Online Cbt and Elip Effectiveness Against The Degree of Post Partum Blues in Madura Urban

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Abstract. A preliminary study in February 2020 in northern Surabaya explained that 81% of post partum mothers experienced post partum blues. This condition has an impact on increasing the morbidity and mortality rates for mothers and newborns. This research to aim to know differences between the CBT and ELIP methods on the degree of post partum blues in the urban Madurese in Surabaya. Type of research is quantitative with a non equivalent control group with experimental approach. The population was 80 postpartum mothers. Sampling used a total sampling of 40 as pre and post CBT groups and 40 as pre and post ELIP groups. Instrument used EPDS through online screening, while CBT and ELIP were carried out through online web Analysis test used pair t test and independent t test with p< 0.05. Result and implication has showing that are differences in the pre and post groups in each group of CBT of 22.87 and ELIP of 22.95, while independent t test has obtaine p = 0.81 it is mean that there is not differences in both CBT and ELIP to reducing the degree of post partum blues.

Keywords: CBT, ELIP, Online, Post partum Blue

1 Introduction

The post partum period is a critical period for a woman because she enters the role adaptation from individual roles to mother roles, which is often marked by emotional changes, changes in self-image and changes in feelings. Adaptation to these changes triggers the post partum blues. Post partum blues incidents have been reported since the late 19th century. These symptoms appear on the first day and peak on days three to five postpartum with time periods varying from a few hours to several days. The exact cause of the post partum blues is not yet known, but several studies suggest that the post partum blues is influenced by hormonal changes, family support, maternal coping mechanisms, and society.

Globally, the prevalence of post partum blues reaches 20% of all mothers giving birth. In Asia, the prevalence has reached 26% -85% since 2003 and has increased every year by 2-10%, while in Indonesia the prevalence has reached 50% -70% with varying symptoms. A case study conducted in February 2020 to March 2020 in the city of Surabaya found that 25 out of 33 post partum mothers experienced post partum syndrome symptoms such as fatigue, unable to sleep well, lazy to eat, lazy to breastfeed their babies, feeling alone, often dizzy, often worry about something that is not certain, and think that the baby is an obstacle and a burden in their daily
activities. Until now, the post partum blues management has not received special attention. This is due to the mother's ignorance of her condition and not expressing complaints to both her family and health workers. This condition allows for post partum depression. Cognitive Behavior Therapy (CBT) is the management of various forms of non-pharmacological psychological problems that involve thoughts and individual behavior. The elements of CBT include the subconscious mind, mediating thoughts, changing thoughts, changing behavior. Exercise Life Style Program Intervention (ELIP) is a form of lifestyle exercise program conducted by homogeneous groups with one tutor. Through this program all members can create a lifestyle exercise program together.

During this pandemic, screening, CBT and ELIP were carried out via the online web on the nifascare.com application to break the chain of transmission of covid 19. Based on the above background, the researchers are interested in examining the effectiveness of the online CBT and ELIP methods in reducing the symptoms of post partum blues, then they are used as study material in providing care for the post partum blues, especially for the Madurese ethnic group.

2 Research Methods

This type of research is quantitative with a non-equivalent control group desaign experimental approach. A population of 80 postpartum mothers in the work area of PMB Mei Surabaya Utara period April to June 2020 Sampling using total sampling with the inclusion criteria for third to seventh day postpartum mothers, primiparous, multiparous, normal delivery, screened with EPDS with a score of > 10 via online Madurese urban screening for more than two years. Sampling was divided into 40 groups of pre and post CBT and 40 groups of ELIP pre and post test. The instrument uses the Edinburgh Post Partum Depression Scalae (EPDS). Meanwhile, CBT and ELIP are conducted through online web.

The normality test used the Shapiro Wilk test with p > 0.05, while the analysis test used the paires t test and the independent t test with p <0.05.

3 Research Result

Frequency distribution

Table 1 Frequency distribution of pre and post CBT and ELIP degrees. Table 1 explains that 100% of respondents experienced post partum blues at a severe level in both the CBT and ELIP groups, marked by reduced concentration, unable to sleep well, irritability, lazy breastfeeding, extreme fatigue, frequent dizziness that did not go away after resting.

Table 1 frequency distribution of post partum degrees before given the method

| Post partum blues level | n  | Frekuensi  | %   |
|-------------------------|----|------------|-----|
| CBT pre                 | 40 | Weight = 40 | 100 |
| ELIP pre                | 40 | Weight = 40 | 100 |

Respondent Characteristics

Table 2 describes that the parity of the respondents was mostly primapara, namely 73.8% and 26.3% with multiparity parity. Primipara tends to experience higher post partum blues than
multiparous because of lack of experience in adapting to their conditions. Most of the respondents were on the 3rd day of the puerperium at 31.3% and on the 4th day it was 26.3% while the 5th day was 15%. This suggests that the post partum blues begins on day 3 - 5 and peaks until day 3 post partum.

Table 2 Respondent Characteristics

| Responden | Frekwensi | %   |
|-----------|-----------|-----|
| Primipara | 59        | 73.8|
| Multipara | 21        | 26.3|
| Day of post partum |          |     |
| Day 3     | 25        | 31.3|
| Day 4     | 21        | 26.3|
| Day 5     | 12        | 15.0|
| Day 6     | 6         | 7.5 |
| Day 7     | 5         | 6.3 |

Homogeneity and normality test

Table 3 describes the results of the homogeneity test with the Shapiro Wilk test and the Kolmogorov-Smirnov normality test. These results were obtained in the pre and post test CBT Kolmogorov-Smirnov test of 0.14 and the Shapiro Wilk test of 0.83, while in the ELIP pre and post test groups the Kolmogorov-Smirnov test results were 0.20 and the Shapiro Wilk test was 0.10. This figure illustrates that the pre and post test and ELIP pre and post groups have a homogeneity of variants where p > 0.05 so that the paired t test and independent t test can be carried out.

Table 3 Homogeneity and normality test results

| Group | Shapiro wilk | Kolmogorov Smirnov |
|-------|--------------|--------------------|
| CBT   | 0.83         | 0.14               |
| ELIP  | 0.10         | 0.20               |

Paired t test

Table 4 explains that there are differences between the pre and post groups in each CBT and ELIP groups. In the CBT group the mean pre value was 28.55 and the post value was 5.68, which means that there was a decrease in the degree of post partum blues by 22.87. Whereas in the ELIP group the mean pre test was 28.53 and the post test was 5.58 which explained that there was a decrease in the degree of post partum blues by 22.95. The correlation coefficient value in the CBT group was -0.18 with p = 0.91 and ELIP was -0.26 with p = 0.97 (p > 0.05), which means that there was no relationship between the pre and post test respondents in both groups, while the results of the paired t test CBT and ELIP obtained p = 0.001 in each group, which means that there is an effect of online CBT and ELIP methods on the pre and post

Table 4 The results of the CBT and ELIP difference test

| Pos Partum Blues | Equality of variance | Sig 2-tailed | Mean deference |
|------------------|----------------------|--------------|---------------|
| CBT              | Sig                  | Sig 2-tailed | Mean          |
4 Discussion

Cognitive Behavior Therapy (CBT) with Post Partum Blues

Based on the results of the paired t test, the correlation coefficient was -0.18 with p = 0.001 (p <0.05), which means that there is a significant effect on the degree of post partum blues after being given CBT treatment.

CBT with Subconscious Mind

Post partum blues in Madurese ethnicity is often characterized by negative thoughts, including worrying about not being able to care for their babies, not having enough milk, insufficient nutrition for themselves and their babies, childbirth wounds that do not heal quickly, newborns, care after childbirth and the high adherence to the values of the Madurese ethnic beliefs towards their ancestral culture, such as restrictions on drinking water, prohibited from eating chicken, eggs, green vegetables because they think these foods inhibit the healing of labor wounds and result in a rancid smell on the baby.

CBT is a method that focuses on the subconscious mind and feelings of the respondent. Through CBT, individuals are directed so that the individual's subconscious mind leads to negative thoughts by building positive thoughts and understanding their helplessness. The process of transferring subconscious minds is carried out using interpersonal communication strategies so that individuals are stimulated to immediately realize the problem, build their own strength and adjust their emotional level. With the above opinion, the research of Muresan-Madar & Baban (2015) (2) explains that in addition to changing mindsets, this method can increase self-confidence both from knowledge and from culture. Meanwhile, according to O'Mahen et al (2012) (3) that CBT method is able to influence the way of thinking, emotionally and individual behavior.

CBT with behavior

The general description of Madurese behavior during the post partum phase includes feeling physical exhaustion, difficulty sleeping, lazy eating, not leaving the house before 40 days. Physical fatigue and difficulty sleeping due to additional activities such as waking up at night to breastfeed the baby and still working as a housewife during the day, but on the other hand, the mother experiences physical weakness because the labor process is continued with the postpartum adaptation phase. This condition causes respondents to experience a dilemma, thus triggering the symptoms of maternity blues. CBT is an effective method for building strategies to improve maladaptive behavior. Through the behavior strategy approach, which is implemented in the form of priority activities, it can give individuals the opportunity to arrange, select activities that are felt to be done. This approach is also a social patronage that comes from the same group towards individuals, so that individuals do not feel lonely in carrying out the role of mother. This opinion is supported by research by Goodmen, et al in 2011 which explains that behavior strategy is an approach that can stimulate individuals to find solutions to their problems according to individual capacity (4) CBT with self-conflict management. Self-conflict management is defined as the synchronization of all aspects of behavior and attitudes towards interpersonal conflicts so as to produce the desired resolution and solution (5). Madurese post partum mothers tend not to reveal interpersonal conflicts to other people or their families.
because they are worried that they are considered unable to carry out the role of mother and wife (6). One approach to CBT is specific skill training, which is a compilation of interpersonal communication methods and self-efficacy (5). Interpersonal communication is able to activate the neurotransmitter dopamine so that individuals feel emotional stability, calmness (7). This condition stimulates adaptive behavior so that the mother can determine and evaluate the choice of behavior that has been programmed. Meanwhile, the self-efficacy approach promotes control assistance and motivation for mothers to better understand and enjoy the role of mother. The target of this approach is to provide emotional support so that self-conflict in the mother can be managed properly (8). This opinion is in line with the research of O’Meheen et al., (2015) (3) which results that interpersonal communication and self-efficacy is an approach that can change the cognitive, emotional area of an individual so as to improve behavior and minimize individual conflict (9). The above opinion is also supported by the results of Dennis & Cindy Lee's research in 2014 (10) which states that individual conflicts can be reduced by a psychosocial approach that involves other people, family, and peers (10).

**CBT with Coping Mechanism**

Mechanism coping means a process of solving individual problems as well as self-defense to adapt to all changes (11). The results of the interview showed that most respondents felt that during the 7 days after giving birth they often experienced anxiety, anxiety, self-isolation, fatigue, feeling alone. To eliminate this problem, the respondents cried themselves, were angry with themselves, were angry with the environment, were angry with their babies. Most of the coping mechanisms in respondents are in the domain of confrontation mechanisms. Practical support and emotional support approaches to CBT are provided by a homogeneous group of mothers which aims to provide support to every mother who experiences symptoms of maternity blues. This implementation takes the form of providing mutual motivation, determining goals for thoughts and adaptive behavior, strengthening the role of mothers. This process can change thought patterns, perceptions and behaviors which in turn change negative coping mechanisms into positive ones. This opinion is supported by research by Kao et al. In 2015, which shows that a practical support approach can increase individual self-confidence and confidence so that they are able to determine activities according to their abilities (12). Meanwhile, Ripley et al's research in 2018 stated that the emotional support provided by a homogeneous group was able to reduce anxiety levels, manage conflict and achieve the success goals of activity programs in the group (13).

**Exercise Life Style Program (ELIP) with Post Partum Blues**

ELIP is a life style training program that aims to change perceptions and behavior. Based on the results of the analysis, it was found that there was a significant mean difference between the treatment and control groups. ELIP is a healthy lifestyle exercise program whichcontains several programs including postpartum activities, intensive care puerperium, newborn care, postpartum nutrition and stress management. Implementation is carried out jointly between the facilitators and other respondents. This program is carried out for 4 weeks with details of 12 face-to-face meetings for 1.5 hours. This program triggers mutual motivation among respondents, controls activities, improves coping mechanisms and increases motherhood and self-efficacy. This opinion is in line with the research of Motolla et al. In 2011 which stated that a lifestyle exercise program was able to stimulate the formation of capacity building and group behavior change (14). Asci's research in 2016 concluded that lifestyle program training can change the perceptual, cognitive and behavioral domains of a group so that changes occur together (15).
CBT with ELIP.

The results of the analysis showed that there was a significant difference in the mean between the control and treatment groups, both using CBT and ELIP. This condition is caused because the two methods are psychotherapies that involve social support. In line with this opinion, among others, is the research of O'Mahen (2012) which states that one of the successes of the CBT method is social support that involves various individuals, families and societies (3). In line with the opinion above, also carried out by Carter et al in 2010 which stated that the interpersonal approach of the community was more effective when compared to the interpersonal approach given by a health facilitator or therapist (8). However, CBT is more effectively implemented in Madurese post partum blues mothers because CBT does not only assess social support but also studies cultural support and beliefs. This opinion is in line with O'Mahen's research in 2013 that CBT does not only focus on solving psychological problems due to conditions of changes in metabolism, hormonal, physical changes but also changes in the environment, including culture (9).

5 Conclusions and Recommendations

Based on the results of the pair test, it was found that there was a significant difference in the mean between the pre and post groups, both the CBT and ELIP methods. CBT is one of the psychotherapies which consists of behavior strategy, communication skills, coping mechanism, self efficacy. Several things that were studied in the implementation of CBT in this study include self control, belief, culture, mother's role, and support.

ELIP is a form of lifestyle training in the post partum blues of the Madurese tribe which is arranged together with a program that has been agreed by the group so that group participants can play a role in controlling each other, motivating, reminding so that social support is achieved, changes in perceptions, changes in thought patterns and changes in behavior.

This study has limitations including a very limited study of the health culture of the Madurese tribe, a limited number of respondents and the limitations of researchers to monitor the success of the methods that have been applied. CBT and ELIP are methods for reducing post partum blues symptoms. Each method has effectiveness, but CBT is more effective for the Madurese.

Aknowlagement

Thanks to Ristekdikti for providing financial support in the implementation of this research CBT dengan ELIP.

References

[1] Zakiyah. Pengaruh dan efektifitas cognitif behavioral therapy ( CBT ) berbasis komputer terhadap klien cemas dan depresi. E-Jurnal Widya Kesehat dan Lingkingan. 2014;1(1):75–80.

[2] Muresan-Madar A, Baban A. THE DEVELOPMENT AND PILOTING OF A CBT GROUP PROGRAM FOR POSTPARTUM DEPRESSION: Engine Orange, SHSU’s
library search engine! J Evidence-Based Psychother [Internet]. 2015;15(1):51–64. Available from: http://eds.b.ebscohost.com.ezproxy.shsu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=b086bc66-396a-447c-9f93-f845a5d7d08e%40sessionmgr120

[3] O’Mahen H, Fedock G, Henshaw E, Himle JA, Forman J, Flynn HA. Modifying CBT for Perinatal Depression: What Do Women Want?. A Qualitative Study. Cogn Behav Pract. 2012;19(2):359–71.

[4] Goodman JH, Santangelo G. Group treatment for postpartum depression: A systematic review. Arch Womens Ment Health. 2011;14(4):277–93.

[5] Michel J. Evidence-Based Practice of Cognitive-Behavioral Therapy. 2010;(May).

[6] Haryono TJS. Integrasi Etnis Arab dengan Jawa dan Madura di Kampung Ampel Surabaya. BioKultur. 2013;II(1):13–26.

[7] Miniati M, Callari A, Calugi S, Rucci P, Savino M, Mauri M, et al. Interpersonal psychotherapy for postpartum depression: A systematic review. Arch Womens Ment Health. 2014;17(4):257–68.

[8] W. C, S. G, P. R, L.E. R. Conjoint IPT for postpartum depression: literature review and overview of a treatment manual. Am J Psychother. 2010;64(4):373–92.

[9] O’Mahen H, Himle JA, Fedock G, Henshaw E, Flynn H. A pilot randomized controlled trial of cognitive behavioral therapy for perinatal depression adapted for women with low incomes. Depress Anxiety. 2013;30(7):679–87.

[10] Dennis CL. Psychosocial interventions for the treatment of perinatal depression. Best Pract Res Clin Obstet Gynaecol [Internet]. 2014;28(1):97–111. Available from: http://dx.doi.org/10.1016/j.bpobgyn.2013.08.008

[11] Upadhyay RP, Chowdhury R, Salehi A, Sarkar K, Singh SK, Sinha B, et al. Postpartum depression in india: A systematic review and meta-analysis. Bull World Health Organ. 2017;95(10):706–17.

[12] Kao JC, Johnson JE, Todorova R, Zlotnick C. The positive effect of a group intervention to reduce postpartum depression on breastfeeding outcomes in low-income women. Int J Group Psychother. 2015;65(3):445–58.

[13] Ripley JS, Worthington EL, Garthe RC, Davis DE, Hook JN, Reid CA, et al. Trait Forgiveness and Dyadic Adjustment Predict Postnatal Depression. J Child Fam Stud [Internet]. 2018;27(7):2185–92. Available from: http://dx.doi.org/10.1007/s10826-018-1053-0

[14] Mottola MF, Sopper MM, Doxtator L, Big-Canoe K, Prapavessis H, Harris S, et al. Capacity-building and participatory research development of a community-based Nutrition and Exercise Lifestyle Intervention Program (NELIP) for pregnant and postpartum Aboriginal women: Information gathered from talking circles. Int Indig Policy J. 2011;2(1).

[15] Aşçı Ö, Rathfisch G. Effect of lifestyle interventions of pregnant women on their dietary habits, lifestyle behaviors, and weight gain: a randomized controlled trial. J Health Popul Nutr. 2016;35:7.