Rational Emotive Therapy and Anxiety in Patients with Chronic Diseases: A Quasi-Experiment Pre-Post Control Study

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ABSTRACT
During the process of hospitalization of the illness, patients can experience various incidents or treatments which according to various studies are very traumatic and stressful. This study aimed to explain the effect of Rational Emotive Therapy (RET) on the level of anxiety in chronic disease patients. The research design used a quasi-experiment pre-post control group design. The sample of this study was 10 patients with chronic diseases in the age range of 30–50 years using purposive sampling techniques in taking the subject of the study. The results of the experiment showed that there was no real difference in anxiety before and after RET. The experimental group showed Asymp (asymptotic significance). A significance of 0.046 (p < 0.05) means there was a real difference in anxieties before and after RET. The Mann-Whitney test results obtained an asymp (asymptotic significance) of 0.042 (p< 0.05). This indicates that there were real differences in both groups (control and experiment) after treatment. While the Mann-Whitney trial results received an asymptotic significance of 0.549 (p > 0.05), that means there were no significant differences between the two groups (control and experimental) before treatment. It can be concluded that rational-emotional therapy can lower the level of anxiety of chronic disease patients.

Keywords: rational emotive therapy; anxiety; chronic disease; cancer

INTRODUCTION
At the stage of the patient being diagnosed as suffering from certain chronic diseases, there will be tension in the patient himself. Patients need cognitive skills to be able to process incoming information related to the pain they suffer and the consequences. If tension cannot be effectively controlled, then anxiety occurs in the individual. Patients can perceive their condition as a threat when it is known that a chronic disease is a disease that has been infected for a long time and is difficult to cure, even if it may not be cured. The patient hopes to remain healthy so that he can do the same activities as a normal, healthy person. The perception of the threat of this disease can generate feelings of unhappiness and depression, resulting in increased anxiety for the patient. A patient with a chronic disease will experience tension, fear, or anxiety specific to the pain he experiences. The fear and anxiety commonly experienced by the patient are associated with the threat of disease to daily activities and life.

According to a study conducted by Froggatt (2005), male patients have a higher risk of anxiety than women. According to Rahmi (2008), in patients with chronic kidney disease, anxiety about death issues reached 90%, and 10% about family-related issues. DeLaune & Ladner (2011) argued that anxiety, if properly managed, would make a person thrive well, whereas strategic coping against anxieties would trigger the emergence of depression, negative emotions, worry, and feelings of regret, even causing individuals to attempt suicide. The two mechanisms involved in the response are biological and psychological. (Kimmel, 2001). Early detection of emergency problems is expected to provide a quick response. (Andrade & Seso,2012). This is the basis for research to find out the impact of emotional rational therapy on the level of anxiety in patients with chronic disease. This research aims to determine the
impact of emotional rational therapy on reducing anxiety in patients with chronic diseases in the village of Kademangan Bharat, district of Blitar. Based on the background above, the formula for the problem is as follows: How is the influence of emotional-rational therapy on decreasing anxieties in patients with chronic diseases in the town of Kademangan, Bihar district?

Nevid (2005) defines anxiety as an apprehensive state of fear that something bad is about to happen. For example, about health, relationships, careers, exams, environmental conditions, and so on. Situations like this are even more adaptive to a bit of anxiety about aspects of life. According to Caninsti (2007), anxiety can be beneficial if it encourages people to do something positive to learn to face the test. Nevid (2005) continues that anxiety is a response to a threat, but anxiety can become abnormal if the rate exceeds the threat given or when an emergency comes without any apparent cause. Dryden & Branch (2008) describe the causes of anxiety among others: (a) biological (genetic predisposition, neurotransmitter irregularity, brain path abnormalities); (b) social (lack of social support, exposure to threatening events, observation of fear response in others); (c) behavioral factors (dependence on compulsive anxieties), installation of a previously neutral (conditioning) aversion stimulus; (d) cognitive and emotional factors. (Unfinished psychological conflicts, excessive assumptions of fear, irrational beliefs, sensitivity to excess threats, misplacement of attributions to body signals, low self-efficacy).

Nevid (2005) says that psychological approaches may differ from one another in ways and purposes, but there is one thing in common: to be nuclear in the face of something and not to avoid the source of anxiety. The treatment of cognitive anxiety disorders is done through the TRE approach. Ellis (1973) showed the client that irrational needs and perfectionism would generate anxiety. Cognitive therapy Beck tries to identify and correct distorted and dysfunctional beliefs. (Froggatt, 2005). Cognitive therapy helps clients identify errors in their thinking and also helps clients see situations logically by accumulating truth to test clients' misconceptions. (Nevid, 2005). According to Corey (2009), negative or irrational thoughts in patients with chronic diseases eventually trigger anxiety. The attempt is to correct such negative views into positive ones using cognitive therapy. Based on the above view, one aspect that is considered important to the researchers is to try to improve cognitive functions that are reduced as a result of chronic pain experienced by using a cognitive approach aimed at reducing the anxiety caused by the chronic disease. In connection with the anxiety reviewed from cognitive factors, the study uses a cognitiveness therapy called Emotional Rational Therapy, which aims to reduce the signs and symptoms of anxiety by correcting the assumptions and distortions of cognitiveness suffered by the patient. The study will use psychotherapy that emphasizes cognitive approaches using emotional rational therapy (TRE).

According to Gunarsa (2001), Ellis's rational emotional therapy refers to human designs that assume and feel interrelated, but in its approach, it is more focused on the mind than on the expression of one's emotions. The TRE approach assumes that human beings are the result of their own unlogical and untrue thinking. According to Corey (2009), TRE is based on the assumption that thoughts, feelings, and behavior interact significantly. The creator of TRE Ellis quotes the ancient Greek Stoic philosopher Epictetus as saying, "One is disturbed not by the
things around him but by what is seen of them. (Dryden dan Ellis, Dalam Corey, 2009). The underlying assumption of TRE is that emotions derive from the beliefs of the individual's evaluation, interpretation, and reaction to life situations. Ellis (1973) argues that the individual who creates a disturbed feeling also has the power to control the emotional future.

Anxiety is mainly related to the cost of treatment, which often becomes an obstacle for patients to obtain adequate treatment. In addition, the emotional stresses that arise as a result of the diagnosis of chronic diseases both from within and from outside the patient often cause the optimism and attitude of acceptance and greatness on the part of the patient to be low or decreased. Research conducted by Mashudi (2016) showed that the anxiety experienced by the patient is a negative emotional reaction of the patient to the situation (present and future) in the individual's life that feels unpleasant and poses a threat to the individual. Dryden & Branch (2008) showed that these emotional reactions are negative or irrational thoughts of patients to the diagnosis of chronic diseases that are always associated with death and pessimism of circumstances. The emergence of behavioral problems, according to Wasesa and Diana (2016), is not influenced by things in the surroundings but by the wrong way of thinking. Neurosis is caused by irrational thinking and behavior. (Gunarsa,2001).

With the presence of emotional rational therapy, the client understands the ability to recognize and challenge the irrational attitudes that have been acquired from time to time. They learn to change their helpless views with effective and logical cognition so that they can improve their feelings about the situation. TRE becomes a psychotherapeutic movement directed at giving clients a tool to build patterns in their thinking and behavior. (Corey, 2009). TRE's focus is on thinking and doing, not on perceptions expressed.

The results of a study conducted by Mashudi (2016) showed that empirically, interventions in counseling rational emotive behavior through (imagery) imaging techniques were proven effective in improving the resilience of students with weak socio-economic status, in particular on aspects of self-efficiency. Results of research conducted by Hansika, Princess, and Suarni (2014) show that the hypothesis of rational emotional counseling with the formula ABC can increase the confidence of students who show low self-confidence. The results of a study conducted by Wasesa and Diana (2016) showed that rational emotional behavioral training is ineffective in reducing fraudulent behavior in primary high school students. The results of a study conducted by Weliangan and Teganing (2009) show that TRE is effective in reducing irrational thoughts and levels of anxiety in the subject; indirectly, TRE also reduces the intensity of KDRT and makes the subject's household harmonic.

The results of this research are theoretically expected to enrich the field of psychology in counseling and psychotherapy, in particular health psychology and clinical psychology. The results of this study are also expected to supplement the picture of the impact of emotional-rational therapy used in patients with chronic anxiety disorders. This study can also be used in the social sciences and health sciences. In practice, the results of this study are expected to be a benchmark to reduce the anxiety experienced by patients with chronic diseases.
METHOD

This research uses a quantitative-descriptive approach. This experimental research design uses a quasi-experimental pre-post control group design, i.e., it has a treatment, impact measurement, and experimental unit but does not use random assignments to create comparisons to conclude changes caused by treatment. (Cook & Campbell, 1979).

Subject

The subjects in this study were 10 women in the village of Kademangan in the district of Blitar. Based on the design of the research, the subjects are selected using purposive sampling techniques, i.e., with the professional consideration that the researcher possesses to obtain information relevant to the research purpose. (Darmadi, 2013). Subjects involved in the research are: (1) Women who have a history of chronic illness, (2) Age: 30–50 years and (3) Have an emergency with a minimum level of

Instruments

A test method using a test tool to measure anxiety in a client is known as the Hamilton Rating Scale for Anxiety/ HRS-A translated by Hawari. (dalam Hawari, 2006). This measurement consists of 14 groups of symptoms, each group being further detailed with more specific symptoms.

Data Collection

The data collection procedures used by researchers include (a) observations, interviews, (c) documentation, (d) lifting, and measurement scales. A document is written material or object related to a particular event or activity. It could be a recording or a written document, such as a database archive of letters and pictures related to an event. (Tobroni & Suprayogo, 2001). The research documents collected are records or files that have a connection with the focus of this research.

Intervention Procedures

Experimental design and procedures include: 1) Preparation Stage: Making Research Instruments. 2) Implementation of Intervention. Session I: Researchers conduct initial interviews to generate a report to find out the case history of the prospective subject to provide a diagnosis. In addition to conducting initial interviews, prospective subjects were also interviewed with items from the HRS-A scale for the first baseline. (B1). Session II: When the diagnosis (B1) says that the subject suffers from anxiety disorder, then the person concerned will be the subject of the study. The researchers then made a collaborative commitment to the subject to be prepared to explore it and undergo future therapeutic procedures. In addition, the subjects interviewed the HRS-A scale items for the second baseline (B2). Session III: The researchers began to conduct deeper interviews on the background of anything that has been a burden on the subject for so long (becoming PR) that has caused anxiety to the subject itself. Continue with the discussion of the stages of therapy to be undertaken in the case of the subject. The meeting also included an interview with HRS-A for the third baseline. (B3). Session IV—
Session VIII: is the time of implementation of the treatment or therapeutic techniques agreed upon (TRE). In addition, observations and interviews were conducted to determine qualitatively the changes that occurred during the treatment. The following steps are followed: a) The client is allowed to submit anything that makes the client depressed, anxious, sad, or even frightened. b) The therapist identifies the cause and trigger events in the client that cause the client to experience anxiety or obstacles and problems in the subject's life. c) The stage of confrontation, re-education, and reinforcement against the irrational beliefs of the client by giving understanding and homework to discard the irrational belief into rationality and form good positive thoughts, and d) Subjects acquire insight into their minds and new rational beliefs. The final stage of the subject is to evaluate the feelings of the subjects associated with the level of insight that has been achieved, so that the client remains a new and rational believer and thinker, and so the subject becomes more confident in himself to be better internally in himself and the social environment of his life. Session IX: Evaluate the treatment that has been shared and interview the item on the HRS-A scale as posttest data (PT1). Session X: final evaluation and final interview as a supplement to qualitative data, as well as the last HRS-A scale survey as second posttest data (PT2).

Data Analysis

In this study, the type of data used is ordinal data. The data analysis used in this study was by Mann, Witney, and Wilcoxon.

RESULTS AND DISCUSSIONS

The age of respondents in the majority control group from 30 to 40 years was 4 people (80%), while in the experimental majority group from 41 to 50 years of age it was 4 people (80%). The level of education in the control group of the high school majority was 3 people (60%), while in the experimental group, the majority of the middle school was 3 people (60%). The type of work in the IRT majority control group was 3 people (60%), while in the experimental majority group, it was also 4 people (80%). There is an effect of RET on reducing the level of anxiety in people with chronic diseases. This can be seen from the respondent's anxiety score before and after therapy. Before therapy, the majority of respondents had a mild anxiety score of 4 (80%), and only 1 (20%) had a moderately anxious score. After receiving RET, 100% respondent's anxiety rate has decreased. Four of the respondents (80%) did not experience anxiety (normally anxious scores), and only one respondent (20%) experienced mild anxiety. This is in line with the theory presented by Corey (2007), which explains that one of the objectives of RET is to eliminate self-destructive emotional disorders such as fear, guilt, sin, anxiety, feeling was-was, and anger, where such emotional disturbances are classified in the category of anxieties.
Before receiving RET treatment in the control group, the majority experienced anxiety as moderate as 3 people (60%), while in the experimental group, the majority had anxieties as severe as 3 people (60%). In Table 5, after receiving RET treatment, the majority of the control group experienced severe anxiety in 3 people (60%), while the experimental group experienced moderate anxiety in 4 people (80%). This suggests that RET can decrease anxiety in patients with chronic disease in the village of Kademangan in the Blitar district.
Table 4. Alarm level before given RET Pre_Tremor

<table>
<thead>
<tr>
<th>Pre_Anger* Group Crosstabulation</th>
<th>Group</th>
<th>Amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>Experiment</td>
</tr>
<tr>
<td>Pre_Anger</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>60.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Berat</td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>40.0%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 5. Anxiety level after being given RET

<table>
<thead>
<tr>
<th>Post_Anger * Group Crosstabulation</th>
<th>Group</th>
<th>Amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>Experiment</td>
</tr>
<tr>
<td>Post_Anger</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>0.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Currently</td>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>40.0%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Heavy</td>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>60.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>% within Group</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The results of Wilcoxon tests in a control group marked with an asymptote. Sig 0.317 (p > 0.05), which means there is no real difference in anxiety before and after RET. Table 7 shows the results of Wilcoxon tests in a group of experiments marked with an asymptote. Sig 0.046 (p < 0.05), which means there is a significant difference in anxiety before and after RET.

Table 6. Pre_Post Anxiety Control Wilcoxon Signed Ranks Test

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Post_Anger - Pre_Anger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-1.000b</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.317</td>
</tr>
<tr>
<td>a. Wilcoxon Signed Ranks Test</td>
<td></td>
</tr>
<tr>
<td>b. Based on negative ranks.</td>
<td></td>
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</tbody>
</table>
Table 7. Pre_Post Anxiety Eksperimen Wilcoxon Signed Ranks Test

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Post_Anxiety - Pre_Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-2.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.046</td>
</tr>
</tbody>
</table>

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Mann-Whitney's test results marked with an asymptote. Sig 0.549 (p > 0.05) means that there was no noticeable difference in both groups (control and experiment) before the RET treatment. Table 9 shows the results of Mann-Whitney's asymptote test. Sig 0.042 (p < 0.05) means there is a real difference in both groups (control and experiment) after RET treatment. After receiving RET for an average of five face-to-face interviews, the respondents experienced a change in thinking, i.e., irrational thoughts turned into rational thoughts. In addition, respondents are more likely to receive a variety of treatment programs and actions during home care. It is in line with the basic concept of RET described by Wayne (2005) that RET therapy is a therapy applied to human behavior comprehensively. This therapy explains the causes of problems based on biopsychosocial, which is a combination of biological, psychological, and social factors that are used in human feelings and behavior. Corey (2007) explains that the main objective of RET, among other things, is to improve and change attitudes, perceptions, ways of thinking, beliefs, and views of clients that are irrational and unlogical into rational and logical so that clients can develop themselves, improving self-actualization to the optimum possible through positive cognitive and affective behavior. RET influences one's irrational thinking through biopsychosocial means to turn it into rational thinking. At the implementation of activating event stage therapy, all respondents (100%) stated that they were stressed by thinking of conditions influenced by various internal and external causes, such as mistrust of the disease, confused thinking of where the disease was obtained (especially cancer), while neither family nor relatives had the same disease, and did not get support from their wife or family. At the beliefs about the event stage, most respondents stated that the illness they suffered was a test of the God of YME, and most of them believed it could be cured. Irrational thoughts experienced by respondents include the desire to be operated on soon, being unwilling to undergo treatment, and being unable to be completely sure of being cured. In the consequent phase, most respondents (80%) have irrational thoughts or desires that are not in line with treatment procedures, such as asking for immediate surgery when the condition does not allow for surgery and are not eager to continue treatment.
According to White et al. and Pier et al. (2008), chronic diseases can isolate people socially. Individual experiences with chronic illness often result in reduced contact with friends and family and sometimes loss of contact. Contact with friends may be limited due to friends' fears about his condition, as described by Ahlstrom et al. (2007): a lack of patient energy or reluctance to engage with friends because days are unhappy and there is nothing to talk about. Some patients say they avoid social situations because of their chronic illness. With COPD, patients are worried that activity will cause shortness of breath, possibly triggering panic attacks. (Willgoss et al., 2011). The stroke victim is uncertain in the social setting due to sensitivity to noise and feelings of confusion. Willgoss et al. (2011) say that anxiety symptoms such as sweating and incontinence in COPD patients lead to social isolation and that some patients "stay at home effectively". Guilt about chronic illness can increase feelings of depression. Some patients felt that they had to be blamed for the development of their chronic condition; patients who had a stroke were described as "paying a price" for various factors such as drinking and stress. (White, Magin, Attia, Pollack, Sturm, Levi, et al., 2008). Patients also feel guilty for not being grateful for being alive. (Hedlund, Zetterling, Ronne-Engstrom, Ekselius, Carlsson, et al., 2010). The results of a study conducted by Teti, Efri, and Siti (2017) showed that some of the respondents had moderate state anxiety (59.8%), and some respondents experienced moderate trait anxiety (54.6%). Based on the factors that influence...
anxiety, the auto-systemic threat factor is the dominant factor in anxiety in breast cancer patients undergoing chemotherapy.

Anxiety and uncertainty about the future are often felt by patients with chronic diseases. Patients describe concerns about the prognosis of their chronic illness and uncertainty about their future, often experienced as anxiety and depression. Some patients experienced relatively sudden panic episodes, such as waking up at night and being unable to sleep because they were worried about their chronic illness, while others described a more subtle and constant feeling of uncertainty. Patients associate their uncertainty with the fact that their chronic diseases are incurable, that the course of the disease is unpredictable, and that they have fears about death (Manderson, Kokanovic, et al. (2009), Dekker and others (2019), Willgoss et al. (2011)).

Of the 28 people who performed stress screening using HRS, only 10 were found to have anxiety. While the anxiety scores are mild and moderate, none show any serious or very serious anxieties. It can be influenced by the presence of several factors, namely: 1) There is peer group support in the village of Kademangan so that the victim can adapt to the conditions faced at the time; 2) The anxiety experienced by the patient depends on the physical condition during anxiety screening. When the patient's physical condition improves or stabilizes, the condition of the patient decreases or even does not appear (normal), while when the physical condition deteriorates, the person's anxiety can be visible or increased. This is in line with the statement of Nursalam, dkk (2005), which explains that a person's mistrust and feelings of rejection occur when he is sick.

The phase of disputing, the therapist directs the client to rational things, explains the positive effects, and implants rational thinking. At the new effect stage, respondents are willing to accept and promise to apply the new rational thoughts given by the previous therapist. It is in line with Elizabeth's (2008) explanation that the focus of rational-emotional therapy is irrational thoughts that drive toward unhealthy negative emotions, replaced by rational alternative thoughts. The results of the RET evaluation showed that all respondents had rational new thinking, so this affected the respondent's stress score. Stress scores at the time of the final evaluation using the HRS-A questionnaire showed that 4 respondents (80%) did not experience anxiety (normal anxious scores) and 1 respondent (20%) experienced mild anxiety. Thus, the RET innovation program has an influence on irrational thinking that affects the decrease in anxiety in chronic disease sufferers.

CONCLUSIONS

The study examined the impact of Rational Emotive Therapy (RET) on anxiety levels in individuals with chronic diseases in the village of Kademangan, Blitar district. The results indicated that the majority of respondents in both the control and experimental groups were in the age range of 30 to 50 years and had various levels of education and types of work. Prior to RET treatment, many respondents experienced moderate to severe anxiety. However, after undergoing RET therapy, there was a significant reduction in anxiety levels, with 80% of participants in the experimental group reporting no anxiety at all. This aligns with the principles of RET, which aim to transform irrational thoughts into rational ones. The findings suggest that RET can effectively reduce anxiety in individuals with chronic diseases, offering them a more
positive outlook on their conditions and improved emotional well-being. These results are consistent with existing literature on the impact of chronic diseases on mental health, emphasizing the importance of psychological interventions like RET in managing anxiety and improving overall quality of life for individuals facing chronic illnesses.

REFERENCES