

October 2018

MATERNAL WELL-BEING THERAPY IN TREATING DEPRESSION IN JOHOR CITY OF MALAYSIA

Akeel Khan

Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia, draqeelkhan@gmail.com

Deviga Marappan

Department of Social Education, Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia, add6za1@gmail.com

Adibah Abdul Latif

Senior Lecturer, Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia, p-adiba@utm.my

Follow this and additional works at: <https://digitalcommons.bau.edu.lb/hwbjournal>



Part of the [Architecture Commons](#), [Business Commons](#), [Life Sciences Commons](#), and the [Medicine and Health Sciences Commons](#)

Recommended Citation

Khan, Akeel; Marappan, Deviga; and Abdul Latif, Adibah (2018) "MATERNAL WELL-BEING THERAPY IN TREATING DEPRESSION IN JOHOR CITY OF MALAYSIA," *BAU Journal - Health and Wellbeing*. Vol. 1 : Iss. 1 , Article 1.

Available at: <https://digitalcommons.bau.edu.lb/hwbjournal/vol1/iss1/1>

This Article is brought to you for free and open access by Digital Commons @ BAU. It has been accepted for inclusion in BAU Journal - Health and Wellbeing by an authorized editor of Digital Commons @ BAU. For more information, please contact ibtihal@bau.edu.lb.

MATERNAL WELL-BEING THERAPY IN TREATING DEPRESSION IN JOHOR CITY OF MALAYSIA

Abstract

Maternal depression during pregnancy appears to be the most common and complicated psychological disorder in the world. Although maternal depression can be treated medically, consumption of antidepressant drugs could leave some kind of negative side effects on mother's body and the baby in the womb. Therefore, the purpose of the current study is to determine the effectiveness of Maternal Well-being Therapy (MWT) in treating women with maternal depression. It is a qualitative study adapting case study research design. From the state of Johor city of Malaysia, four pregnant women who has scored 12 or more with suicidal thoughts symptoms on EPDS are identified and all the other volunteered women are at 3rd Tri-semester of pregnancy during the first session. Instrument such as Edinburg Postnatal Depression Scale (EPDS), Short Form 36-Item Health Survey (SF-36) and Maternal Well-being Therapy (MWT) was administrated in this research. Maternal Well-being Therapy has been very effective in treating women with maternal depression and suicidal thoughts. Results indicates that depression level has decreased from 33.33% to 43.33%, well-being has increased around 36% to 52% and no suicidal thoughts found after the first session of counselling. By the end of third session, all clients were ready for termination of sessions since no depression and suicidal thoughts traced, in which, all the women found to be with good emotional well-being. Maternal Well-being Therapy (MWT) has shown a favourable result in treating woman with maternal depression. In conjunction to this, more research should be done using counselling therapy as a treatment option in treating maternal depression.

Keywords

Maternal Depression; Counselling, Maternal Well-Being Therapy, Well-Being; Suicidal Thoughts

MATERNAL WELL-BEING THERAPY IN TREATING DEPRESSION IN JOHOR CITY OF MALAYSIA

A. KHAN¹, D. MARAPPAN², & A. LATIF³

ABSTRACT

Maternal depression during pregnancy appears to be the most common and complicated psychological disorder in the world. Although maternal depression can be treated medically, consumption of antidepressant drugs could leave some kind of negative side effects on mother's body and the baby in the womb. Therefore, the purpose of the current study is to determine the effectiveness of Maternal Well-being Therapy (MWT) in treating women with maternal depression. It is a qualitative study adapting case study research design. From the state of Johor city of Malaysia, four pregnant women who has scored 12 or more with suicidal thoughts symptoms on EPDS are identified and all the other volunteered women are at 3rd Tri-semester of pregnancy during the first session. Instrument such as Edinburg Postnatal Depression Scale (EPDS), Short Form 36-Item Health Survey (SF-36) and Maternal Well-being Therapy (MWT) was administrated in this research. Maternal Well-being Therapy has been very effective in treating women with maternal depression and suicidal thoughts. Results indicates that depression level has decreased from 33.33% to 43.33%, well-being has increased around 36% to 52% and no suicidal thoughts found after the first session of counselling. By the end of third session, all clients were ready for termination of sessions since no depression and suicidal thoughts traced, in which, all the women found to be with good emotional well-being. Maternal Well-being Therapy (MWT) has shown a favourable result in treating woman with maternal depression. In conjunction to this, more research should be done using counselling therapy as a treatment option in treating maternal depression.

KEYWORDS

Maternal Depression; Counselling, Maternal Well-Being Therapy, Well-Being; Suicidal Thoughts

1. INTRODUCTION

Maternal Depression during pregnancy appears to be the most common and complicated psychological disorder, even though the awareness of maternal depression is improving by time, however for centuries or more the seriousness of maternal depression is often been denied or overlooked (Gordon & Gordon, 1957) . Many still belief that maternal depression is just temporary illness, which will vanish by itself, and no attention or treatment required. Sadly many fail to realise that maternal depression can be injurious to both mother and child and in some serious cases can lead to suicidal thoughts or even suicidal (Rahman, et al., 2013; Almond, 2009). Simultaneously maternal depression

¹ Aqeel Khan

Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia. Email: draqeelkhan@gmail.com

² Deviga A/P Marappan

Department of Social Education, Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia.

³ Adibah Abdul Latif

Senior Lecturer, Faculty of Education, Universiti Teknologi Malaysia (UTM) Malaysia

also can be categorized from mild, moderate, severe and psychotic (Brockington, 2004; Felice, Saliba, Grech & Cox, 2004).

Maternal depression can distresses a pre-natal women with the prevalence rate between 0 to 12% and post-natal women within the duration of one year after child birth by both mild and severe depression (Avalos et al., 2016; Gavin et al., 2005). A review of 143 studies from 40 countries around the world, demonstrated the prevalence rate of maternal depression ranged from 0% to 60% (Halbreich & Karkun, 2006). Besides that, a study conducted in Khayelitsha reported that 39% mothers out of 1062 found to have depressive mood during their pre-natal stage (Hartley, et al., 2011). In Malaysia the prevalence rate of maternal depression do fall on the high side, around 68% of woman has developed suicidal thoughts due to maternal depression (Mustaffa et al., 2014). Women with maternal depression often shadowed by poor well-being (Marappan, Khan, Latif, & Yusoff, 2016), loneliness, restricted physical and social functioning, sadness, anxiety, difficulty in making decision, not resilience, insomnia, neglecting health, overlooking personal hygiene (Moffatt, 2004; Robinson et al., 2001; Whiffen, 2009), forgetting proper diet picking up smoking attitude and drinking alcohol (Da Costa et al., 2000; Rondo et al., 2003; Badr et al., 2005; Berle et al., 2005; Dole et al., 2003), however opposite or obscure results did reported (O'Hara, 2009).

Although maternal depression can be treated medically, consumption of antidepressant drugs by pre-natal and post-natal mothers who are suffering from high level of maternal depression could leave some kind of negative side effects on mother's body, the baby in the womb (Koren, & Nordeng, 2012; Davis, Gawley & Bowen 2012) and worse case in which infant being exposed to antidepressants through breast milk (Berle, & Spigset, 2011; Rai et al., 2013; Byatt, Deligiannidis & Freeman, 2013; Shen et al., 2017; Boukhris, Sheehy, Mottron & Berard, 2016; Huybrechts et al., 2015). Believed that intake of antidepressant during pregnancy can result an autistic child and babies who exposed to anti-depressant via breast milk might suffer from slower brain development (Nulman, et al., 2002)

At the same time leaving maternal depression untreated could lead to harmful effects on both mother and baby as such birth complication, premature baby, low birth weight, increase in risk of pregnancy, insecure attachment, slower fetal development and suicidal thoughts. Thus, any decision on using antidepressants during pre-natal and post-natal stage must be achieved after carefully considering the risk and benefits for the patients (Mitchell et al., 2011; Julien, 2013; Yonkers et al., 2011).

In the process of finding an alternative way in treating maternal depression during pre-natal and post-natal, previous studies found moderate to severe depression, counselling therapies can be just as effective as anti-depressants (Milgrom et al., 2011). Advantage of counselling therapy in treating maternal depression, will not leave any harmful side effects to mother and infant (Sockol, Epperson, & Barber, 2011; Goodman & Santangelo, 2011). In addition counselling therapy focuses more on recovery from maternal depression and, even more importantly, is the prevention of future episodes of maternal depression through the development of personal resiliency skills and positive lifestyle changes, making you feel confident and stronger from the inside out (Goodman & Santangelo, 2011; Milgrom et al., 2011). Studies have shown that as few as six to ten sessions of counselling therapy are equally as effective at relieving depressive symptoms as antidepressants drugs (Fitelson, Baker & Leight, 2011).

Over last few decades various researches have been conducted locally and internationally but they are mainly addressing the maternal depression and suicidal thoughts at rural setting (Mukhtar & Oei, 2011; WMWM et al., 2005; Abdollahi, 2011; Tan & Yadav, 2012) or focused more on depression during pregnancy (Yee & Lua Pei Lin, 2011; Gavin, Tabb, Melville, Guo & Katon, 2011) or focussing only Malay community in rural area (Tan & Yadav, 2012). Very few studies really concerned or studied on the effectiveness of counselling treatment in treating maternal depression and suicidal thoughts during pre-natal and post-natal stage. Hence current research believes that to what extend the studies conducted in western culture may not be applicable in Malaysian context. Therefore the purpose of the current study is to determine the effectiveness of Maternal Well-being Therapy in treating women with maternal depression.

2. METHODS

This study was conducted in Johor, Malaysia. The state of Johor is selected as research location because based on "The Annual Report of the National Suicide Registry Malaysia (NSRM) 2009", Johor has registered the highest number of suicide deaths (26.8% N= 88) from overall Malaysia. Plus from a

research studying influence of social support on maternal depression and mental well-being has indicate that 68% of post-natal mothers' had a thought of harming themselves (Mustaffa et al., 2014).

2.1 Study Design

This is a qualitative study adapting case study design in which researcher can come out with a great counselling techniques for describing how certain things works but it is only by trying it out on a real life pool that you can see if it is a realistic simulation (Tashakkori & Teddlie, 2008). In the current study, counselling therapy called Maternal Well-being Therapy (MWT) is developed to treat women with maternal depression during pre-natal and post-natal stage.

2.2 Compliance with Ethical Standards

This study was carried out with the approval of Human Research Ethics Approval UTM. The protocol and contents was approved by the National Medical Research Registry (NMRR) and Medical Research and Ethics Committee (MREC) [(NMRR Number: 16-946-31123) and Research ID: 31123]. The National Medical Research Registry (NMRR) is designed to support the implementation of the National Institute of Health (NIH) guideline on the conduct of research in the Ministry of Health Malaysia (MOH) and the he current Ministry of Health Malaysia (MOH) policy on research.

2.3 Population and sampling

Four participants were purposively selected using purposive sampling method (Bryman, 2015). Prior to this, 4 pre-natal women who has scored 12 or more with suicidal thoughts symptoms on Edinburg Postnatal Depression Scale (EPDS) has participated in counselling intervention. Even though participants were purposively selected, researcher has made sure that all the 4 selected participants were voluntarily participating. Finally, all the participants are checked again and ensured that all of them are pre-natal women at 3rd Tri-semester of pregnancy in 2016 and originated from the state of Johor.

2.4 Procedures

Succeeding to this, researcher determine the initial intervention to meet the research objectives and research design. Following this the initial intervention is send for expert review for content validation (reviewed by 3 registered counsellors). Amendments are done based on the expert review report and final formation of Maternal Well-being Therapy was completed. Once the final formation of Maternal Well-being is done, the Human Ethical Approval at university level, National Medical Research Registry (NMRR), Medical Research Ethics Committee (MREC) approval, and approval from Pejabat Kesihatan Daerah was obtained. Furthermore, all women who scored 12 or more on Edinburg Postnatal Depression Scale (EPDS) from was identified: and from the list 4 women was selected to participate in phase 2 (counselling intervention). Selected women will be explained about the nature of counselling intervention, which researcher will conduct counselling based on participants needs in reducing their maternal depression, maladaptive thoughts of social support and suicidal thoughts. Then the content of inform concern were explained verbally and written inform concern were obtained as a part of agreement in agreeing to participate in counselling intervention therapy plus all participants were informed that they have full rights to withdraw themselves if they feel uncomfortable at any point of time during the counselling intervention without any penalty.

Number of counselling sessions is not fixed, as it was determined after screening their primary, secondary and presenting problem. This counselling intervention were conducted using Maternal Well-being Therapy (MWT) in treating maternal depression and suicidal thoughts during pre-natal and post-natal stage.

Main intention of this counselling intervention is to observe the impact of counselling towards maternal depression and well-being; then to observe to what extend the counselling intervention helps women to cope with maternal depression and suicidal thoughts during pre-natal and post-natal stage.

2.5 Instruments

Edinburg Postnatal Depression Scale (EPDS)

Edinburg Postnatal Depression Scale (EPDS) was developed in 1987 by Murray, Cox, Holden, & Sagovsky, (2005). EPDS is a 10 item self-self-report designed to screen maternal depression during pre-natal and post-natal stage. Validity and reliability of EPDS has been proven in numerous studies. (Green et. al., 2003; Suetsugu, in et al., 2015) and anxiety disorder (Navarro et. al., 2007).

Short Form 36-Item Health Survey (SF-36)

The Short Form-36 was derived from the General Health Survey of the Medical Outcomes Study by Stewart et al., (1988). SF-36 is one of broadly used measure in determining physical and emotional functioning. This instrument measures such as physical functioning, bodily pain, role of limitations due to physical health problems, role limitations due to personal or emotional problems, emotional well-being, social functioning, energy and general health perceptions. As for the current research only the emotional well-being subscale is extracted, which only 5 items will be used (question number 24, 25, 26, 28 and 30). Scoring for emotional well-being is calculated as 1 = 0, 2 = 20, 3 = 40, 4 = 60, 5 = 80 and 6 = 100 for question 24, 25 and 28 and 1 = 100, 2 = 80, 3 = 60, 4 = 40, 5 = 20 and 6 = 0 for question 26 and 30.

Maternal Well-being Therapy (MWT)

Maternal well-being Therapy is an eight step counselling therapy which is specially constructed to treat women with maternal depression and suicidal thoughts during pre-natal and post-natal stage. MWT demonstrates very good content validity, three experts, officially registered Malaysian counsellors has validated the Maternal Well-being Therapy (MWT). Content validity achieved from each expert (1st Expert =93.75%, 2nd expert = 81.25% and 3rd expert = 100%). The overall total average of content validity for Maternal Well-being Therapy (MWT) was 91.67 % (high level). However, some of the questions were rewritten for clearer understanding based on expert's advice (refer table 1).

Table 1: Steps of Maternal Well-being Therapy (MWT)

| Steps | Contents |
|------------------------------------|--|
| Step 1 Diagnosis | Depression screening using instruments such as EPDS and well-being Scale. |
| Step 2: Rapport building | Client Background History Individual background Family background Social background Medical background |
| Step 3: Problem Encounter | Primary problem Secondary problem Presenting problem |
| Step 4: Counsellor's Evaluation | Counsellor's evaluation based on the session and clients emotional status. |
| Step 5: Treatment Intervention | Counselling treatment will be conducted by using WDEcP technique based on their primary and secondary problem. It is a combination of Reality Therapy and Rationale Emotional Behavioural Therapy (REBT), some elements like WDEP system from Reality Therapy is adapted by adding a part from Albert Ellis's Rational Emotional Behaviour Therapy. In this research the therapy is designed and finally formed as WDEcP technique W (<i>wants</i>) Helping clients, students, employees define and clarify their wants. (<i>what do you want to be and do? Your "Picture album"</i>) D (<i>Doing & directions</i>) Examining their total behaviour: feelings, effective or ineffective self-talk, and especially their actions (<i>what are you doing? And where do you want to go?</i>) E (<i>Evaluation</i>) |

| | |
|-------------------------------|---|
| | <p>A searching and even at times uncomfortable self-evaluation (<i>does your present behaviour have reasonable chance of getting what you want?</i>)</p> <p><i>C (confiscate)</i> Remove or eliminate irrational beliefs and maladaptive thoughts that caused depression and maladaptive thoughts.</p> <p><i>P (Plans)</i> Culminating in specific and attainable positive plans (P) for improvement.</p> |
| Step 6: Well-being Evaluation | This step is to re-evaluate respondent's well-being and depression after the therapy. Effectiveness of the therapy will be measure based on the respondent's good well –being and less depression. |
| Step 7: Termination | Termination will be done once respondents display very good well-being with no depression and shows no sign of suicidal thoughts. |
| Step 8: Follow up | Monthly follow up via phone call to keep track clients are ok even after session |

The following formula was used to calculate the percentage of maternal depression and well-being (Ghani, Latif, Aziz, & Khan, 2015) (refer formula 1 and 2).

$$Depression = \frac{Client\ score\ (x)}{maximum\ EPDS\ score\ (30)} \times 100\%$$

Formula 1: Percentage for EPDS score

$$Well-being = \frac{Client\ score\ (x)}{maximum\ Well-being\ score\ (500)} \times 100\%$$

Formula 2: Percentage for Well-being score

Result

Table 2: Client's level of depression, Well-being and suicidal thoughts: before and after implementing Maternal Well-being Therapy.

| No. | Emotions | Emotional level before applying Maternal Well-being Therapy | | | Final Outcome of Maternal Well-being module |
|----------|---|---|-----------------|-----------------|---|
| | | Session 1 (n=1) | Session 2 (n=1) | Session 3 (n=1) | |
| Client 1 | Depression (%) | (20) 66.67% | (10) 33.34% | (5) 16.67% | Decreased |
| | Suicidal thoughts (for pass 2 weeks) (Yes/No) | Yes | No | No | No symptoms |
| | Well-being (%) | (120) 25% | (380) 76% | (400) 80% | Increased |
| Client 2 | Depression (%) | (22) 73.33% | (12) 40% | (6) 20% | Decreased |
| | Suicidal thoughts (Yes/No) | Yes | No | No | No symptoms |
| | Well-being (%) | (180) 36% | (400) 80% | (460) 92% | Increased |
| Client 3 | Depression (%) | (21) 70% | (8) 26.67% | (5) 16.67% | Decreased |
| | Suicidal thoughts (Yes/No) | Yes | No | No | No symptoms |
| | Well-being (%) | (100) 20% | (360) 72% | (420) 84% | Increased |
| Client 4 | Depression (%) | (18) 60% | (6) 20% | (4) 13.33% | Decreased |

| | | | | |
|-------------------------------|-----------|-----------|-----------|-------------|
| Suicidal thoughts (Yes/No) | Yes | No | No | No symptoms |
| Well-being (%) | (180) 36% | (360) 72% | (380) 76% | Increased |

Table 2 Indicating the result obtained from counselling session conducted using Maternal Well-being Therapy (MWT) on 4 mothers during their pre-natal to post-natal stage. From the result obtained, it was found that MWT has been very effective in helping mothers to increase their well-being and reduce their maternal depression and suicidal thought with just 3 effective counselling sessions with MWT.

Client 1: Session 1, results indicate that client 1 was depressed with suicidal symptoms and poor well-being before the first session; first session was conducted during the 9th month of prenatal stage [depression 66.67% (20), well-being 25% (120) and symptoms of suicidal thoughts]. Session 2, was conducted during 2nd week of post-natal (normal delivery and child in good health condition); right after the session, it was found that there was a decrease about 33.33% in depression level, an increase of 51% in maternal well-being and no suicidal thoughts found as compare to the previous session [depression 33.34% (10), well-being 76% (380) and no symptoms of suicidal thoughts]. Session 3 [depression 16.67% (5), well-being 80% (400) and no symptoms of suicidal thoughts], based on the results obtained counselling session for client 1 was terminated after the 3rd session because client is now emotionally very healthy with high level of maternal well-being and no symptoms of depression and suicidal thoughts present.

Client 2 during session 1 was found to be depressed with suicidal symptoms and poor well-being; 1st session of therapy was conducted during the 9th month of pregnancy [depression 73.33% (22), well-being 36% (180) and symptoms of suicidal thoughts]. Session 2 was conducted during the 3rd week of post-natal (normal delivery and child in good health condition); right after the session, it was found that there is decrease about 33.33% in depression level, increase of 44% in maternal well-being and no suicidal thoughts found as compare to the previous session [depression 40% (12), well-being 80% (400) and no symptoms of suicidal thoughts]. During Session 3, client found to be perfectly alright with no depression and suicidal thoughts. Besides that, client also looked very happy and cheerful compared to the first session. Counselling therapy session was terminated here because client's well-being has increased and no depression or any suicidal thoughts present [depression 20% (6), well-being 92% (460) and no symptoms of suicidal thoughts].

Client 3 during session 1 test indicating that client is suffering from maternal depression with suicidal thoughts and client's well-being is very low; 1st session of therapy was conducted during the 9th month of pregnancy [depression 70% (21), well-being 20% (100) and symptoms of suicidal thoughts]. Session 2 was conducted during the 2nd week of post-natal (normal delivery and child in good health condition); right after the session found that there is decrease about 43.33% in depression level, increase of 52% in maternal well-being and no suicidal thoughts found as compare to the previous session [depression 26.67% (8), well-being 72% (360) and no symptoms of suicidal thoughts]. Session 3 [depression 16.67% (5), well-being 84% (420) and no symptoms of suicidal thoughts] based on the results obtained counselling session for client 1 is terminated after the 3rd session because client is now emotionally very health with high level of maternal well-being and no symptoms of depression and suicidal thoughts present.

Client 4 during session 1 learned to be depressed with suicidal thoughts and her will-being falls very low; 1st session of therapy was conducted during the 9th month of pregnancy [depression 60% (18), well-being 36% (180) and symptoms of suicidal thoughts]. During the Session 2, client shown up good improvement in her well-being level where it has increased about 36% and depression has decreased 40% with no suicidal symptoms [depression 20% (6), well-being 72% (360) and no symptoms of suicidal thoughts]. During the Session 3 client found to be perfectly alright with no depression and suicidal thoughts, besides client also looked very happy and cheerful compare to the first session. Counselling therapy session is terminated here because client's well-being has increased and not depressed or any suicidal thoughts present [depression 13.33% (4), well-being 76% (380) and no symptoms of suicidal thoughts].

Based on the result obtained, we learned that Maternal Well-being Therapy has been very effective in treating women with maternal depression and suicidal thoughts. Moreover Maternal Well-being Therapy is suitable for both pre-natal and post-natal stage. Conclusively Maternal Well-being Therapy can be considered as the perfect therapy in treating women with maternal

depression. It is a quick and most affordable therapy without leaving any side effects to both mother and child.

3. DISCUSSION

Counselling therapy is a wide spreading technique in treating women's with maternal depression and it's been researched for over few decades (Morris, 1987; Cooper & Murray, 1997; Horowitz & Goodman, 2005; Dennis & Hodnett, 2007; Cape, Whittington, Buszewicz, Wallace & Underwood, 2010; Cuijpers et al., 2013; Sampson, Villarreal & Rubin, 2016). Many studies has been carried out all over the world in testing effectiveness of counselling therapy in treating maternal depression during pre-natal and post-natal stage (Cape, Whittington, Buszewicz, Wallace & Underwood, 2010; Cuijpers et al., 2013; Sampson, Villarreal & Rubin, 2016). In the presenting study Maternal well-being Therapy (MWT) has resulted a very positive outcome, in which maternal depression has decreased and mother's well-being has improved after the counselling session using Maternal Well-being Therapy (MWT).

Maternal Well-being Therapy (MWT) is a blend of Reality Therapy and Rationale Emotional Behavioural Therapy (REBT), and finally formed as WDEcP technique. (Refer table 1). This WDEcP technique is stand for 'W' (wants), 'D' (direction and doing), 'E' (evaluation), 'C' (confiscate) and 'P' (plan). This WDEcP technique is to treat women with maternal depression and the whole eight step process is known as Maternal Well-being Therapy.

Aim of MWT is to promote change in depressed pre-natal and post-natal women, MWT has guided the depressed women to obtain their "picture album," or quality world by directing them moving their perception of external world closer to his inner world of wants (Wubbolding, 1988). Another character of MWT is focusing on client's current problem ("here and now") rather than focusing on their past because women during pre-natal and post-natal stage developed depressive or suicidal symptoms due to their temporary problems occurs at the present. Even though many reasons has been discussed as the reason or course of maternal depression during pre-natal and post-natal stage (Casey, Goolsby, Berkowitz, Frank, Cook, Cutts, & Meyers, 2004; Rahman, Iqbal, Bunn, Lovel, & Harrington, 2004). but for many decades social support has been addressed as one of the major contributing factor for maternal depression and suicidal thoughts during pre-natal and post-natal stage (Yonkers et al., 2011; Cacciatore, Schnebly & Froen, 2009 & Leahy-Warren, McCarthy & Corcoran, 2012; Zlotnick et al., 2014; Goyal, Gay & Lee, 2010; Klainin & Arthur, 2009 & Razurel et al., 2011; Grush et al., 1998)

According to attachment theory by Ainsworth (1978) and Bowlby (1988), the social support perceived by women during pre-natal and post-natal stage is classified into three category which is the secure, insecure (Anxious-Avoidant or Anxious-Resistant) and disorganised (inconsistent type of attachment). But only women with the insecure (less or no social support perceived) and disorganised (inconsistent type of social support) are shown up with depressive symptoms and suicidal thoughts. In this case Maternal Well-being Therapy (MWT) has provide the structure to help women to cope with their inconsistent or nonexistence of social support type during their pre-natal and post-natal stage in order to gain good emotional well-being during their pregnancy period and after childbirth.

MWT has made the women realize that they have choice in every situation and they were encouraged and made them realised that only they can or allowed to come out with a best solution for their current situation. At the same time MWT also has disputed all the maladaptive and the negative thoughts they had regarding their social support system. Maternal well-being Therapy (MWT) plus 3 months of follow up observation was very beneficial for the researcher to observe the clients improvement and for clients to realise and see the changes in themselves after taking Maternal Well-being Therapy (MWT). MWT was responsible in promoting changes in their thoughts by removing their wrong belief on their presenting social support system for the disorganised attachment type and helping the client to cope with nonexistence of social support by planning their future by exploring their wants and needs in order to obtain good emotional well-being and eliminating the depressive symptoms and suicidal thoughts.

Moreover, a study is conducted in Germany on testing the effectiveness counselling therapy (Interpersonal Psychotherapy) in treating maternal depression during post-natal stage: the study was conducted over total of 120 depressed post-natal women who has met the DSM-IV criteria for major depressive disorder and found that counselling therapy has resulted a positive effect on women's well-being, results indicate a great decrease in mother's maternal depression and improved social functioning in just 12 week of treatment compared to the control group: the level of depression is tested using Beck Depression Inventory (BDI) and Hamilton Rating Scale for Depression (HRSD) (O'hara, Stuart, Gorman & Wenzel, 2000).

From a study conducted in the United Kingdom, counselling therapy sessions (empirically supported intervention) is carried out in the name of “Listening Visit” on depressed post-natal women by home visitors in United States. This visit has resulted a significant positive effect on women’s maternal depression by increasing their life satisfaction and reducing their maternal depression: level of maternal depression is tested using Edinburg Post-natal Depression Scale (EPDS) and Hamilton Rating Scale for Depression (HRSD). The counselling therapy (Listening visit) can be considered as acceptable and effective treatment for maternal depression as its substantial promise in treating maternal depression (Segre, Stasik, O'hara & Arndt, 2010).

Although medical treatments available in the market or universally used as first line treatment for treating maternal depression, even though selective drugs like serotonin reuptake inhibitors (SSRI) are expected to be effective but the possible medication affects are worrisome to both mother, child and including child in the womb as this kind of drugs can be transmitted via breastmilk (Stephens, Ford, Paudyal, & Smith, 2016; Molyneaux, Trevillion, & Howard, 2015; Pearlstein, 2008; Bjork, Veiby, Engelsen, & Gilhus, 2015). For this reason majority women’s neither from pre-natal or post-natal stage prefers counselling or psychotherapy treatments more as compared to antidepressant (Goodman, 2009; Backenstrass et al., 2006; Boath, Bradley & Henshaw, 2004; Stephens, Ford, Paudyal, & Smith, 2016).

In addition, from a data collected over total of 509 convenience sample of pre-natal women at a hospital in Boston, Massachusetts with the purpose of researching pre-natal and post-natal women’s preference and treatment attitudes: found that pre-natal women prefers individual therapy as their first choice (72.5%), only 7.3% of women prefers medication as their first choice of treatment for treating maternal depression and the rest 15.1% prefers like educational class, educational materials, telephone support, web-based internet support, and self-help materials: furthermore, majority of the women (92%) has indicated that they will like to participate in individual counselling therapy if recommended and only 33% women stated that they will prefer to take antidepressant if recommended by physician. Obviously counselling therapy is the most preferred treatment by women’s during their pre-natal and post-natal stage and they do concern of the potential risk of taking antidepressant during their pregnancy and breastfeeding period and its effect on their child (Goodman, 2009).

Furthermore, there are many cases where women shown up a significant positive improvement in their emotional states with decreased depression level and better maternal well-being as compared to their previous state with just one session of counselling therapy (Morrell et al., 2009): even on the current study 75% of the women who has participated in the maternal well-being therapy (MWT) for the first time, shown up a greater decrease in their EPDS score ≤ 10 and improved maternal well-being: and in just three effective counselling session on maternal well-being therapy has demonstrated 100% effectiveness by improving women’s maternal well-being, decrease maternal depression and eliminating suicidal thoughts.

Finally maternal well-being therapy (MWT) has proved its effectiveness and supremacy in treating maternal depression, increasing women’s maternal well-being and abolishing suicidal thoughts during pre-natal and post-natal stage.

Many research either in medical science or social science, has emphasized the risk factors of consuming of antidepressant drugs during pre-natal and post-natal stage (Shen et al., 2017; Boukhris, Sheehy, Mottron & Berard, 2016; Huybrechts et al., 2015; Man, Tong, Wong, Chan, Simonoff & Wong, 2015; Huang, Coleman, Bridge, Yonkers, & Katon, 2014; Suri, Altshuler, Helleman, Burt, Aquino & Mintz, 2007; Wisner et al., 2009; Yonkers et al., 2009)

Consumption of antidepressant drug during pregnancy and breastfeeding period could leave some kind of negative side effects on mother’s body, the baby in the womb (Koren, & Nordeng, 2012; Davis, Gawley & Bowen 2012) and the worst part is when the infant being exposed to antidepressants through breast milk (Berle & Spigset, 2011; Rai et al., 2013; Byatt, Deligiannidis & Freeman, 2013)

Infant in the womb that exposed to antidepressant and its potential neonatal risk could be, pre-mature birth, risk of minor physical anomalies (MPAs), low-birth weight, still-birth, miscarriage (Chun-Fai-Chan et al., 2005; Einarson et al., 2001; Einarson et al., 2003), growth effects, long term effects on offspring and other perinatal complications (Koren, & Nordeng, 2012; Suri, Altshuler, Helleman, Burt, Aquino & Mintz, 2007; Wisner et al., 2009; Yonkers et al., 2009; Davis, Gawley & Bowen 2012): at the same time infants that exposed to antidepressant via breastmilk will be suffering from problems such as effects on their motor developments, a study on testing the children whose mothers were diagnosed with major depressive disorder in pregnancy and elected not to take medication (n = 13) were compared with children of depressed mothers treated with SSRIs (n = 31) on birth outcomes and postnatal neurodevelopmental functioning between ages 6 and 40 months. Children underwent blinded standardized pediatric and dysmorphology examinations and evaluations of their mental and

psychomotor development with the use of the Bayley Scales of Infant Development (BSID II), the findings indicates that selective serotonin reuptake inhibitors (SSRIs) during fetal development might have subtle effects on motor development and motor control are consistent with the pharmacologic properties of the drugs (Casper et al., 2003).

At the same time leaving maternal depression untreated could lead to harmful effects on both the pre-natal and post-natal mother and baby. Thus, any decision on using antidepressants during pre-natal and post-natal stage must be achieved after carefully considering the risk and benefits for the patients (Mitchell et al., 2011; Julien, 2013; Yonkers et al., 2011).

However some studies reported that in severe cases of treating maternal depression, antidepressant might be crucial for immediate effect (Fitelson et al., 2011). But still there are some studies belief the combination of medication and counselling therapy would be the best solution for severe cases (Casacalenda, Perry, & Looper, 2014; Wells, 2014). In fact severe cases of maternal depression can be avoided if screening and prevention is done at a very early stage, like in the United Kingdom and many other countries with fundamental maternal health care will identify and treat women with maternal depression at very early stage or prevented before its occurs and as a result of this only fewer or less than 10% cases will be referred to secondary care (Bauer, Parsonage, Knapp, Iemmi, & Adelaja, 2014; Wittchen, Muhlig, & Beesdo, 2003; Stephens, Ford, Paudyal, & Smith, 2016).

But unfortunately screening or diagnosis of maternal depression during pre-natal and post-natal stage is rarely offered as part of the gynaecological care services in Malaysia and many other Asian countries. Implementation of standard scheduled screening of maternal depression during pre-natal and post-natal stage and appropriate counselling should be included in the maternal health policy in order to prevent maternal depression (Yusuff, Tang, Binns, & Lee, 2015).

4. CONCLUSIONS

Maternal Well-being Therapy (MWT) has showed a promising result not only in treating woman with maternal depression, but also functions as agent in boosting women's well-being and eliminating suicidal thoughts during pre-natal and post-natal stage. More research using counselling therapy as a treatment tool might be more beneficial in treating maternal depression in future.

REFERENCES

- Abdollahi, F., Lye, M. S., Zain, A. M., Ghazali, S. S., & Zarghami, M. (2011). *Postnatal depression and its associated factors in women from different cultures*. Iranian journal of psychiatry and behavioral sciences, 5(2), 5.
- Ainsworth, M. D. S., Blehar, M. C., & Waters, E. (1978). Wall. s.(1978). *Patterns of attachment: A psychological study of the strange situation*, 18.
- Almond, P. (2009). *Postnatal depression: a global public health perspective*. *Perspectives in public health*, 129(5), 221-227.
- Avalos, L. A., Raine-Bennett, T., Chen, H., Adams, A. S., & Flanagan, T. (2016). *Improved perinatal depression screening, treatment, and outcomes with a universal obstetric program*. *Obstetrics & Gynecology*, 127(5), 917-925.
- Backenstrass, M., Frank, A., Joest, K., Hingmann, S., Mundt, C., & Kronmüller, K. T. (2006). *A comparative study of nonspecific depressive symptoms and minor depression regarding functional impairment and associated characteristics in primary care*. *Comprehensive psychiatry*, 47(1), 35-41
- Badr, L. K., Abdallah, B., & Mahmoud, A. (2005). *Precursors of preterm birth: Comparison of three ethnic groups in the middle East and the United States*. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 34(4), 444-452.
- Bauer, A., Parsonage, M., Knapp, M., Iemmi, V., & Adelaja, B. (2014). *Costs of perinatal mental health problems*, *Centre for Mental Health*. <https://www.centreformentalhealth.org.uk/costs-of-perinatal-mh-problems>. Published Oct 20, 2014. Accessed Aug 8, 2016

- Berle, J. O., & Spigset, O. (2011). *Antidepressant use during breastfeeding*. *Current women's health reviews*, 7(1), 28-34.
- Berle, J. O., Mykletun, A., Daltveit, A. K., Rasmussen, S., Holsten, F., & Dahl, A. A. (2005). *Neonatal outcomes in offspring of women with anxiety and depression during pregnancy*. *Archives of Women's Mental Health*, 8(3), 181-189.
- Bjork, M. H., Veiby, G., Reiter, S. C., Berle, J.O., Daltveit, A. K., Spigset, O., & Gilhus, N. E. (2015). *Depression and anxiety in women with epilepsy during pregnancy and after delivery: A prospective population-based cohort study on frequency, risk factors, medication, and prognosis*. *Epilepsia*, 56(1), 28-39.
- Boath, E., Bradley, E., & Henshaw, C. (2004). *Women's views of antidepressants in the treatment of postnatal depression*. *Journal of Psychosomatic Obstetrics & Gynecology*, 25(3-4), 221-233.
- Boukhris, T., Sheehy, O., Mottron, L., & Bérard, A. (2016). *Antidepressant use during pregnancy and the risk of autism spectrum disorder in children*. *JAMA pediatrics*, 170(2), 117-124.
- Boukhris, T., Sheehy, O., Mottron, L., & Bérard, A. (2016). *Antidepressant use during pregnancy and the risk of autism spectrum disorder in children*. *JAMA pediatrics*, 170(2), 117-124.
- Bowlby, J. (1988). *Attachment, communication, and the therapeutic process. A secure base: Parent-child attachment and healthy human development*, 137-157.
- Bryman, A. (2015). *Social research methods*. Oxford university press.
- Byatt, N., Deligiannidis, K. M., & Freeman, M. P. (2013). *Antidepressant use in pregnancy: a critical review focused on risks and controversies*. *Acta Psychiatrica Scandinavica*, 127(2), 94-114.
- Byatt, N., Deligiannidis, K. M., & Freeman, M. P. (2013). *Antidepressant use in pregnancy: a critical review focused on risks and controversies*. *Acta Psychiatrica Scandinavica*, 127(2), 94-114.
- Cacciatore, J., Schnebly, S., & Froen, J. F. (2009). *The effects of social support on maternal anxiety and depression after stillbirth*. *Health & social care in the community*, 17(2), 167-176.
- Cape, J., Whittington, C., Buszewicz, M., Wallace, P., & Underwood, L. (2010). *Brief psychological therapies for anxiety and depression in primary care: meta-analysis and meta-regression*. *BMC medicine*, 8(1), 38.
- Casacalenda, N., Perry, J. C., & Looper, K. (2014). *Remission in major depressive disorder: a comparison of pharmacotherapy, psychotherapy, and control conditions*. *American Journal of Psychiatry*, 159(8), 1354-1360
- Casey, P., Goolsby, S., Berkowitz, C., Frank, D., Cook, J., Cutts, D., & Meyers, A. (2004). *Maternal depression, changing public assistance, food security, and child health status*. *Pediatrics*, 113(2), 298-304.
- Casper, R. C., Fleisher, B. E., Lee-Ancas, J. C., Gilles, A., Gaylor, E., DeBattista, A., & Hoyme, H. E. (2003). *Follow-up of children of depressed mothers exposed or not exposed to antidepressant drugs during pregnancy*. *The Journal of pediatrics*, 142(4), 402-408.
- Chun-Fai-Chan, B., Koren, G., Favez, I., Kalra, S., Voyer-Lavigne, S., Boshier, A., & Einarson, A. (2005). *Pregnancy outcome of women exposed to bupropion during pregnancy: a prospective comparative study*. *American journal of obstetrics and gynecology*, 192(3), 932-936.
- Cooper, P. J., & Murray, L. (1997). *The impact of psychological treatments of postpartum depression on maternal mood and infant development*.
- Cuijpers, P., Sijbrandij, M., Koole, S. L., Andersson, G., Beekman, A. T., & Reynolds, C. F. (2013). *The efficacy of psychotherapy and pharmacotherapy in treating depressive and anxiety disorders: A meta-analysis of direct comparisons*. *World Psychiatry*, 12(2), 137-148.
- Da Costa, D., Larouche, J., Dritsa, M., & Brender, W. (2000). *Psychosocial correlates of prepartum and postpartum depressed mood*. *Journal of Affective Disorders*, 59(1), 31-40.
- Davis, A., Gawley, L., & Bowen, A. (2012). *Negative impact of non-evidence-based information received by women taking antidepressants during pregnancy from health care providers and others*. *J Obstet Gynaecol Can*, 34(1), 66-71.
- Dennis, C. L., & Hodnett, E. (2007). *Psychosocial and psychological interventions for treating postpartum depression*. *Cochrane Database Syst Rev*, 4.
- Dole, N., Savitz, D. A., Hertz-Picciotto, I., Siega-Riz, A. M., McMahon, M. J., & Buekens, P. (2003). *Maternal stress and preterm birth*. *American journal of epidemiology*, 157(1), 14-24.
- Einarson, A., Bonari, L., Voyer-Lavigne, S., Addis, A., Matsui, D., Johnson, Y., & Koren, G. (2003). *A multicentre prospective controlled study to determine the safety of trazodone and nefazodone use during pregnancy*. *The Canadian Journal of Psychiatry*, 48(2), 106-110.

- Einarson, A., Fatoye, B., Sarkar, M., Lavigne, S. V., Brochu, J., Chambers, C., & Einarson, T. R. (2001). Pregnancy outcome following gestational exposure to venlafaxine: a multicentre prospective controlled study. *American Journal of Psychiatry*, 158(10), 1728-1730.
- Felice, E., Saliba, J., Grech, V., & Cox, J. (2004). Prevalence rates and psychosocial characteristics associated with depression in pregnancy and postpartum in Maltese women. *Journal of affective disorders*, 82(2), 297-301.
- Fitelson, E., Kim, S., Baker, A. S., & Leight, K. (2011). Treatment of postpartum depression: clinical, psychological and pharmacological options. *International journal of women's health*, 3, 1.
- Gavin, A. R., Tabb, K. M., Melville, J. L., Guo, Y., & Katon, W. (2011). Prevalence and correlates of suicidal ideation during pregnancy. *Archives of women's mental health*, 14(3), 239-246
- Gavin, N. I., Gaynes, B. N., Lohr, K. N., Meltzer-Brody, S., Gartlehner, G., & Swinson, T. (2005). Perinatal depression: a systematic review of prevalence and incidence. *Obstetrics & Gynecology*, 106(5, Part 1), 1071-1083.
- Goodman, J. H. (2009). Women's attitudes, preferences, and perceived barriers to treatment for perinatal depression. *Birth*, 36(1), 60-69.
- Goodman, J. H., & Santangelo, G. (2011). Group treatment for postpartum depression: a systematic review. *Archives of women's mental health*, 14(4), 277-293.
- Gordon, R. E., & Gordon, K. (1957). Some social psychiatric aspects of pregnancy and childbearing. *The Journal of the Medical Society of New Jersey*, 54(12), 569.
- Green, J. M., Kafetsios, K., Statham, H. E., & Snowdon, C. M. (2003). Factor structure, validity and reliability of the Cambridge Worry Scale in a pregnant population. *Journal of health psychology*, 8(6), 753-764.
- Grush, L. R., & Cohen, L. S. (1998). Psychopharmacology: Treatment of Depression during Pregnancy: Balancing the Risks. *Harvard review of psychiatry*, 6(2), 105-109.
- Halbreich, U., & Karkun, S. (2006). Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *Journal of affective disorders*, 91(2), 97-111.
- Hartley, M., Tomlinson, M., Greco, E., Comulada, W. S., Stewart, J., Le Roux, I., & Rotheram-Borus, M. J. (2011). Depressed mood in pregnancy: prevalence and correlates in two Cape Town peri-urban settlements. *Reproductive health*, 8(1), 9.
- Horowitz, J. A., & Goodman, J. H. (2005). Identifying and treating postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 34(2), 264-273.
- Huang, H., Coleman, S., Bridge, J. A., Yonkers, K., & Katon, W. (2014). A meta-analysis of the relationship between antidepressant use in pregnancy and the risk of preterm birth and low birth weight. *General hospital psychiatry*, 36(1), 13-18.
- Huybrechts, K. F., Bateman, B. T., Palmsten, K., Desai, R. J., Paterno, E., Gopalakrishnan, C & Hernandez-Diaz, S. (2015). Antidepressant use late in pregnancy and risk of persistent pulmonary hypertension of the newborn. *Jama*, 313(21), 2142-2151.
- Huybrechts, K. F., Bateman, B. T., Palmsten, K., Desai, R. J., Paterno, E., Gopalakrishnan, C & Hernandez-Diaz, S. (2015). Antidepressant use late in pregnancy and risk of persistent pulmonary hypertension of the newborn. *Jama*, 313(21), 2142-2151.
- Julien, R. M. (2013). *A primer of drug action: A concise nontechnical guide to the actions, uses, and side effects of psychoactive drugs*, revised and updated. Holt Paperbacks.
- Koren, G., & Nordeng, H. (2012). Antidepressant use during pregnancy: the benefit-risk ratio. *American journal of obstetrics and gynecology*, 207(3), 157-163.
- Leahy-Warren, P., McCarthy, G., & Corcoran, P. (2012). First-time mothers: social support, maternal parental self-efficacy and postnatal depression. *Journal of Clinical Nursing*, 21(3-4), 388-397.
- Man, K. K., Tong, H. H., Wong, L. Y., Chan, E. W., Simonoff, E., & Wong, I. C. (2015). Exposure to selective serotonin reuptake inhibitors during pregnancy and risk of autism spectrum disorder in children: a systematic review and meta-analysis of observational studies. *Neuroscience & Biobehavioral Reviews*, 49, 82-89.
- Marappan, D., Khan, A., Latif, A. A., & Yusoff, A. M. (2016). Influence of maternal depression and suicidal thoughts: Role of spousal support during pregnancy. *Man in India*, 96(1), 9-17.
- Milgrom, J., Schembri, C., Erickson, J., Ross, J., & Gemmill, A. W. (2011). Towards parenthood: an antenatal intervention to reduce depression, anxiety and parenting difficulties. *Journal of affective disorders*, 130(3), 385-394.
- Mitchell, A. A., Gilboa, S. M., Werler, M. M., Kelley, K. E., Louik, C., Hernández-Díaz, S., & Study, N. B. D. P. (2011). Medication use during pregnancy, with particular focus on prescription drugs: 1976-2008. *American journal of obstetrics and gynecology*, 205(1), 51-e1.

- Mitchell, A. A., Gilboa, S. M., Werler, M. M., Kelley, K. E., Louik, C., Hernández-Díaz, S., & Study, N. B. D. P. (2011). Medication use during pregnancy, with particular focus on prescription drugs: 1976-2008. *American journal of obstetrics and gynecology*, 205(1), 51-e1.
- Moffatt, G. K. (2004). *The parenting journey: From conception through the teen years*. Greenwood Publishing Group.
- Moffatt, G. K. (2004). *The parenting journey: From conception through the teen years*. Greenwood Publishing Group.
- Molyneaux, E., Trevillion, K., & Howard, L. M. (2015). Antidepressant treatment for postnatal depression. *Jama*, 313(19), 1965-1966.
- Morris, J. B. (1987). Group psychotherapy for prolonged postnatal depression. *British journal of medical psychology*, 60(3), 279-281.
- Mukhtar, F., & PS Oei, T. (2011). A review on the prevalence of depression in Malaysia. *Current Psychiatry Reviews*, 7(3), 234-238.
- Mustaffa, M. S., Marappan, D., Abu, M. S., Khan, A., & Ahmad, R. (2014). Social Support During Pre-Natal And Post-Natal Stage: Influence On Maternal Depression And Mental Well-Being. *Procedia-Social and Behavioral Sciences*, 143, 417-422.
- Navarro, P., Ascaso, C., Garcia-Esteve, L., Aguado, J., Torres, A., & Martín-Santos, R. (2007). Postnatal psychiatric morbidity: a validation study of the GHQ-12 and the EPDS as screening tools. *General Hospital Psychiatry*, 29(1), 1-7.
- Nulman, I., Rovet, J., Stewart, D. E., Wolpin, J., Pace-Asciak, P., Shuhaiber, S., & Koren, G. (2002). Child development following exposure to tricyclic antidepressants or fluoxetine throughout fetal life: a prospective, controlled study. *American Journal of Psychiatry*, 159(11), 1889-1895.
- O'Hara, M. W. (2009). Postpartum depression: what we know. *Journal of clinical psychology*, 65(12), 1258-1269.
- O'hara, M. W., Stuart, S., Gorman, L. L., & Wenzel, A. (2000). Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of general psychiatry*, 57(11), 1039-1045.
- Pearlstein, T. (2008). Perinatal depression: treatment options and dilemmas. *Journal of psychiatry & neuroscience: JPN*, 33(4), 302.
- Rahman, A., Iqbal, Z., Bunn, J., Lovel, H., & Harrington, R. (2004). Impact of maternal depression on infant nutritional status and illness: a cohort study. *Archives of general psychiatry*, 61(9), 946-952.
- Rahman, A., Surkan, P. J., Cayetano, C. E., Rwagatare, P., & Dickson, K. E. (2013). Grand challenges: integrating maternal mental health into maternal and child health programmes. *PLoS Medicine*, 10(5), e1001442.
- Rai, D., Lee, B. K., Dalman, C., Golding, J., Lewis, G., & Magnusson, C. (2013). Parental depression, maternal antidepressant use during pregnancy, and risk of autism spectrum disorders: population based case-control study. *Bmj*, 346, f2059.
- Razurel, C., Kaiser, B., Sellenet, C., & Epiney, M. (2013). Relation between perceived stress, social support, and coping strategies and maternal well-being: A review of the literature. *Women & health*, 53(1), 74-99.
- Robinson GE, Stewart DE (2001) Postpartum disorders. In: Stotland NL, Stewart DE, editors. *Psychological aspects of women's health care: the interface between psychiatry and obstetrics and gynecology*. 2nd ed. Washington, DC: American Psychiatric Press, pp. 117-140.
- Rondo, P. H. C., Ferreira, R. F., Nogueira, F., Ribeiro, M. C. N., Lobert, H., & Artes, R. (2003). Maternal psychological stress and distress as predictors of low birth weight, prematurity and intrauterine growth retardation. *European Journal of Clinical Nutrition*, 57(2), 266-272.
- Sampson, M., Villarreal, Y., & Rubin, A. (2016). A problem-solving therapy intervention for low-income, pregnant women at risk for postpartum depression. *Research on social work practice*, 26(3), 236-242.
- Segre, L. S., Stasik, S. M., O'hara, M. W., & Arndt, S. (2010). Listening visits: an evaluation of the effectiveness and acceptability of a home-based depression treatment. *Psychotherapy Research*, 20(6), 712-721.
- Shen, Z. Q., Gao, S. Y., Li, S. X., Zhang, T. N., Liu, C. X., Lv, H. C., & Wu, Q. J. (2017). Sertraline use in the first trimester and risk of congenital anomalies: a systemic review and meta-analysis of cohort studies. *British journal of clinical pharmacology*, 83(4), 909-922.
- Shen, Z. Q., Gao, S. Y., Li, S. X., Zhang, T. N., Liu, C. X., Lv, H. C., ... & Wu, Q. J. (2017). Sertraline use in the first trimester and risk of congenital anomalies: a systemic review and meta-analysis of cohort studies. *British journal of clinical pharmacology*, 83(4), 909-922.

- Sockol, L. E., Epperson, C. N., & Barber, J. P. (2011). A meta-analysis of treatments for perinatal depression. *Clinical psychology review*, 31(5), 839-849.
- Stephens, S., Ford, E., Paudyal, P., & Smith, H. (2016). Effectiveness of psychological interventions for postnatal depression in primary care: a meta-analysis. *The Annals of Family Medicine*, 14(5), 463-472.
- Stephens, S., Ford, E., Paudyal, P., & Smith, H. (2016). Effectiveness of psychological interventions for postnatal depression in primary care: a meta-analysis. *The Annals of Family Medicine*, 14(5), 463-472.
- Stewart, A. L., Hays, R. D., & Ware, J. E. (1988). The MOS short-form general health survey: reliability and validity in a patient population. *Medical care*, 724-735.
- Suetsugu, Y., Honjo, S., Ikeda, M., & Kamibeppu, K. (2015). The Japanese version of the Postpartum Bonding Questionnaire: Examination of the reliability, validity, and scale structure. *Journal of psychosomatic research*, 79(1), 55-61.
- Suri, R., Altshuler, L., Hellemann, G., Burt, V. K., Aquino, A., & Mintz, J. (2007). Effects of antenatal depression and antidepressant treatment on gestational age at birth and risk of preterm birth. *American Journal of Psychiatry*, 164(8), 1206-1213.
- Tan, K. L., & Yadav, H. (2012). Depression among the urban poor in Peninsular Malaysia: A community based cross-sectional study. *Journal of health psychology*, 1359105311433908.
- Tashakkori, A., & Teddlie, C. (2008). Introduction to mixed method and mixed model studies in the social and behavioral sciences. *The mixed methods reader*, 7-26.
- Wells, K. B. (2014). Treatment research at the crossroads: the scientific interface of clinical trials and effectiveness research. *American Journal of Psychiatry*. 156(1), 5-10
- Whiffen, V. E. (2009). *A secret sadness: The hidden relationship patterns that make women depressed*. New Harbinger Publications.
- Wisner, K. L., Sit, D. K., Hanusa, B. H., Moses-Kolko, E. L., Bogen, D. L., Hunker, D. F., & Singer, L. T. (2009). Major depression and antidepressant treatment: impact on pregnancy and neonatal outcomes. *Focus*, 7(3), 374-384.
- Wittchen, H. U., Muhlig, S., & Beesdo, K. (2003). Mental disorders in primary care. *Dialogues in clinical neuroscience*, 5(2), 115.
- WMWM, R., MR, H., Awang, A., & Mohamed, M. N. (2005). Postpartum depression among Malay women from a rural area in Kedah, North West of peninsular.
- Wubbolding, R. E. (1988). *Using reality therapy*. Perennial library.
- Yee, W. S., & Lua Pei Lin. (2011). Anxiety and depressive symptoms among communities in the east coast of Peninsular Malaysia: A rural exploration. *Malaysian Journal of Psychiatry*, 20(1).
- Yonkers, K. A., Gotman, N., Smith, M. V., Forray, A., Belanger, K., Brunetto, W. L., & Lockwood, C. J. (2011). Does antidepressant use attenuate the risk of a major depressive episode in pregnancy?. *Epidemiology (Cambridge, Mass.)*, 22(6), 848.
- Yonkers, K. A., Wisner, K. L., Stewart, D. E., Oberlander, T. F., Dell, D. L., Stotland, N., & Lockwood, C. (2009). The management of depression during pregnancy: a report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. *General hospital psychiatry*, 31(5), 403-413.
- Yusuff, A. S. M., Tang, L., Binns, C. W., & Lee, A. H. (2015). Prevalence and risk factors for postnatal depression in Sabah, Malaysia: a cohort study. *Women and Birth*, 28(1), 25-29.