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Can Dysfunctional Thought Record Reduce Postpartum Depression?

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Abstract. The purpose of this article is to identify the level of post-partum depression and to study the effectiveness of Dysfunctional Thought Record (DTR) technique in helping a post-partum depression woman. This is a single case study. The subject was selected using purposive sampling method. Edinburgh Postnatal Depression Scale (EPDS) and Beck Depression Inventory (BDI) are used to measure the depression level. The DTR technique is applied through the six counselling sessions. The result of pre-test and post-test reported that the level of post-partum depression is decreased. The EPDS score is decreased from 20 (pre-test) to 7 (post-test 3) and from possible post-partum depression to normal. The BDI score is reduced from 28 (pre-test) to 6 (post-test 3) and the depression level has improved from moderate to normal.

Keywords: dysfunctional thought record, post-partum depression, woman

INTRODUCTION

Depression is a suffering mental torture and predicts to be the second most disabling condition in the world by 2020, after heart disease (World Health Organization, 2012). Depression affects all ages but it is two to three times more common in women. Most life experiences attributed to depression are unique to women, such as post-partum changes, infertility, and hormonal fluctuation.

Postpartum depression (PPD) can influence low self-esteem, reduce confidence in mothering abilities, decrease attachment and bonding between mother and infant. PPD affects 10–20 percent of mothers in general (Appleby et.al., 1997; O'Hara & Swain, 1996; Ng, 2014). Thus, PPD gained special attention due to women's vulnerability during childbearing years that is highly associated with suicide, and its negative impacts on women, child, family and society (Arifin & Roshida, 2016).

The prevalence rate of PPD in a hospital setting was 6.8 percent (Zainal et.al., 2012). PPD usually begins within the first 6 weeks following delivery, and most cases require treatment by a health professional (Robertson et.al., 2004; Brown & Lumley, 2000). Despite the well-documented risk factors and health consequences of PPD, it often remains undetected and untreated (Dennis & Chung, 2006). Most women recover within 6 months, but others continue to show evidence of subclinical depressive symptoms for up to 2 years (Campbell et.al., 1992). Potentially serious consequences include suicide, marital conflict, disturbance in mother–child relationships, and later problems in child development (Murray & Cooper, 1997). The negative impacts are significant and prolonged if left untreated.

Deva (2006) argued that the development of psychotropic medication in Malaysia has tended to ignore psychological in treating depression. However, a high proportion of women are unwilling to take medication due to concerns over side effects and breast-feeding (Appleby et.al., 1997). Therefore, psychological intervention is more appropriate for PPD women. Nevertheless, majority of the Malaysian studies are conducted from pharmacotherapy perspectives. In fact, there is a serious shortage of documented empirical research on the experience of PPD in Malaysia. The existing literature on PPD in Malaysia is limited to quantitative description, but not exploring the individual experience of PPD and the nature of its severity, as most of the studies only reported the total questionnaires score (Arifin & Roshaidai, 2016). The most widely accessible therapy for depression is antidepressant medication but there are problems associated with this approach in the prenatal period: not least the fact that a high proportion of women are unwilling to take medication, often with concerns over side effects and breast-feeding (Appleby et.al., 1997). In this sense, most PPD women preferred to have communication with someone such as counsellor or psychologist who was non-judgmental (Dennis & Chung-Lee, 2006).

Literatures showed that Cognitive Behaviour Therapy (CBT) is one of the most famous approaches used to treat depression (Dobson, 1989; World Health Organization, 2012). CBT is found to be as effective as well administered pharmacotherapy as a treatment for depression; some meta-analytic reviews suggest CBT is slightly better than antidepressant medications in alleviating individuals' depressive symptoms (Coull & Morris, 2011). Beck et.al (1979) mentioned that once the depressed patient understand the definition of cognition and recognizes the presence of automatic thought and images, the therapist assigns a specific project designed to delineate his dysfunctional cognition. In view of the efficacy of CBT in treating depression, this study will focus on the applications of Dysfunctional Thought Record (DTR), one of CBT technique on a PPD woman. The client is instructed to "catch" as many cognitions as he can and record in writing. DTR is used to record. This is to note changes in cognitive distortions of a depressed subject over time (Tate 2006). Therefore, the aim of this study is to identify level of PPD and effectiveness of Dysfunctional Thought Record (DTR) technique in helping a PPD woman.

METHODOLOGY

The study is a single case study. The research design that is used in this case study is the AB design. The 'A' is the phase referred as the baseline whereby it involves a series or pattern of observation without involving any interaction. The 'B' is the intervention phase where it involves intervention and the treatment plan being brought into section. During the baseline period, the participant will be given an inventory for at least 3 times to get the score before the intervention is brought in. The treatment plan will be proceed only after getting consistent result from the participant (De-Oliveira IR, 2011). The sample was selected through purposive sampling method. The subject was referred by a Non-governmental Organization to provide counselling supports due to post-partum depression. An intake evaluation was conducted to ensure that selection criteria are met. The specific selection criteria are; the Edinburg Postnatal Depression Scale (EPDS) must 10 or greater (possible PPD) and Beck Depression Inventory (BDI) is within 21 to 30 (moderate depression). EPDS is a 10-item postnatal depression scale. BDI is a 21 item to identify PPD level of the subject. The research design includes six counselling sessions DTR as an intervention to reduce depression. Burns (1999) introduces the Daily Record of Dysfunctional Thoughts to help client take action over procrastination and overcome what he calls "doing nothingism". DTR was modified by De-Oliveira IR (2011) from a five column worksheet to seven column worksheet with new name as Trial-Based Thought Record (TBTR). Jager-Hyman et.al. (2014) found that the importance of directly targeting cognitive distortions when treating individuals at risk for suicide. Each of the counselling session with the sample was audio-taped with the consent of the sample. The purpose of the audio-taped session was for the session to be transcribed the verbatim of each session as accurate as possible by replying and typing it out. The

counselling sessions were conducted mainly in English language.

Conceptualization of Case

The subject is a 33 years old Chinese housewife, Buddhist, stays in Penang Island. She worked as a publication editor before she quitted her job when her elder son was one year old. She married to a 49 years old paediatrician. She has two sons (5 and 1 years old). She is the third child in her family with one brother 2 sister. Her father passed away when she was 7 years old, her mother worked as a confinement lady to support the whole family including her grandparents. The subject indicated that she has no medical problem except sinus. Psychologically, the subject expressed that her mental health was good, happy and helpful person. She has no history of depression and no family history of depression as well. She is proactive in whatever she pursued in the past.

Subject's presenting issue is PPD. Since the delivery of her second son four months ago, she was so sad and helpless. She experienced a traumatic delivery experience. She opted for natural birth, unfortunately baby's water bag burst with no contraction, so end up caesarean. The whole process was full of fear and worries. Her confinement lady, recommended by her mother in laws was inexperience and unhelpful. In addition, the baby doesn't like her breastfeeding that made her feel she is a failed mother. Her husband, who is a paediatrician, explained and comforted her that this is normal in baby due to lactose intolerance. Nevertheless, she cannot accept it. She cries frequently, depressed, lost, frustrated and angry with self and others. She dislikes this "self" which is so different from the past. Client shared that she has thrown the baby to the bed once and feel suicidal when her emotion is overwhelmed.

Procedure of Treatment

Session 1	Building rapport Identification of subject 's past coping strategies	Pre-test 1
Session 2	Explore problem and goal setting Educating subject about Cognitive Model Assigning homework- identify distorted thought	Post-test 1
Session 3	Exploration of subject 's Depression Reviewing the homework Educating cognitive conceptualization diagram to identify automatic thoughts Explain the purpose of DTR Assigning homework- DTR	
Session 4	Reviewing DTR homework Fully focus on identify cognitive distortion Help subject challenge and restructure the cognition Assigning homework-DTR	Post-test 2
Session 5	Reviewing DTR homework Practicing on restructuring the cognition forming new effective thoughts and feelings Assigning homework-DTR	
Session 6	Reviewing DTR homework Evaluation subject 's progress Preparation of action plan after therapy Termination	Post-test 3

Figure 3.2 Treatment Procedures

FINDING AND DISCUSSION

Levels of Post-partum Depression

Table 1: Edinburgh Postnatal Depression Scale (EPDS) Pre and Post-test Results

EPDS	Scores	Decrease in scores	Decrease Percentage	Depression level
Pre-test	20			Possible Post-partum Depression
Post 1	17	3	10%	Possible Post-partum Depression
Post 2	11	6	20%	Possible Post-partum Depression
Post 3	7	4	13%	No Post-partum Depresion

Edinburgh Postnatal Depression Scale total scores 30
Cut-off score for possible depression is above 10
Overall decrease in percentage 43%

The finding has demonstrated that the DTR technique as applied in the counselling sessions has successfully reduced the level of PPD. All the post-tests showed that the PPD level have reduced gradually. Table 1 shows the percentage differences between Pre and Post-tests results. The possible PPD level has decreased and at the end of the sixth session (Post 3), which shows no PPD. The EPDS score during the pre-test was 20, has decreased to 17 (Post 1), 11 (Post 2) and 7 (Post 3). The PPD level has reduced by 43 percent after the six sessions of counselling. There is a significant decreased of 20 percent in the PPD level from the Post-test 1 to Post-test 2, where the DTR intervention started.

Table 2: Beck Depression Inventory (BDI) Pre-test and Post-test Results

BDI	Scores	Decrease in scores	Decrease Percentage	Depression level
Pre-test	28			Moderate depression
Post 1	23	5	8%	Moderate depression
Post 2	8	15	24%	Normal
Post 3	6	2	3%	Normal

Beck Depression Inventory total scores
Overall decrease in percentage 35%

The decrease in PPD level is further supported by BDI inventory. Table 2 shows during the pre-test subject experience moderate depression. However, after the counselling intervention, subject's depression level is reduced to normal. The BDI score during the pre-test was 28 and slightly decreased to 23 (Post 1). In Post-test 2, the score is decreased to 8 and later on dropped to 6 in Post-test 3. Based on the above result, the PPD level has reduced by 35 percent after the six sessions of counselling intervention. There is a significant decreased of 24 percent in the PPD level from the Post 1 to Post 2 where the DTR intervention started. Thus, we can conclude that subject's depression level is back to normal state after the counselling sessions.

Although the DTR technique was introduced only in the third session, the 10 percent decreased during the Post-test 1 is mainly due to the trust therapeutic relationship and a safe avenue for subject to catharsis. This is supported by subject's feedack at the end of the first session where she felt she is not alone. Subject believed that someone is there who care for her (Session 1, Ref. no. 124). This finding implied the therapeutic relationship was a very core element in counselling process,

in particular in CBT approach (Beck & Alford, 2009; Corey & Corey, 2015). In addition, Lambert (1992) proposed that common factors contribute to the therapeutic process of change are client factor (40 percent), therapeutic relationship (30 percent), hope and expectancy (15 percent), and model and techniques (15 percent). During the sessions, subject showed her eagerness for change (Session 1: ref no 128), she trusted counsellor and have confidence with the DTR technique (Session 3: ref no 126), the DTR technique bring hope and expectancy whereby subject felt empowered that she can make a difference in her life (Session 4: ref no 16). All these factors have contributed to the successful of the counselling intervention on the subject.

During the post-test 3, there is a further reduction of 13 percent in depression level with the continual practicing and homework; identifying and challenging the distorted thoughts and restructure the thought to adaptive thoughts. Overall, the EPDS scores have decreased the PPD level to normal, which is a remarkable improvement. The finding of this research in terms of level of PPD is in consistent with past research by many researchers such as Stewart, et.al (2003), Jager-Hyman et.al. (2014) and Fitelson, et.al., (2011).

The Effectiveness of DTR

The effectiveness of DTR technique can be further illustrated based on the outcomes from the transcript data. The discussion in this section will be based on the issues of PPD that has been highlighted by the subject in the case of conceptualization. These issues can be categorized into three aspects; cognition, emotion and behavioural. In terms of cognition signs, subject showed her suicidal thought, indecisiveness, self-criticalness with cognitive distortion of maximization, ought/should, labelling and catastrophizing.

Subject regarded herself as has high self-expectation (Session 1: ref no 84:), she is a perfectionist, therefore the other signals in terms of cognition all mainly stem from her displacing attitude of being a perfectionist. This perfectionist core belief tends to make subject believes that she must achieve success in whatever she plans. This generated negative automatic thought of ought to/ should. When she is unable to achieve her plan, her self-critical belief will criticize and labelling her as a failure. This finding is in tandem with Moon & Cho (2014). Moon & Cho (2014) noted that perfectionist attitudes may lead to higher efficacy to always be in control, therefore always finding ways and means to reach goals and if one fails, therefore the negativity would take over the cognition and lead to aggressive tendencies. Below are excerpts derived from transcribed data of the counselling sessions that portrayed the effectiveness DTR in terms of term of cognition aspect;

> Subject:…with this diagram and explanation, I can **see the picture clearer**…otherwise I will stuck at my own thinking…with this help me analyse and make better judgement. (Session 2: ref no 117)

> Subject: …I am **in control** of the situation, I can control and make it better. (Session 3: ref no 126)

> Subject: …**I shouldn't let the distorted thinking to worsen my situation**…from what you share with me just now, I don't really think your way. So I make the situation worse… (Session 5: ref no 84)

> Subject: Not..not that drain, not that frustrated, more towards **acceptance**, **positive thinking**..
> (Session 3: ref no 94)

> Subject: …I am able to take it **more positively**…
> (Session 4: ref no 56)

> Subject: …I **failed as a mom**, I feel the guilty, because I can't provide him the best, even though I have tried (Session 2: ref no 76)

> Subject: In the past few months, the **suicidal thoughts** may flash in my mind, so I stopped myself to go near the balcony or window. (Session 6: ref no 116)

> Subject: **I am not a good mum**
> (Session 4: ref no 64)

> Subject: …, I shouldn't **maximize** the problem, I shouldn't enlarge the scope… (Session 3: ref no 34)

> Subject: …he **should**, he **must**, the thought automatically come to my mind. (Session 3: ref no 38)

> Subject: …I shouldn't **label** him, he is unique, he may have certain characteristics, I should respect him… (Session 3: ref no 90)

> Subject: As you said, I **catastrophizing** the situation..
> (Session 5: ref no 78)

> Subject: …I am able to stand in front of the balcony which **I was so afraid of in the past two three months**. Now, I can bring the baby to the balcony…(suicidal thought).
> (Session 6: ref no 114)

From the excerpts, the DTR counselling intervention has brought a lot of positive effects to the subject. The subject was able to control her difficult situation and her family members feel proud of her changes. Subject's helplessness thought has reduced from 10 to 3 or 4 with no suicidal thought anymore. Based on the DTR technique, subject felt she failed as a mother because she is unable to provide the best for her baby (refer to breast-milk). This feeling is considered normal (Robertson et.al., 2004). Robertson et.al. (2004) further emphasized that some women worry excessively about the baby's health or feeding habits and see themselves as a bad mother. This perception is a kind of cognitive distortion. With the DTR intervention, it addressed subject's unrealistic expectations regarding the infant and her new self.

In due to lack of coping strategies, subject cried when she felt helplessness (Session 1: ref no 80). The negative automatic thought resulted behavioural signs such as crying, throwing baby to bed, and scolding the husband and the elder son. This behavioural signs is apparent to the PPD patients (Horowitz & Goodman, 2005). The excerpts below portrayed subject's behavioural signs ;

> Subject: … I did **throw my baby to the bed once** only when I was so angry… (Session 1: ref no 16)

> Subject: …I try to ask him to be patient, I will attend to him shortly…he asked again…end up …**I scold him,** I raise my voice… (Session 1: ref no 42)

> Subject: …it even triggered me like, okay…**I would dump him, or I would throw him on the floor** if he

keep on crying… (Session 2: ref no 77)

Subject: …in the past two months **I cried very frequently** whenever anyone,... mention about breast-milk… (Session 2: ref no 76)

With the application of DTR technique, subject enables to be aware of her negative automatic thoughts that influence her behaviour. In term of behavioural changes, subject mentioned that she has able to enjoy things (Session 6: ref no 18), her relationship with her husband and her elder son has improved (Session 6: ref no 20) and she feel more relax (Session 6: ref no 12).

The research findings demonstrated that DTR technique based on cognitive behavioural therapy (CBT) as a whole, managed to reduce PPD in the subject. Through the counselling sessions, subject learned to be the master and detective of her own thoughts. The findings of this research in terms of PPD is in consistent with the past research (Stewart, et.al., 2003; Dennis & Hodnett, 2007; Fitelson et.al., 2011; Para, 2008).

CONCLUSION

PPD is a rare, but extremely serious disorder that can develop after childbirth, characterized by negative automatic thought and loss of contact with reality. Because of the high risk for suicide or infanticide, proper treatment is crucial to save both mother and baby. The research findings demonstrated that DTR has improved the cognitive, behavioural and emotions of the subject in this study. In addition, as pharmacotherapy which is still dominated in the treatment of depression, the treatment efficacy of DTR technique would bring immediate positive impacts on post-partum women through counselling intervention. The study provides insights and deeper understanding on assisting post-partum women in coping with the increase of responsibilities and roles at critical period.

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