicate the presence of symptoms in the previous week. Each item is scored from 0 (did not apply to me at all over the past week) to 3 (applied to very much or most of the time over the past week). An important function of the DASS is to assess the severity of the core symptoms of depression, anxiety, and stress. Therefore, the DASS allows not only to measure the severity of the subject's symptoms but also to measure the subject's response to the given intervention [20]. DASS is often used in both clinical and non-clinical situations and can be administered either individually or in groups.

MCMI-IV

Millon Personality Test has been largely used in Indonesia among psychologist and some version has been validated [21]. MCMI-IV, the latest version of Millon Personality Test is a psychometric consisting of 195 "true-false" questions to measure 15 personality patterns and 10 clinical syndromes intended for ages 18 years and over. MCMI-IV, was developed by Theodore Millon and then continued by Seth Grossman and Carrie Millon in 2015 to adapt to the DSM-V. In this study, the researchers highlighted the clinical syndromes indicated by the MCMI-IV to measure the subject's depression and anxiety. The clinical syndromes referred to are generalized anxiety, persistent depression, and major depression as well as depression and anxiety scores from the DASS.

CBT

According to Beck [22], CBT is a therapy that aims to change cognitive or perception of problems, to make changes in emotions and behavior. This includes beliefs related to thoughts, emotions, and behavior as a system that is interconnected with one another.

CBT was developed based on behavioral and cognitive approaches so that in its application CBT involves several behavioral and cognitive intervention techniques [23]. Based on the behavioral approach, what a person does will affect his feelings and thoughts. The application of this theory in the practice of CBT is in teaching someone to learn new behaviors and ways to deal with a disturbing situation, involving the learning of certain skills. The cognitive view explains that the way we think about an event will affect how we feel and behave, but sometimes a person does not realize

that he has wrong thoughts or beliefs or what is called cognitive distortion. A cognitive distortion is a problem because it is in the form of inappropriate thinking and also causes negative emotions or behavior to avoid problematic situations [20].

Many studies are showing that CBT is an effective therapy for treating depressive symptoms. Some literature also suggests that in treating depressive symptoms, CBT is comparable to the therapeutic effect of medical drugs [24]. Research related to the results of using CBT to overcome various types of problems or disorders conducted by Butler *et al.* [25] showed a fairly satisfactory level of effectiveness.

Beck defines CBT as a counseling approach designed to solve the counselee's current problems through cognitive restructuring and deviant behavior. The counseling process is based on the counselee's conceptualization or understanding of the specific beliefs and behavior patterns of the counselee. The hope of CBT is the emergence of distorted cognitive restructuring and belief systems to bring changes in emotions and behavior for the better. While CT-R hopes to return the subject to a healthy condition before experiencing a disturbance.

The Cognitive behavioral counseling model describes the relationship between the specific situation being faced, cognition, and feelings. The word "cognition" is another word for the mind. Beck *et al.* [26] describe cognition as a thought or visual image that may not be noticed unless the individual focuses attention on it. Feelings that often cause unexpected effects or create problems for individuals are usually negative feelings. Negative feelings are limited thoughts, in which the individual locks himself in. At this point, CBT shows how to develop the ability to see things from multiple angles, question assumptions, and discover the fact; the mind itself has little effect on the individual. Individuals can think whatever they want, but the emotions generated by the individual's mind may make him disturbed. CBT is a structured, short-term, here-and-now-oriented intervention aimed at solving problems, and changing dysfunctional thoughts and behaviors. CBT uses a cognitive approach which states that an individual's emotions, behavior, and physiological responses are influenced by his thoughts on the situation. Thus, modifications to an individual's mind can change his feelings and behavior.

Specific situations referred to in CBT are not only real situations, but can also be external events, daydreams, images, dreams, memories, emotions, behavior, and physiological responses, while the disturbance situations that arise can be depression [27], bipolar disorder, psychotic disorder, schizophrenia [28], generalized anxiety disorder, post-traumatic stress, panic disorder, phobias, social phobia, obsessive compulsive disorder, somatoform disorder, sexual disorders, eating disorders, sleep disorders, drug addiction, etc.

CT-R

In subsequent developments, the boundaries of CBT have been consistently expanded and developed, but the basic principles have not changed. CBT is widely recognized as an effective problem-solving model and as a means of improving quality of life. Until now, CBT has been used to treat various disorders such as eating disorders, phobias, sexual problems, even psychosis, borderline personality disorder, and schizophrenia. The flexible nature of CBT can also be used in various situations, including schools [29], different types of groups, and different age groups under various conditions. At present, CBT is also widely combined with various other approaches that are in line with CBT principles, such as mindfulness and produce the Mindfulness-Based Cognitive Therapy counseling model, compassion-based therapy, logotherapy, dialectical behavior therapy, acceptance, and commitment therapy. CBT is rich in techniques, strategies, and applications that can be trained by the counselee.

Aaron Beck, the originator of CBT, at a very old age, is still actively involved in the development of CBT, assisted by several colleagues including his son, Judith S. Beck who currently serves as president of The Beck Institute for Cognitive Behavior Therapy. Even in 2021, The Beck Institute has just released a new development of CBT, namely CT-R which is allegedly able to help overcome serious mental health conditions, known as CT-R. In contrast to traditional CBT, the principle of CT-R is more directed to positive psychology, where the counselee is not only brought to analyze his negative thoughts, but also positive thoughts with the assumption that before experiencing the disorder, the individual had become an adaptive person. The task of CT-R is to reactivate the counselee's adaptive function. The new CBT product, the CT-R, is pushing for a massive development of traditional CBT, which is planned to be introduced in 2021.

One of the factors that make CT-R valuable is the technical adaptation of various psychotherapies, where the emphasis is on restoring strength-based orientation as part of CBT. CT-R believes that at some point in the past, no matter how serious the individual's disorder, he or she was either normal or unaffected. The purpose of CT-R is to restore the individual to a good condition before the individual experienced the disorder.

CT-R Procedure

According to Beck *et al.*, the founder of The Beck Institute and developer of CBT and together with

Grant, they develop CT-R, the main features of CT-R are divided into 4 stages [18], namely: first, access and energize; second develop; third actualize; and fourth, strengthening, where various forms of activity are carried out at each stage to achieve the expected target conditions. In the first stage, the researcher tries to find activities that are fun for the counselee, such as playing a song, asking clients for advice or suggestions regarding certain things, playing cards, talking about things that are of interest to the client, such as food, hobbies, or asking closed questions (forced-choice) which is easy for the client to answer. At the development stage, the researcher begins to identify the client's aspirations, can use imagery techniques to enrich and find the meaning behind these aspirations. In the third stage, the researcher divides the aspirations into small steps that are possible for the client to do and achieve. After the first three stages are carried out, then in the termination stage, the researcher focuses the client's attention on positive achievements or experiences, then develops resilience around the challenges that the client may experience [18].

Results and Discussion

The results of measuring the level of depression with MCMI-IV showed a decrease, both in clinical syndromes of persistent depression and major depression before the intervention and at the last session of the intervention. The results of this measurement are also corroborated by a decrease in depression scores using the DASS, as shown in Table 1.

The measurement data in this study showed that there was a significant decrease in depression and anxiety levels. The combined use of the CBT model, CT-R, and drugs can reduce the level of depression and anxiety as indicated by a decrease in persistent depression scores from 75 in the mild category to 14 in the unindicated category, a decrease in major depression scores from 102 in the mild category weight to 12 which is in the unindicated category, and the generalized anxiety score from 115 which is in the severe category to 30 which is in the unindicated category, on the MCMI-IV scale. Measurements using the DASS scale show a decrease in depression scores from 25 which are classified as major depression to 3 which are classified as normal depression, and a decrease in anxiety scores from 16 which are included in the

category of severe anxiety to four which are classified as normal anxiety categories. The measurement results of these two tests are also supported by physical changes in the form of the disappearance of insomnia symptoms, psychological and behavioral changes. Since the meeting of the ninth session, the subjects felt calmer and more enthusiastic about doing their daily work. The subject is also diligent in doing the homework given by the counselor, which is given in the 4th, 6th, 8th, and 10th sessions, in the form of recognizing automatic thoughts, filling out worksheets to identify specific situations, automatic thoughts, and consequences experienced, make graded tasks, practice decision making, do activities that give positive energy.

Discussion

Depression is a feeling of deep sadness and the individual will dissolve in that sadness. This condition is often caused by an event that causes anxiety usually accompanied by sleep and eating disorders. Sufferers also have feelings of guilt and worthlessness and tend to be anxious and self-blame. Depression can become a psychotic symptom when the sufferer loses touch with reality. People with severe depression will lose their will to live, fail to pay attention to daily needs, lock themselves in their rooms for hours in silence, and seem to ignore other people's efforts to comfort them. Depression can be caused by psychological pressure, which comes from various factors, such as the biological, developmental, and interacting environment. Physical illness, severe and acute stress, and chronic stress are also factors that trigger depression [15].

One way that can be done to overcome depression and anxiety disorders is the use of CBT counseling techniques. Alamdarloo *et al* [4] and Toneatto and Calderwood [30] finds that CBT is effective in reducing depression and anxiety revealed that CBT is effective in reducing depression and anxiety. One of the reasons for the effectiveness of BT is that it emphasizes the identification and correction of cognitive deviations, the application of correct thinking, and the development of the skills necessary to assess and make accurate assessments of negative thoughts that can help reduce levels of anxiety, depression, and other psychological disorders [4], [31].

According to Corner (1992) in Videbeck [32], anxiety is a feeling of fear that is not clear and is not

Table 1: Research results

Instrument	Clinical Syndrome	Measurement before the Intervention Session			Measurements at the 11th Intervention Session		
		Score	Category	Personality	Score	Category	Personality
MCMI-IV	Persistent depression	75	Low	1. Border-line	14	No indication	1. Turbulent
	Major depression	102	High	2. Melancholic	12	No indication	2. Histrionic
	Generalized anxiety	115	High	3. Dependent	30	No indication	3. Compulsive
DASS	Depression	25	High		3	Normal	
	Anxiety	16	High		4	Normal	

MCMI-IV: Millon Clinical Multiaxial Inventory IV, DASS: Depression Anxiety Stress Scale

supported by the situation. When feeling anxious, the individual feels uncomfortable or afraid or may have a premonition that disaster will befall him even though he does not understand why the threatening emotion is occurring. No object can be identified as an anxiety stimulus. Anxiety has two aspects, namely a healthy aspect and a dangerous aspect, which depends on the level of anxiety, the duration of anxiety experienced, and how well the individual copes with anxiety. Anxiety can be seen in the range of mild, moderate, severe to panic. Each level causes physiological and emotional changes in the individual. Mild anxiety is the feeling that something is different and requires special attention. Sensory stimulation increases and helps individuals focus attention on learning, solving problems, thinking, acting, feeling, and protecting themselves. Moderate anxiety is a disturbing feeling that something is different; the individual becomes nervous or agitated. Severe anxiety is experienced when the individual believes that something is serious and there is a threat, he shows a response of fear and distress. When the individual reaches the highest level of anxiety, severe panic, all rational thinking stops, and the individual experiences a fight, flight or freeze response, namely the need to leave immediately, stay in place, and struggle or be unable to do something [32], [33].

Based on the DSM-IV, anxiety disorders can be divided into panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder, social phobia, specific phobia, and unspecified anxiety disorder. Signs and symptoms of anxiety are (1) physical; cephalgia, palpitations, and insomnia for at least 1 month, dizziness, sweating, fast or violent heart rate, dry mouth, abdominal pain, agitation, restlessness, tremor and (2) mentally; mental tension (anxiety/confusion, feeling tense or nervous, poor concentration [34].

Individuals who are depressed see themselves as having a below normal mood, which is characterized by sadness, loneliness, hopelessness, and unhappiness. In addition, in terms of thinking, individuals tend to be negative so that the behavior they display is following the mindset they make and believe. In general, negative thinking patterns are characterized by low self-confidence, feeling themselves incapable, worthless both in viewing themselves, the world, and their future [35]. These symptoms are shown by the subject of this study. This is strongly supported by the results of interviews especially at the beginning of the session and the results of the MCMI-IV and DASS tests.

A 2015 worldwide survey showed that CBT is the most widely used form of therapy in the world [36]. In addition, in the UK, CBT has been used as the main modality of therapy in the National Health Service Improving Access to Psychological Therapy program, treating more than 500,000 people/year with various mental health problems, including depression and anxiety-related disorders [37]. The substantial focus on

disseminating and training quality CBT clients from every continent has been the basis for the overall acceptance of CBT as the “golden standard” therapy [38].

CBT is the gold standard of psychological treatment — as the best psychotherapy standard currently available for several reasons — first, CBT is the most researched form of psychotherapy; second, CBT proved to be superior to other psychotherapies; third, CBT’s theoretical model/mechanism of change is the most researched and is in line with the mainstream paradigms of human thought and behavior (e.g., information processing). At the same time, there is room for further improvement, both in terms of the efficacy/effectiveness of CBT and the underlying theory/mechanism of change and finally, CBT has flexibility and is open to integration with other therapeutic models [38], [39].

Referring to Beck’s cognitive theory, depression and anxiety experienced by individuals are caused by the subject’s automatic thoughts. This explanation of automatic thought then laid the foundation for the theory of human psychopathology. According to Beck, these thoughts arise automatically (hence the label “automatic thoughts”). When an individual experiences anxiety or anger, he or she will have automatic intervening thoughts, which explain certain emotions. Thus, the theme of threat or anxiety causes anger, loss causes sadness, and gains joy [40]. Beck also observes that automatic thinking actually exaggerates or even misconstrues or misinterprets a situation. The angry reaction caused by automatic thinking is not supported by evidence. In the case of Beck’s patients, these automatic thoughts are generally distortions that fit their diagnosis. Beck’s first recognized attempt was to examine these thoughts in patients with depression, who constituted the majority of his caseload [41]. The automatic thoughts of depressed patients have common themes of self-criticism or regret. When depression gets worse, automatic thoughts occupy most of the stream of consciousness. Similarly, the minds of patients with anxiety are filled with fear in both physical and psychological realms [40].

Beck’s initial CBT application of automatic thought constructs was to train clients to focus and recognize them. In interviews, Beck trains individuals to examine the validity of thoughts, which are generally misinterpretations or interpretations of situations. Beck notes that these thoughts often reflect cognitive distortions — misinterpreting or exaggerating situations. The counselor’s role is to teach the counselee to evaluate these distortions. When the counselee can correct misinterpretations through procedures such as seeking evidence, considering alternative explanations, or evaluating the logic of conclusions, then the counselee is better off. This is experienced by the subject. After understanding the relationship between specific situations, automatic thoughts, and their consequences, the subject begins to see the relationship from the chart

and begins to practice making thoughts that are more adaptive and supported by strong evidence so that the response changes.

One of the reasons why CBT is a psychotherapy that is still used today is the research and development factor. In the most recent development of CBT, namely CT-R, the task of the researcher or counselor is to activate this normal personality through relationships, pinpointing individual strengths, talents, and aspirations and then using them to jointly form a therapeutic plan. While there are important differences between traditional CBT and Recovery-Oriented Cognitive Behavior therapeutic approaches (CT-R), these therapies use many of the basic principles of CBT, including personalizing cognitive formulations for each individual who is unique, work through negative and dysfunctional beliefs, and discuss strategies for achieving meaningful goals.

During therapy sessions, subjects were also trained to analyze their negative thoughts and how these automatic thoughts impact their feelings, behavior, and biological responses. The automatic thoughts of the main subject are first, the thoughts of her husband hiding secrets from her, especially about finances. The subject feels helpless because all control is held by his husband and he does not have the opportunity to protest or just express his wishes or feelings even the illness he feels is underestimated by his husband, and once he comes home the subject is considered insane by his husband when the subject says that He needed therapy to deal with his sleep disorder which was already very disturbing and made his body feel weaker day by day.

The second main automatic thought is that the subject will be left without friends which are triggered by the death of a friend who has not seen each other for a long time, but in the last 2 years, they meet again and establish intense contact, due to cancer. The subject felt frightened every time he saw the cell phone and tried to convince himself that his friend had indeed died and would not call him again. The subject tried to erase all traces of his friend by deleting the contact on his cell phone and throwing away the plant that his friend gave him because he was too sick due to his departure and was not satisfied with the relationship that had been interrupted for a long time. After the intervention, the subject can recognize their automatic thoughts and replace them with more adaptive thoughts so that the subject can understand the relationship between specific situations, automatic thoughts, and the consequences they face. Next, the researcher accesses the individual's adaptive mode.

After the negative automatic thoughts were successfully contradicted by using the Socratic question technique and looking for supportive and unsupportive things to build the counselee's understanding of the causes of depression and anxiety, the researcher then accessed the client's adaptive mode and encouraged him to do various activities that were fun for him,

namely talking to someone who are considered to be able to respect themselves, such as old friends, friends in the religious community, their children, accompanied by some small talk while interspersed with jokes.

The researcher allowed the subject the opportunity to tell various stories with an attitude of respect for the client. The researcher also asked the subjects to share their skills in caring for plants with the researchers. The best moment of the subject is in the morning when the subject's husband is at work and the subject is alone at home because at that time the subject feels free to relax and does not need to do anything. Because they only live alone with their husbands, the subject's husband often forbids the subject from cooking and more often buys ready-made food that his husband likes.

In the adaptive mode energizing session, researchers explore the subject's strengths and abilities, energizing adaptive beliefs about themselves, others, and their future. Researchers also reactivate the experience of having and meaningful roles and activate hopes for the future, what they aspire to. With the guided discovery technique, the subject shared experiences while still actively working as a property agent and was awarded the best agent several times and received high trust from the company leadership. The subject also told how she managed to persuade her husband to buy a fairly spacious house that they currently live in at a fairly cheap price. The researcher encouraged the subjects to conclude the successful experiences they had experienced and positive beliefs that were activated during the adaptive mode. The researcher gave homework, namely filling out a weekly activity schedule for the next week and assessing his feelings, giving reactions/responses to these activities and whether these activities will be repeated in the future. This activity schedule is then discussed with the subject at the next meeting.

Based on the CT-R cognitive conceptualization diagram of the subject, data were obtained that the strengths and assets of the subject were the full support of their three children who were always ready to talk and discuss various things including the anxiety and depression they experienced. Another important asset is the husband's attention, such as buying a robot to clean the floor of the house so that the subject does not have to bend over which can increase the pain due to the pinched condition he is experiencing. At that time the subject was undergoing physiotherapy to restore his condition. Another important asset is the experience of being successful in his career and work as a property agent.

The client's most important dysfunctional belief is feeling unloved by her husband. The subject has the belief that her husband is hiding a secret and even the possibility of another woman in her husband's life. The subject also talked about her difficulties in communicating with her husband and how to get his

husband's attention. For this, the researcher provides communication skills training and encourages the subject to practice and analyze the results and then discuss them. Based on this, the researcher developed more positive coping strategies for the subjects for five other specific situations they experienced.

In the middle session, the subject began to feel enthusiastic about doing daily household chores. Clothes for ironing that are usually left piled up so that the house looks messy are no longer there. In addition, the subject also began to rearrange the front yard of his house by calling gardeners and builders to repair some damaged parts of the house or just beautify it. The subject continued to maintain a relationship with all of his children, especially the second child who was pregnant.

At the end of the session, the subject's positive confidence increased considerably due to the presence of the first grandchild, where the subject, who had started to forget how to take care of a baby, was motivated to learn how to take care of a newborn through the YouTube channel and believed that he was able to take good care of his grandson. The subject often goes back and forth out of town to visit his first grandson and accompany his son in caring for the baby.

Based on the results of the interview, the subject also stated that he did not experience sleep disturbances anymore which at the beginning of the session was very disturbing and made his body feel weak and powerless, and often felt pain in the head. This sleep disorder then prompted the subject to seek help and be willing to follow this therapy. In addition, the subject also feels that he has a clear spirit and purpose in life and knows what he wants and what he should do. The subject also stated that he felt calmer and less suspicious of his husband. Communication with their husband also improved. An interesting topic that is often discussed is the development of his grandson. The subject's thoughts are also directed to future aspirations and not to the past which is considered disappointing (including her husband's infidelity) and makes her depressed and filled with high anxiety. This is the second stage of the CT-R model.

The results of the study after the intervention for 12 sessions was given is a reduction in these early symptoms and even almost disappeared, where at the end of the session the individual declared himself excited, had high hopes for the future, cheerful and calm mood, neither anxious nor nervous, not afraid when looking at the cell phone, daring to chat with the family of his deceased friend, being able to see positive things from daily experiences, especially in his relationship with her husband, being more relaxed in dealing with her husband who is considered authoritarian. The subject also has a fairly solid activity plan, especially related to the presence of his first grandchild. Sleep disorders and eating disorders that previously appeared are also no longer experienced. Sleep rhythm improves without the help of sleeping pills, sleep quality also improves,

and wakes up less frequently at night. The subject's appetite also returned to normal and was able to enjoy food which was generally her husband's choice. At the final CT-R stage, namely strengthening, the subject was able to divide the long-term goals into several short-term goals that they were able to achieve gradually and were quite satisfied with the results they received. Expectations are more realistic and can choose the most important things and can make a priority scale.

This study also proves that the combined use of the three therapies used in this study can reduce the symptoms of insomnia which is a symptom of depression and anxiety experienced by the subject. This is in line with research conducted by Hapsari and Kurniawan [42]. Insomnia is a disorder of difficulty falling asleep, difficulty maintaining sleep patterns, or having poor sleep quality despite having enough opportunities to sleep [43]. Acute insomnia usually lasts < 4 weeks and can be associated with a specific cause, whereas chronic insomnia lasts for more than 6 months and is not easy to find [27]. Insomnia can lead to the emergence of various new diseases such as increasing the risk of accidents due to drowsiness while driving, increasing the risk of developing chronic diseases and obesity, and also causing depression [43]. Insomnia can be defined as primary and secondary, if the symptoms of insomnia are related to other physical or psychological conditions then that condition is a primary diagnosis and insomnia is a secondary diagnosis [44]. In this study, insomnia symptoms experienced by research subjects can be diagnosed as primary and secondary. Based on the results of the interview, the subject explained that depression and anxiety made it difficult to sleep, and sometimes counselees had to be helped to sleep with oral therapy. Several ways that can be done to overcome sleep disorders are drug and non-drug therapy (45) and one of the effective non-pharmacological methods to reduce symptoms of sleep disorders is CBT whose stages are specifically arranged to cases of insomnia [46]. CBT is considered effective in treating insomnia because in its intervention CBT is a combination of cognitive and behavioral therapy in which the treatment of chronic insomnia requires direct intervention to improve behavior, wrong thinking patterns, and the relationship between the two which aggravates the patient's condition [45]. Several studies of CBT have been shown to be effective in treating symptoms in insomnia patients even though it is not accompanied by medication or therapy [27], [43], [47]. A meta-analysis conducted by Trauer *et al.* [48] stated that further research is needed on the administration of CBT as the main therapeutic method without the use of antipsychotic drugs or sedative drugs.

These considerations need to be made for long-term healing effects and patient satisfaction. This finding contrasts with the research of Mao *et al.* [49] which compared improved sleep quality in insomniacs who were only given medication and the

other group was given medication concurrently with CBT therapy which resulted in the group being given medication concurrently with CBT therapy experiencing a more significant improvement in sleep quality than the other group taking medication only. Therefore, based on the description above, this study aims to test the effectiveness of the CBT technique without medication to treat insomnia in individuals, especially in early adulthood with risky lifestyles. Based on the theory of insomnia etiology, CBT for insomnia is a non-pharmacological intervention method that is appropriate for insomnia cases, especially to improve sleep quality [42]. Of note, the researcher did not work directly with the psychiatrist treating the subject and only received self-reports from the subject. Therefore, the explanation regarding the drugs consumed is not explained in detail in this paper.

The CT-R intervention was also shown to improve the subject's appetite. This change occurs because the subject has found activities that can give him positive energy so that the subject is encouraged to do various activities such as fixing the house and garden, taking care of grandchildren, which is quite draining so that the enjoyment of eating food also increases.

The best thing that the subject showed was that during the counseling process the subject showed very good and enthusiastic cooperation and came to the meeting according to the agreed schedule. This shows the seriousness of the counselee's efforts to overcome depression and anxiety. In addition, the subject's trust and confidence in the researcher were also high enough so that there was a belief that everything done during the session would help the subject reduce his level of depression and anxiety and eliminate other accompanying symptoms, such as insomnia, loss of appetite, feeling weak and lackluster.

In the last session, which is the twelfth, the subject's appearance is very different from the first session. Subjects used clothes and hairdos that were neater than the previous session. His manner of speaking was straightforward and showed good self-confidence. Her emotions are stable even when asked about her husband, who previously tended to be colored by sadness, annoyance, fear, self-doubt, hopelessness, and hopelessness. The subject also shows high self-reliance and is accompanied by gratitude for what he currently has. The subject expressed his thoughts with enthusiasm, full of aspirations for the future, especially regarding plans for himself, relations with his husband, children and grandchildren. Although raising grandchildren is quite tiring, the subject really enjoys it and makes him want to do more things for his grandchildren. The subject began to return to his job as a freelance property agent because he felt he had enough energy to channel and to overcome boredom when he was not in the city where his children and grandchildren live.

The results of the MCMI-IV test conducted at the termination stage, at the end of the eleventh session, showed a change in personality type, where in the initial test the main personality types were borderline, melancholic and dependent, turning into turbulent, histrionic, and compulsive. This shows that when the subject's negative automatic thoughts are successfully replaced with adaptive thoughts, then the subject gets energy from various positive activities, so that he is able to develop his aspirations and find steps to achieve his aspirations and after practicing it turns out to be successful, then this successful experience strengthens the subject to do more positive activities where the subject begins to enjoy his new self, even feels addicted to doing various things which he then feels the benefits. Thus the changes experienced are not only due to the disappearance of negative automatic thoughts but the emergence of positive thoughts that provide tangible evidence that makes the subject dare to make greater expectations. Slightly different from traditional CBT, CT-R is a procedure that requires precise interaction between counselor and client with life experiences to support recovery, resilience and empowerment. In the case of a serious mental disorder, to obtain maximum results, the intervention must be intensive and consistent with follow-up for a certain period of time.

Conclusion

This study proves the effectiveness of the combined use of traditional CBT, CTR CT-R and oral therapy to reduce depression and anxiety levels is quite high, but this cannot be generalized because there is only one respondent. The CT-R model is still very new and rarely used, especially in Indonesia, and need further research's.

References

1. Schröder J, Berger T, Meyer B, Lutz W, Hautzinger M, Späth C, *et al.* Attitudes towards internet interventions among psychotherapists and individuals with mild to moderate depression symptoms. *Cognit Ther Res.* 2017;745–756. <https://doi.org/10.1007/s10608-017-9850-0>
2. Lau RW, Mak WH. Effectiveness of workplace interventions for depression in Asia: A meta-analysis. 2017. <https://doi.org/10.1177/2158244017710293>.
3. Tran TD, Tran T, Fisher J. Validation of the depression anxiety stress scales (DASS) 21 as a screening instrument for depression and anxiety in a rural community-based cohort of northern Vietnamese women. *BMC Psychiatry.* 2013;13:24. <https://doi.org/10.1186/1471-244X-13-24>
PMid:23311374

4. Alamdarloo GH, Khorasani SM, Najafi M, Jabbari FS, Shojaee S. The effect of cognitive-behavioral therapy on depression, anxiety, and stress levels in Iranian males with addiction. 2019. Available from: <https://us.sagepub.com/en-us/nam/open-access-at-sage>.
5. Hofmann SG, Wu JQ, Boettcher H. Effect of cognitive-behavioral therapy for anxiety disorders on quality of life: A meta-analysis. *J Consult Clin Psychol*. 2014;82(3):375-91. <https://doi.org/10.1037/a0035491>
PMid:24447006
6. Khaledian M, Zarin HK, Jalalian A. The effectiveness of group cognitive behavior therapy on reduction of addicts' depression. *Res Addict*. 2014;8(29):78-88.
7. Titov N, Dear BF, Ali S, Zou JB, Lorian CN, Terides MD, *et al*. Science direct clinical and cost-effectiveness of therapist-guided internet-delivered cognitive behavior therapy for older adults with symptoms of depression: A randomized controlled trial. *Behav Ther*. 2015;46(2):193-205. <http://dx.doi.org/10.1016/j.beth.2014.09.008>
PMid:25645168
8. Karg RS, Bose J, Batts KR, Forman-Hoffman VL, Liao D, Hirsch E, *et al*. Past year mental disorders among adults in the United States: Results from the 2008-2012 mental health surveillance study. *CBHSQ Data Rev*. 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27748100>. [Last accessed on 2021 Nov 10].
9. Kessler RC, Aguilar-Gaxiola S, Alonso J, Chatterji S, Lee S, Ormel J, *et al*. The global burden of mental disorders: An update from the WHO World Mental Health (WMH) surveys. *Epidemiol Psychiatr Soc*. 2009;18(1):23-33. <https://doi.org/10.1017/s1121189x00001421>
PMid:19378696
10. Bhaskar AS, Hogan DM, Archfield SA. Urban base flow with low impact development. *Hydro Processes*. 2016;30:3156-71.
11. Attridge M. Internet-based cognitive-behavioral therapy for employees with anxiety, depression, social phobia, or insomnia: Clinical and work outcomes. 2020. <https://doi.org/10.1177/2158244020914398>
12. Nolen-Hoeksema, S. An interactive model for the emergence of gender differences in depression in adolescence. *J Res Adolesc*. 1994;4(4):519-534.
13. Velting ON, Setzer NJ, Albano AM. Update on and advances in assessment and cognitive-behavioral treatment of anxiety disorders in children and adolescents. *Prof Psychol Res Pract*. 2004;35(1):42-54.
14. Steer RA, Brown GK, Beck AT, Sanderson WC. Mean beck depression inventory-i1 scores by severity of major depressive episode. *Psychol Rep*. 2001;88(3 Pt 2):1075-6. <https://doi.org/10.2466/pr0.2001.88.3c.1075>
PMid:11597055
15. Corsini RJ, Wedding D. *Current Psychotherapies*. United States of America; 2011.
16. Merikangas KR, Kalaydjian A. Magnitude and impact of comorbidity of mental disorders from epidemiologic surveys. *Curr Opin Psychiatry*. 2007;20(4):353-8. <https://doi.org/10.1097/YCO.0b013e3281c61dc5>
PMid:17551350
17. Baldwin DS and Birtwistle J. *An Atlas of Depression*. The Parthenon Publishing Group; 2002. <https://doi.org/10.1201/NOE1850709428>
18. Beck AT, Grant P, Inverso E, Brinen AP, Perivoliotis D. *Recovery-Oriented Cognitive Therapy for Serious Mental Health Conditions*. New York: The Guilford Press; 2021.
19. Damanik ED. *Pengujian Reliabilitas, Validitas, Analisis item Dan Pembuatan Norma Depression Anxiety Stress Scale (DASS)*. Depok: Universitas Indonesia; 2006.
20. Gomez F. *A Guide to the Depression, Anxiety and Stress Scale*; 2014;(Dass 21). Available from: http://www.iwsmi.org.au/images/mental_health/Frequently_Used/Outcome_Tools/Dass21.pdf
21. Triwahyuni A, Purwono U, Sadarjoen SS, Sapri ER. Pengembangan Millon Personality Type Inventory (Mpti) sebagai instrumen pengukuran kepribadian di Indonesia. *J Psychol Sci Prof*. 2019;3(2):65.
22. Beck JS. *Cognitive Behavior Therapy Basics and Beyond*. 3rd ed. New York: The Guilford Press; 2021.
23. Gosch EA, Flannery-Schroeder E, Mauro CF, Compton SN. Principles of cognitive-behavioral therapy for anxiety disorders in children. *J Cogn Psychother*. 2006;20(3):247-62.
24. Hea EO, Houseman J, Bedek K, Sposato R. The use of cognitive behavioral therapy in the treatment of depression for individuals with CHF. *Heart Fail Rev*. 2009;14(1):13-20. <https://doi.org/10.1007/s10741-008-9081-2>
PMid:18228140
25. Butler AC, Chapman JE, Forman EM, Beck AT. The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clin Psychol Rev*. 2006;26(1):17-31. <https://doi.org/10.1016/j.cpr.2005.07.003>
PMid:16199119
26. Allen NB. *Cognitive therapy of depression*. Aaron T Beck, A John Rush, Brian F Shaw, Gary Emery. New York: Guilford Press, 1979. *Aust N Z J Psychiatry*. 2002;36:275-8 <https://doi.org/10.1046/j.1440-1614.2002.t01-5-01015.x>
27. Williams J, Roth A, Vathauer K, McCrae CS. Cognitive behavioral treatment of insomnia. *Chest*. 2013;143(2):554-65. <http://dx.doi.org/10.1378/chest.12-0731>
PMid:23381322
28. Williams E, Ferrito M, Tapp J, Williams E, Ferrito M, Tapp J. Cognitive-behavioural therapy for schizophrenia in a forensic mental health setting. *J Forensic Pract*. 2014;16(1):68-77. <https://doi.org/10.1108/JFP-12-2012-0028>
29. Koschmann E, Abelson JL, Kilbourne AM, Smith SN, Fitzgerald K, Pasternak A. Implementing evidence-based mental health practices in schools: Feasibility of a coaching strategy. *J Ment Health Train Educ Pract*. 2019;14(4):212-31. <https://doi.org/10.1108/JMHTEP-05-2018-0028>
30. Toneatto T, Calderwood K. Cognitive-Behavior Therapy for Concurrent Anxiety and Alcohol Use Disorder: A Randomized Control Trial. *Int J Ment Health Addict*. 2015;13(2):297-306.
31. Pour TH. The effect of cognitive behavioural therapy on anxiety in infertile women. *Euro J Exp Biol*. 2014;4(1):415-9.
32. Videbeck SL. *Psychiatric-Mental Health Nursing*. Philadelphia: Lippincott Williams & Wilkins; 2008.
33. Zakayah Z. The effect and effectiveness of computer-based cognitive behavioral therapy (cbt) on clients of anxiety and depression. *E-Journal Widya Kesehatan Dan Lingkungan*. 2014;1(1):75-80.
34. Keliat AB, Akemat. *Model Praktik Keperawatan Profesional Jiwa*. Jakarta: EGC; 2012.
35. Beck AT, Hollon SD, Young JE, Bedrosian RC, Budenz D. Treatment of Depression With Cognitive Therapy and Amitriptyline. *Arch Gen Psychiatry*. 1985;42(2):142-148. <https://doi.org/10.1001/archpsyc.1985.01790250036005>
36. Knapp P, Kieling C, Beck AT. What do psychotherapists do? A systematic review and meta-regression of surveys. *Psychother Psychosom*. 2015;84(6):377-8. <https://doi.org/10.1159/000433555>
PMid:26402554
37. Clark DM, Canvin L, Green J, Layard R, Pilling S, Janecka M. Transparency about the outcomes of mental health services (IAPT approach): An analysis of public data.

- Lancet. 2018;391(10121):679-86. [http://dx.doi.org/10.1016/S0140-6736\(17\)32133-5](http://dx.doi.org/10.1016/S0140-6736(17)32133-5)
PMid:29224931
38. David D, Cristea I, Hofmann SG. Why cognitive behavioral therapy is the current gold standard of psychotherapy. *Front Psychiatry*. 2018;9:6-8. <https://doi.org/10.3389/fpsy.2018.00004>
PMid:29434552
39. Hofmann SG, Asmundson GJ, Beck AT. The science of cognitive therapy. *Behav Ther*. 2013;44(2):199-212. <http://dx.doi.org/10.1016/j.beth.2009.01.007>
PMid:23611069
40. Beck AT. A 60-year evolution of cognitive theory and therapy. *Perspect Psychol Sci*. 2019;14(1):16-20. <https://doi.org/10.1177/1745691618804187>
PMid:30799751
41. Beck, A.T. Thinking and Depression: I. Idiosyncratic Content and Cognitive Distortion. *Arch Gen Psychiatry*. 1963;9:324-33. <https://doi.org/10.1001/archpsyc.1963.01720160014002>
PMid: 14045261
42. Hapsari A, Kurniawan A. Efektivitas Cognitive Behavior Therapy (CBT) untuk meningkatkan kualitas tidur penderita gejala insomnia effectiveness of cognitive behavioral therapy to increase sleep quality in young adults insomnia patients abstract. *JURNAL ILMU KELUARGA DAN KONSUMEN*. 2019;12(3):223-35.
43. Walia HK, Mehra R. Overview of common sleep disorders and intersection with dermatologic conditions. *Int J Mol Sci*. 2016;17(5):654. <https://doi.org/10.3390/ijms17050654>
PMid:27144559
44. National Institutes of Health. National Institutes of Health state of the science conference statement: Manifestations and management of chronic insomnia in adults June 13-15, 2005. *Sleep*. 2005;28(9):1049-57. <https://doi.org/10.1093/sleep/28.9.1049>
PMid:16268373
45. Cunnington D, Junge MF, Fernando AT. Insomnia: Prevalence, consequences and effective treatment. *Med J Aust*. 2013;199(8):S36-40. <https://doi.org/10.5694/mja13.10718>
PMid:24138364
46. Taylor DJ, Pruiksma KE. Cognitive and behavioural therapy for insomnia (CBT-I) in psychiatric populations: A systematic review. *Int Rev Psychiatry*. 2014;26(2):205-13. <https://doi.org/10.3109/09540261.2014.902808>
PMid:24892895
47. Kryger M, Roth T, Dement WC. *Principles and Practice of Sleep Medicine*. 2017.
48. Trauer JM, Qian MY, Doyle JS, Rajaratnam SMW, Cunnington D. Cognitive behavioral therapy for chronic insomnia: A systematic review and meta-analysis. *Ann Intern Med*. 2015;163(3):191-204.
49. Mao H, Ji Y, Xu Y, Tang G, Yu Z, Xu L, Wang W.. Group-Cognitive-Behavioral Therapy in insomnia: a cross-sectional case-controlleed study. *Neuropsychiatric Disease and Treatment*, 2017;13:2841-2848. <https://doi.org/10.2147/NDT.S149610>