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The Effect of Giving Mindfulnes Based Cognitive Therapy to Reduce Parenting Stress in Parents with Children with CHD (Congenital Heart Disease)

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ABSTRACT

This study aims to determine the effect of Mindfulness Based Cognitive Therapy (MBCT) to reduce parenting stress in parents with children with congenital heart disease (CHD). This study uses a quasi-experimental method with a pre-test-post-test control group design. The participants in this study were 30 parents who had children with congenital heart disease, who were randomly divided into two groups, namely the experimental group and the control group. The experimental group was given MBCT intervention for 8 sessions, while the control group did not get any intervention. Parenting stress measurements were carried out before and after the intervention using the Parenting Stress Index (PSI). The results of the analysis showed that there was a significant difference in parenting stress scores between the experimental group and the control group after being given MBCT intervention ($p<0.05$). The experimental group experienced a greater decrease in parenting stress scores compared to the control group. The provision of MBCT intervention is effective in reducing parenting stress in parents who have children with congenital heart disease. The results of this study can be considered in the development of psychological interventions to overcome parenting stress in parents with children with CHD.

KEYWORDS *Stress Parenting, Mindfulness-Based Cognitive Therapy, Congenital Heart Disease*

INTRODUCTION

CHD is one of the most common types of birth defects, affecting 8 per 1000 babies born globally and its prevalence is increasing over time. The condition of children affected by CHD in 81 low- and lower-middle-income countries in the world. Low And Lower Middle Class Countries In The World (LLMICs) show a different prognosis compared to developed countries. The main difference, almost always related to inadequate access to care; Cardiac services for children, which mostly remain in the realm of tertiary care facilities and medical quarters, are very lacking.

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The condition of CHD in Indonesia based on data from the 2017 Global Burden of Disease Study shows that as many as 80,928 babies are born with CHD every year. Other data obtained from the Indonesian Heart Association and PERKI (Indonesia Cardiovascular Specialist Association) explains that there are an estimated 43,200 cases of congenital heart disease (CHD) out of 4.8 million live births every year (Dwinanda., 2021). According to the Chairman of the Indonesia Heart Foundation, Esti Nurjadin, quoted from the online media riaupos.jawapos, explained that the main obstacle in dealing with children with CHD is the high cost of examination and surgery. Curative services for children with congenital heart disease from underprivileged families have only been carried out on 2,189 patients who received assistance in the form of surgical and non-surgical interventions.

This is in line with what was conveyed by the Minister of Health of the Republic of Indonesia, Budi Gunadi Sadikin, who said that 48 thousand babies born with congenital heart disease every year, 25% or around 12,500 children actually suffer from critical congenital heart disease, of which 7,000 die. One of the factors causing this is the lack of specialist doctors with adequate abilities in Indonesia. In addition, the state's ability to perform heart surgery on pediatric patients with CHD can only be around 5,000 procedures. As a result, around 7,000 thousand babies with CHD cannot be handled properly and optimally.

The data above makes parents who take care of PJB children faced with the harsh reality of raising their children with unpredictable conditions. In many cases they can't do anything about the situation. Nahid's (2021) research that explores the meaning of parenting with CHD explains that the categories of emotional disorders include subcategories of rejection, shock, sadness, isolation, guilt, and difficult parenting processes. Fear and stress can lead to the development of Acute Stress Reaction (ASR) or Acute Stress Disorder (ASD) and Post-Traumatic Stress Disorder (PTSD) in parents who have children with CHD . Therefore, caring for a child with CHD requires extra effort because the condition of the child is more vulnerable than children in general. Fathers and mothers and other family members must work together to ensure the child's good development in a situation of suffering from heart disease.

The long treatment process accompanied by adaptation to a new life with the condition of children who have congenital heart disease (CHD) puts parents of children with CHD at high risk of dealing with mental health problems. In line with what was stated by Cohn et al., (2020) and Ong et al., (2021) that childhood diseases also have the potential to significantly affect family functioning, one of which is parents who experience stress as a result of adaptation to daily life and take on dual roles as parents/caregivers without formal training. This is because in addition to having to adapt to the role of parenting, parents with children with PJB have more challenges to be able to understand the demands of parenting children who have "unique" conditions. However, there have not been many research results that pay attention to the psychological condition of parents who have children with CHD. This is reinforced by the statement from Vainberg, Vardi and Jacoby (2019) that parents are primary caregivers and tend to be more involved 24 hours a day in caring for their children, but most research only focuses on the psychological condition of children undergoing surgery and tends to have minimal research that focuses on the condition of parents who have children with CHD.

In Nahid's research (2021), it was also explained that the routine life of parenting children with CHD is not like caring for children in general, including frequent hospitalizations and conditions related to other treatment processes. One of them is the strict restrictions for parents to carry out social interaction activities, especially after the child has received surgery. This means that the difficulties in the parenting process experienced by parents with children with CHD include how parents must constantly "sacrifice" themselves such as limiting themselves socially, undergoing every child care process that must always be followed, continuing to find solutions to the consequences of the child's condition, suffering from the judgment and curiosity of others as well as some general medical interventions that must be postponed. Parents with PJB children are also faced with the harsh reality of taking care of their children.

Another condition that parents with children with CHD must face is that they are faced with a life situation with constant uncertainty. Even if their child does not need surgery anymore, there will always be a schedule of health checks with the doctor whose final results often raise new concerns, such as the decision on the need for other medical procedures in the future or the emergence of contraindications to pharmacotherapy interventions. As their child grows, the fear of both known and unknown risks from CHD will continue to be faced by parents with CHD. Leeza's (2019) research on the experiences of parents of children undergoing surgery for congenital heart defects, shows that parents of children with CHD are at high risk for mental health comorbidities.

Cousino, M. K., & Hazen, R. A. (2013) said parents who have children with chronic illnesses, have to face bad news about their child's diagnosis, associated medical risks, and in some cases are associated with their child's low potential life expectancy. Although some families may show resilience in dealing with such stressors, the vulnerability of demanding treatment times and shifts in roles, responsibilities, and resources can negatively impact family functioning.

Research by Rebecchini et al., (2017) explained that the distress of parents who have children with CHD has been reported in 30-80% of parents and it is not related to the severity of CHD itself. The study also explained that parents, especially mothers, are at risk of experiencing psychological distress, anxiety, depression, somatization, hopelessness, and post-traumatic stress symptoms, which in turn can affect maternal responsiveness.

Research by Sabina et al. (2019) conveyed that the stress experience of parents who have children with CHD continues to increase even at preschool age. According to the findings of Majnemer et al. (2006), parents of five-year-old children of CHD reported stress or defensive feelings towards their children, especially if the child showed challenging behavior.

In the condition of parents who have children with CHD as described in some of the studies above, it shows that the parents face a stressful situation in caring for children which can be categorized into parentings stress. Parentings stress is a form of anxiety and excessive tension specifically related to the role of parents and the interaction of parents with children. In the study of Vainberg, Vardi and Jacoby (2019) it was explained that parents of children with CHD have a role as the primary caregiver, where they bear a greater burden of care during the entire period of special handling of CHD in their child.

In this coping process, parents have to face many challenges such as scheduling a consultative with a doctor, various medical activities related to routine check-ups, administering potentially fatal interventions such as open heart surgery, carrying out prolonged hospitalization and treatment periods, several additional surgeries, facing challenges regarding child growth and developmental delays, near-death experiences and the possibility of death itself. This situation is often a difficult ordeal for families and makes parents experience greater financial instability due to the large medical expenses incurred to care for their children, which can certainly be a factor that leads to a decrease in living standards. It has been reported in several studies that parents with children with CHD experience a lower quality of life and difficulty coping with daily activities due to emotional distress. This is certainly a burden that has a negative impact on the psychosocial adjustment of parents. As a result, parents are at higher risk of emotional distress, feelings of hopelessness, and suicidal ideation, with mothers showing higher levels of distress, anxiety, and social isolation.

Parentings stress can be overcome by providing psychological interventions, one of which is psychological therapy or known as psychotherapy. Psychotherapy can help control or even eliminate these mental problems so that individuals can carry out their daily activities with relative control and improve their quality of life. The American Psychological Association explains that psychological therapy can help a person identify the factors that contribute to depression or the psychological condition he or she is experiencing. There are various types of psychotherapy with use that is tailored to the symptoms experienced by the individual.

Some of the psychological intervention studies provided to reduce parenting stress include; Dewanty (2016) research on the effect of providing Rational Emotive Behaviour Therapy (REBT) to reduce parenting stress in mothers with autistic children. The study showed that REBT had an influence in reducing parenting stress. Putra (2020) who researched the effect of giving Compassion Focused Therapy CFT to reduce stress levels in mothers who experience parentings stress showed that there was an effect of giving CFT to reduce stress levels in mothers who experienced parentings stress. Another psychological intervention that can reduce stress is mindfulness therapy, according to Segal (2013) some commonly used techniques are based on the mindfulness approach and are especially effective in reducing stress (Segal et al., 2012).

Rahmatika's (2017) research on mindfulness interventions to reduce stress in parents, showed results that mindfulness-based interventions are significant in reducing stress. Raskin (2020) in his research on Mindfulness and Acceptance Interventions for Parents of Children and Adolescents Diagnosed with Chronic Medical Conditions: A Systematic Review, explained that Mindfulness and Acceptance Interventions (MAIs) for parents provide benefits and have a positive impact on parents who have children with chronic medical conditions, including increased parental psychological flexibility and overall well-being.

Based on the presentation of the results of the literacy study above, it can be said that the psychological condition experienced by parents who have children with CHD, can be given one of the psychological interventions in the form of psychotherapy, namely by providing Mindfulness Based Cognitive Therapy or commonly abbreviated as MBCT. MBCT is defined as awareness (awarness) that arises from paying attention to a current experience intentionally and without

judgment in order to be able to respond with acceptance and not react to daily experiences. Research that has been conducted states that Mindfulness Based Cognitive Therapy (MBCT) results in increased awareness of the present, decentering, and acceptance. In addition, it decreases maladaptive cognitive processes such as judgment, reactivity, rumination, and mind suppression.

A study conducted by the Institute of Psychology, Department of Clinical and Developmental Psychology, Eberhard Karls University, Tübingen, Gartenstr. 29, 72074 Tübingen, Germany and the Institute of Medical Psychology and Behavioral Neurobiology, Germany confirmed that MBCT, as a short and economical form of maintenance care, has a significant positive effect on concomitant influence-related actions. Therefore, according to the researcher, intervention is quite possible to be carried out by parents who have children with CHD. The purpose of this study is to obtain an overview of the effect of Mindfulness Based Cognitive Therapy (MBCT) in reducing parenting stress in parents who have children with Congenital Heart Disease (CHD). The purpose of this study is to obtain empirical evidence regarding the effect or not of MBCT therapy to reduce parenting stress in parents who have children with congenital heart disease.

RESEARCH METHOD

The population taken in this study is all parents who have children with CHD and are domiciled in the Bandung City, Bandung Regency, Cimahi City and West Bandung Regency. The sampling technique used in this study is *purposive sampling*, which is a sampling technique used by the researcher if the researcher has certain considerations in the sampling process. The collection technique is related to how the researcher obtains empirical data that is used to answer the research question (Silalahi, 2006). In this case, the right data collection techniques are needed so that valid and reliable data is obtained. Primary data is collected through measuring tools when *pre-test* and *post-test are carried out*, in the form of filling out digital forms and then processed quantitatively. Meanwhile, secondary data collected through targeted interviews will be processed in a descriptive narrative and there are several questions to be able to help participants describe their conditions.

The main data analysis technique in this study to see the effect of MBCT on the reduction of *Parenting Stress* used non-parametric statistics because the study subjects were less than 30 people. The data analysis was carried out by comparing the results of PSI measurement after MBCT treatment (*posttest*) between the two research groups. The test used is a *Mann Whitney* test , which is a type of non-parametric statistics used to test the mean or average of two different or unpaired samples. The H0 rejection criteria is if the test result (p-value) ≤ the desired value of the degree of confidence ($\alpha = 0.05$). Data analysis calculations are assisted by using SPSS for windows.

The overall research implementation procedure of this study consists of three stages, namely:

1. **Preparation Stage**
   a. Conduct an initial survey through observation and interviews with students to see the problems that arise and the phenomenon of Parenting Stress in parents who have children with congenital heart disease.

b. Conducting a literature study to deepen the research topic, namely *Parenting Stress in general and Parenting Stress* in parents who have children who have chronic diseases, especially congenital heart disease, and *Mindfulness Based Cognitive Therapy* (MBCT) as one of the types of interventions that can be used to overcome it.
c. Conducting an initial survey of the research by distributing the *Depression Anxiety Stress Scale* (DASS) questionnaire online in the form of filling out a google form. The questionnaire was distributed through a google form by previously filling in the willingness to follow the researcher. The distribution was carried out on parents who have children with congenital heart disease in the Greater Bandung region.
d. Prepare research design proposals in accordance with the problems to be researched.
e. Taking research subjects based on the results of the initial survey through the distribution of DASS questionnaires. The researcher contacted prospective subjects who met the criteria for research subjects by telephone and asked them about their willingness to participate in the study. After that, interviews and observations were conducted on prospective subjects who were willing to be involved in the research.
f. Preparation of measuring instruments. The researcher used *the Parenting Stress Index* (PSI) measurement tool which is a measurement tool used to measure Parenting Stress.
g. Preparation of Mindfulness Based Cognitive Therapy *training modules*. The MBCT module prepared by the researcher is adapted to the Mindfulness and MBCT book guides, journals on MBCT interventions and discussions with MBCT practitioners.
h. Preparation of training tools and materials consisting of slides, workbooks, hand outs for subjects, evaluation sheets, observation sheets and *informed consent sheets*.

2. Implementation Stage

a. The research subjects were randomly divided into two groups, namely the experimental group and the control group.
b. Providing an explanation of the purpose, objectives and usefulness of the research carried out and asking for the subject's willingness to be used as a subject in the research by providing informed consent, as a statement of willingness which is then given an additional explanation of rights and obligations.
c. Conducting a pretest is asking subjects to fill out a PSI questionnaire to find out the extent of Parenting Stress experienced by the subject.
d. Carry out MBCT intervention activities. The MBCT intervention was carried out as many as eight meeting sessions which were carried out once a week for 60-90 minutes per session, the form of intervention was in the form of providing information/psychoeducation, mindfulness exercises (*body scan*, *mindful breathing*, *mindful movement/walking exercises*, and sitting meditation), cognitive exercises, psychoeducation about *Parenting Stress* and homework to do *mindfulness* exercises. Subjects also get assignments to do at home which are monitored through workbooks.

e. After the intervention process is complete, the subjects are asked to fill in the PSI scale (*posttest*) to find out the condition of Parenting Stress after the intervention is given. Then the results will be compared with the results of filling in the PSI scale before the intervention.
f. After the series of intervention activities was completed, the subjects were asked to fill out an evaluation sheet to find out what the subjects' opinions were about the shortcomings and advantages of the intervention process that had been given.
g. After the intervention, subjects in the control group were also asked to fill in the PSI scale to find out the Parenting Stress after the intervention in the experimental group.

3. Data Processing

At this stage, the things that are done are as follows:

a. Collect all PSI measuring tool sheets, *workbooks* and intervention home exercises that have been filled in completely by the research subjects.
b. Assessing and calculating the results of each *Parenting Stress measuring tool* , namely PSI.
c. Tabulation of data by calculating the number, percentage, and assessment of *Parenting Stress* as well as categorizing Parenting Stress according to the score obtained.
d. Data analysis was conducted using statistical methods to test the effect of MBCT intervention on *Parenting Stress* using SPSS.

4. Discussion Stage

a. Explain the test results owned by the subject.
b. Analyze and discuss the results of statistical calculations based on the theory and framework that underlies this research.
c. Make conclusions about the results of the research.
d. Providing suggestions submitted for the improvement and perfection of the research.

5. Final Stage

a. Compile research reports.
b. Improving and refining research reports thoroughly

RESULT AND DISCUSSION

Results of Statistical Test Analysis

The tables below are the results of statistical tests regarding PSI scores between the control group and the experimental group before the MBCT intervention was given

Table 1. Difference in PSI score before the intervention (*Pre-Test*) between the Experimental Group and the Control Group

	N	Mean Rank	Sum of Rank
Pre-test Results of the Experimental Group	3	2.67	8.00
Control Group Pre-test Results	3	4.33	13.00
Total amount	6		
Mann Whitney Statistical Analysis Test Results			
Asymp. Sig. (2- tailed)/ p values	0.275		

Based on the results of statistical tests contained in table 1 above, before the MBCT intervention in the experimental group, the value *of p* = 0.275 was obtained less than α = 0.05. This shows that before the MBCT intervention there was a difference in the value of *Parenting Stress* experienced by the experimental group and the control group. The score between the experimental group and the control group before the intervention was used as a basis to assess the differences obtained after the intervention so that it could be concluded that the change in the experimental group was an effect of the MBCT intervention carried out. The following table presents the results of the statistical test of PSI scores between the experimental group and the control group after the MBCT intervention.

Table 2. Difference in PSI Score After Intervention (*Post-test*) between the Experimental Group and the Control Group

	N	Mean Rank	Sum of Rank
Post-test *Results* of the Experimental Group	3	5.00	15.00
Control Group Post-test Results	3	2.00	6.00
Total amount	6		
Results of the Mann Whiney Statistical Analysis Test			
Asymp.Sig. (2- tailed)/ p values		0.0495	

Based on the statistical test of the PSI score after the MBCT intervention (posttest) presented in table 2 above, a value of p = 0.0495 was obtained smaller than α = 0.05. This suggests that there was a difference in PSI scores between the experimental group and the control group after the administration of the MBCT intervention. Thus, it means that there is a difference in Parenting Stress experienced by the experimental group that received MBCT treatment and the control group that did not receive treatment. Thus, it can be concluded that MBCT significantly produces a difference in Parenting Stress between the experimental group and the control group.

By using the results of the statistical test before the intervention (pretest) where there was no difference in the PSI scores of the two groups as the basis for interpretation, it can be concluded that the change in PS scores experienced by the experimental group was caused by the MBCT Intervention.

Furthermore, in tables 3 and 4 below, statistical tests regarding the PSI scores of the experimental group and control group before (pretest) and after (pottest) the administration of MBCT intervention using the Wilcoxon test will be presented. In table 3 below, statistical calculations and Wilcoxon tests on PSI pretest and posttest scores from the Experimental group will be presented.

Table 3. Difference in PSI Score Before (*Pretest*) and After the Intervention (*Posttest*) Experimental Group

	N	Mean Rank	Sum of Ranks
Negative Ranks	3a	2.00	6.00
Positive ranks	0b	.00	.00

Posttest Score – Experimental Group Pretest	**Ties**	0c	
	Total	3	
War – Rat Skor Pretest			**111,33**
Rate – Posttest Score Rate		**99,6667**	
Wilcoxon Test Results			
Z Asymp. Sig. (2-tailed)	0.109		

Based on the statistical analysis data presented in table 3 above, the value of p = 0.109 was obtained greater than α = 0.05 which showed that the statistical hypothesis was rejected which means that there was no difference *in Parenting Stress* experienced by the experimental group between the conditions before and after the MBCT intervention.

Further in the table above, it can be seen that there is a mean value in negative ranks of .00 which shows that the six participants in the experimental group experienced a decrease in the average PSI score from *the pretest* score to *the posttest* score of 2.00. At the time before the intervention, the number of interventions decreased from 111.33 to 99.67. This shows that there is a decrease in *Parenting Stress* experienced by the experimental group after receiving MBCT intervention and in general they have changed, so the severity of *Parenting Stress* also decreased from a moderate level (111.33) to a moderate level (99.67).

Table 4. Difference in PSI Score Before (*Pretest*) and After the Intervention (*Posttest*) Control Group

		N	Mean Rank	Sum of Ranks
Posttest Score – Control Group Pretest	**Negative Ranks**	3a	1.00	1.00
	Positive ranks	0b	.00	.00
	Ties	0c		
	total	3		
Rata – Rata skor pretest		**108.333**		
Average Postest Score		**108.000**		
Wilcoxon Test Results				
Z : Asymp. Sig. (2-tailed)	0.317			

Based on the results of the statistical test using the Wilcoxon test on the *PSI pretest* and *posttest* score data from the control group presented in table 4.7, a p value of 0.317 was obtained where the results obtained were greater than the value of α = 0.05. These results showed that there was no difference in *PSI pretest* and *posttest* scores in the control group that did not receive the MBCT intervention.

By using the statistical test as a comparison and the basis of interpretation there was no difference between the PSI *score of the pretest* and *posttest* in the control group as a comparison and the basis of interpretation, it can be concluded that the decrease in the PSI score of the experimental group after the intervention was caused by the MBCT intervention.

Discussion of Research Results

The purpose of this study is to see if MBCT has an effect on reducing Parenting Stress experienced by parents who have children with Congenital Heart Disease in Greater Bandung. The results of this study showed that there was a difference in PSI scores between the experimental group that received the MBCT intervention and the control group with a value of $p = 0.0495$ smaller than $\alpha = 0.05$. Although the difference is felt to be less strong.

The results of the Mann-Whitney statistical test in this study with two groups consisting of three participants each were considered less robust. Mann-Whitney and Wilcoxon statistical values are often considered to be less strong, this can occur due to several factors, one of which is Maxwell, S. E., & Delaney, H. D. (2004) that very small sample sizes significantly reduce the statistical strength of the test. This is in line with Cohen, J. (1988) stating that small sample sizes significantly reduce the statistical strength of the test. On the Wilcoxon statistical test, less robust values can mean that variations in the data are more likely to be caused by random fluctuations than by actual effects (Maxwell et al., 2017). In small samples, extreme values (outliers) can have a large impact on test results. One or two very high or low values can distort the results, making them unrepresentative of the larger population (Wilcox, 2011). Because rankings in a small sample do not provide much information, the results of non-parametric analyses can be less informative.

In the context of the Mann-Whitney test, which is a non-parametric test to compare two independent groups, the small sample size means that the test has little data to detect the differences that exist between the groups, increasing the risk of type II errors (failing to detect differences that actually exist). Another thing that needs to be noted regarding the use of the Mann-Whitney and Wilcoxon statistical test in this study which only used three participants in each group is variability. The variability between individuals in the group becomes very significant. High variability can obscure existing differences between groups, causing test results to be unstable and inconclusive. Because the Mann-Whitney test relies on data rankings rather than raw values. In very small samples, the rating distribution can be very limited and does not reflect the existing rating distribution in the larger population, making the test results less reliable.

The lack of strength of the results of the Mann-Whitney and Wilcoxon statistical tests in the study occurred because the number of parsitsipas in the study was too low so that the statistical calculation became less than optimal. However, it can be seen that the average PSI score at the time before the intervention decreased after the intervention was given from 111.33 to 99.67. This shows that there is a decrease in Parenting Stress experienced by the experimental group after receiving MBCT intervention and in general they have changed so that the severity of Parenting Stress also drops from severe (111.33) to moderate (99.67)

Based on the explanation above, it can be concluded that MBCT intervention can reduce Parenting Stress experienced by parents who have children with Congenital Heart Disease in the Greater Bandung area (Bandung City, Bandung Regency, West Bandung Regency and Cimahi) so that the severity of Parenting Stress in subjects who receive MBCT intervention decreases. The results of the study showed that Mindfulness-Based Cognitive Therapy (MBCT) intervention can reduce parenting stress. The administration of MBCT to mothers who have children

with congenital heart disease shows an increase in awareness at the moment in parenting so that they feel less stressed in the process of raising their children. The results of the interviews after session 8 of therapy obtained data that the participants were more aware of their thoughts and emotions about the situation they are currently living in, such as when accompanying children to play, accompanying children to watch and other conditions when they are interacting with children who have CHD. At the moment before getting the intervention, the participants felt completely unaware of the situation they were facing. They still sometimes struggle with their native ruminative or automation behaviors that make them feel pressured in the parenting process

This is in line with Baer's research, R. A. (2003) explaining that MBCT teaches mothers to be more aware of their thoughts and emotions without judgment. This helps them identify and release negative thoughts or stress related to parenting with CHD. The results of another study presented by Viginia A, Mariana S, Maree JA (2019) showed that after the MBCT intervention, there was a small to moderate decrease in parenting stress, which continued to increase two months after the intervention. In addition, MBCT interventions focusing on parenting can improve the quality of parent-child relationships and reduce parenting stress.

Some of the Mindfulness techniques given in this study such as 3-minute massage, body scan and other techniques were felt to help participants experience better emotional changes in dealing with parenting situations for their children who have CHD. This is because MBCT helps individuals develop skills to better regulate their emotions. In the context of parenting with CHD, mothers often face intense emotional situations. MBCT helps them not to get caught up in negative thought patterns and gives them the tools to calm down and respond to situations more calmly (Kuyken et al., 2012; Kuyken & Evans, 2014).

The use of CBT techniques as part of MBCT in this study is felt to be able to reduce the ruminative thoughts owned by the research participants. The initial responses have some distortions of thought that are quite disturbing for them in caring for their children who have CHD, this can happen such as feeling guilty, labeling themselves and most often predicting negative things that will happen in the future to their children. The provision of this CBT technique helps participants to reduce rumination thoughts that make them trapped in parenting stress This is in line with Teasdale, J. D., et al. (2000) that ruminative thoughts, or constantly thinking about the same problems, are the main cause of chronic stress. MBCT reduces rumination by teaching mothers to focus more on the present moment and distract from distracting repetitive thoughts. This helps reduce the stress of continued parenting in parents who have children with CHD.

The provision of MBCT is also felt to provide an increase in better coping when they experience stressful situations while taking care of children. One of the things they feel when they start to panic or feel emotions rising and want to overflow can be done the MBCT technique (the most frequent and easy-to-use is the breathing technique). This is in line with the statement by Kabat-Zinn, J. (1990) that MBCT actually teaches more adaptive coping skills. With these skills, parents, especially mothers who have children with CHD, can deal with stressful situations more effectively, reducing the sense of overwhelm and anxiety often associated with parenting their children with CHD.

Based on the results of the interview at the end of the therapy session, the participants felt that they were quite able to do MBCT in which participants began to be able to observe, pay attention and feel such as their bodily sensations, cognition, and emotions when they began to feel stress in parenting. So that they can observe the process of what happens to them when they start to feel stress in parenting, for example, starting to feel upset, starting to think negatively or feeling sore in the parenting process. This can be categorized that the participants have been able to do the first component of MBCT, namely observing where in mindfulness there is a strong emphasis on the process of observing, paying attention, and feeling stimuli.

Subsequently, in the MBCT process, there is a second component, namely describing, in doing mindfulness It is better not to label or describe something that he feels or sees. Based on the results of interviews during the MBCT therapy process, the participants said that they did not do a little thought in their lives. The condition of their childcare situation who has PJB sometimes makes them label themselves as incapable parents, bad things will happen to their children and their families if the child is sick, wrong parents if the child is sick or feelings of guilt for the condition that occurs (the condition of the child suffering from congenital heart disease because of him). This arises when they feel pressured, so that feelings of anger, sadness or helplessness arise while going through the process of raising their children.

The next component in the MBCT process is the third component. The third component of MBCT is acting with awareness, which means that it is fully involved in an activity with full attention and focus with maximum awareness so that the individual who performs MBCT in acting must be fully aware or in other words the person can better understand his physical and psychological symptoms, and not put his consciousness elsewhere or daydream. The benefit of this therapy based on the results of the interviews felt by the participants is that they feel that in doing some of the techniques given in MBCT gives them awareness of every moment and situation they do while taking care of their children. According to them, the two participants who previously sometimes daydreamed while waiting for their children to go to school or while playing with their children, became more fully aware of the situation.

The last component in the MBCT process is accepting without judgment, this is done so that a person can appreciate himself even better. So that when he begins to understand his living conditions, he can accept without judging himself. The results of interviews with participants who received MBCT intervention said that they felt that in the process of raising their children, they felt more able to appreciate themselves such as the extent of the achievements they had succeeded in making their children survive, feeling that every moment of parenting needs to be done consciously with a positive appreciation in living it.

The administration of Mindfulness-Based Cognitive Therapy (MBCT) to reduce parenting stress in mothers who have children with congenital heart disease (CHD) in this study faces several obstacles related to the number of samples that are perceived to be insufficient in statistical tests, including time limitations and tight schedules. Regarding time limitations and tight schedules, they basically want to follow the entire series of therapy, but sometimes they become less focused and rescheduled considering the condition of children with CHD who are left behind

during the therapy process. In addition, the routine time in accompanying his child has been disrupted, also related to control activities to the doctor which has also suddenly changed.

This situation is in line with a study conducted by: Dumas, J. E., et al. (2010) the administration of MBSR to reduce stress in mothers who care for children with chronic diseases. explained that mothers who care for children with chronic diseases (in this study children with PJ) often have very busy schedules, including regular visits to the doctor, treatment, and daily care. This time limitation makes it difficult for them to attend MBCT therapy sessions regularly so therapy sessions need to be arranged with a short and dense time formulation. Therefore, the researcher consulted with the therapy supervisor related to the condensation of the therapy meeting schedule by keeping 8 sessions. The implementation of the therapy meeting was divided into three meetings. The meeting consists of three sessions (Session one orientation, automatic awareness and reaction, Session two thoughts in us and session three gathers scattered thoughts) in the second meeting consists of three sessions (Session four recognizes something unpleasant, Session five accepts and releases and session six thoughts are not facts) and in the third meeting consists of two sessions, namely session seven how I care about myself to organize and develop skills and the eight evaluation sessions).

In this study, at the beginning, some participants also had limited access to be able to participate in this MBCT therapy program. In addition to time, the accommodation and media used really need adjustment in order to better reach the limited access they face. The small thing that they hope for is how this program can provide access to media that helps them to continue to participate in the program without having to change places because they have to be attached and have a busy schedule in taking care of their children who have PJB. This condition is similar to that stated in the research of Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). That not all mothers have the natural convenience of participating in the MBCT program, especially if they have to leave their children or have to move places where at the same time they are overwhelmed by the busy treatment schedule and routine in parenting children with CHD. So that the ease of the media in accessing the MBCT program can hinder their participation in the MBCT program if at the same time they have other activity schedules.

In this study, some of the mindfulness techniques provided were not easy for participants to do. Based on the results of the interview, there were several participants who felt difficulty doing the mindful sitting technique because it was easy to be distracted by the surrounding environmental situation, other data from the interview also showed that there were participants who complained that they were able to practice mindful walking because there were indeed few activities outside walking alone or when walking more focused on taking care of children. Participants may find it difficult to understand and apply these techniques, especially if they are unfamiliar with the concept of mindfulness. Indeed, ideally, mindfulness techniques require time and practice to master. So that this technique must be done routinely and not only in eight sessions but needs to be repeated until participants can proficiently master the technique.

In general, research on the provision of Mindfulness-Based Cognitive Therapy (MBCT) to reduce Parenting Stress in parents who have Congenital Heart Disease (CHD) has a positive impact on reducing the level of Parenting Stress.

However, in this researcher, there are several obstacles, including the statistic difference in PSI scores experienced by the two research groups is felt to be less strong, showing the influence of the intervention. This is because the results of statistical tests in the study are considered weak due to the lack of research samples, which only involved three respondents in each group. If it is associated with the MBCT implementation process, considering that this MBCT equips individuals with mindfulness techniques so that intensive practice is needed, therefore it may not be enough if only 1 therapy is done. The administration of therapy more than once so that the effectiveness is more measurable and proportionate in this case, namely in mothers, it is common to apply it in daily life.

However, in terms of quantitative numbers, there was a decrease in the parenting stress scores of participants in the experiential group from before the intervention and after the intervention. This is evidenced by the decrease in the group given MBCT intervention treatment where the Parenting Stress Index (PSI) score after the treatment decreased from 111.33 to 99.67. Meanwhile, in the control group (the group that was not given MBCT), the PSI score did not change, which was originally 108.33 to 108.00. In this study, qualitatively, there was also a change in thoughts and behaviors in the participle after obtaining MBCT. The participants felt they could consciously feel and understand the inner processes that occurred when they began to feel depressed by the process of raising their children who had congenital heart disease. In addition, they can also appreciate themselves more and every moment in raising their children

CONCLUSION

Based on the results of the analysis of the research data that has been obtained, it can be concluded that MBCT is proven to reduce parenting stress experienced by mothers who have children with congenital heart disease. MBCT can reduce parenting stress in mothers who have children with congenital heart disease through mechanisms to improve mindfulness, better emotional regulation, reduction of ruminative thoughts, and improvement of coping skills. This shows that MBCT not only reduces parenting stress but also improves the quality of life and overall mental health for mothers in parenting situations who have CHD.

MBCT is an intervention that combines Mindfulness, cognitive and behavioral therapy. Although this study shows that MBCT can reduce parenting stress, it is not known which component of MBCT has a strong influence in reducing parenting stress or whether the practice of MBCT as a unit is more effective in reducing parenting stress. The reduction in parenting stress experienced by the study participants after participating in the MBCT intervention for 8 sessions in this study looked quite satisfactory. However, this study did not further examine whether the reduction in parenting stress persisted after the study was completed and had a long-term effect.

The main obstacles in the application of MBCT to reduce parenting stress in parents who have children with CHD in this study include time limitations, limited access of participants to the MBCT program, and difficulties in understanding and applying certain mindfulness techniques.

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