
The Benefits of Holistic Therapy for Psychological Disorders in Postpartum Mother: A Systematic Review

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ABSTRACT

Physical and psychological changes during postpartum period can make postpartum mother vulnerable to psychological disorders such as anxiety and depression. The purpose of this study was to identify and analyze several holistic therapies that are beneficial for reducing psychological disorders during postpartum period. The inclusion criteria in this study were articles in english; samples in the form of postpartum mothers; and experimental research. There are 12 research articles that included in the analysis of this research, research articles on mindfulness (n = 4), massage (n = 4), and aromatherapy (n = 4). Holistic therapy can affect the regulation of the nervous system and reduce levels of cortisol hormone. Holistic therapies such as mindfulness, massage, and aromatherapy have been shown to be beneficial for reducing psychological disorders such as anxiety to depression in postpartum mothers which have an impact on increased relaxation and positive mood.

Keywords: Aromatherapy, Holistic Therapy, Massage, Mindfulness, Postpartum Women, Psychological Disorders

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BACKGROUND

The postpartum period is the return of the physiological conditions of the postpartum mother's reproductive organs to conditions as before pregnancy, which begins after the birth of the placenta and will last about 6 weeks (Kementerian Kesehatan, 2013; Jordan, Farley and Grace, 2019).

During the postpartum period, there are various changes both physically and psychologically so that the postpartum mothers need coping and adaptation management to deal and overcome physical and psychological changes. Postpartum mothers also need the attention from the health workers to be able to support their coping and adaptation process (María *et al.*, 2012).

Physical and psychological changes during the postpartum period, as well as taking on roles and responsibilities as a mother for a newborn will make the postpartum mother prone to experiencing psychological disorders such as anxiety and postpartum depression. Research shows that 40% of postpartum women have high anxiety scores (Field, 2018). Research also shows that 17% incidence of postpartum depression in postpartum mothers without a history of depression (Shorey *et al.*, 2018).

The risk of maternal psychological disorders during the postpartum period is two times higher than women during other periods. However, psychological disorders of postpartum mothers often go undetected and untreated so that it can have an impact on the general health and well-being of mothers, newborns, and family members (Shorey *et al.*, 2018).

Psychological disorders in postpartum mothers, especially primiparous mothers, can damage the intention, motivation and confidence of mothers to breastfeed that led mothers switch to formula milk (Adedinsewo *et al.*, 2014b; Fallon *et al.*, 2016). Maternal anxiety has been linked to decreased prolactin synthesis. The prolactin hormone is a hormone that functions to stimulate the synthesis of breast milk which includes the production of a number of milk proteins, especially casein. The reduced synthesis of the prolactin hormone will result in a decreased milk production (Adedinsewo *et al.*, 2014a; Agustina, Hadi and Widyawati, 2016).

Mothers that suffer from psychological disorders often show changes in attitudes such as indifference, neglect, and unresponsiveness to their babies. Mothers with psychological disorders are also at increased risk for recurring psychological disorders (Fallon *et al.*, 2016; Shorey *et al.*, 2018).

Therefore, early diagnosis, management, and prevention of psychological disorders in postpartum mothers are needed so that the health and well-being of postpartum mothers, newborns and families can be manifested (Shorey *et al.*, 2018).

The term holistic comes from the Greek word ὅλος-holos which means whole and total. Holistic therapy is a therapy approach that views humans as whole beings by paying attention to their biological, emotional, intellectual, social and spiritual aspects. All these aspects are one and cannot be separated, so that if there is a change in every aspect of a person's life, it can bring changes to every aspect of their existence and differentiate the quality of their life. Holistic care is being used as a philosophy on how to approach a good health by creating balance and harmony between body, mind and spirit (Papathanasiou, Sklavou and Kourkouta, 2013).

Holistic therapy not only focuses on the symptoms of the patient but also on the condition of the patient's body, mind, and spirit as a whole. Holistic medicine with natural or alternative medicine can provide effective and efficient healing effects with fewer side effects compared to modern medicine in order to increase health and satisfaction of the

patient (Papathanasiou, Sklavou and Kourkouta, 2013). Midwifery care that carried out using complementary or alternative therapies according to the philosophy of midwifery avoids unnecessary medical interventions and supports women's choice and autonomy (Hall, Mckenna and Griffiths, 2012).

The purpose of this research is to identify and analyze several holistic therapies that have benefits on reducing psychological disorders during postpartum period which expected to produce scientifically accountable information that it can be developed and applied as a policy.

METHODS

Search Strategy

The search for articles for this study was carried out by searching the databases of Science Direct, PubMed, Wiley Online Library, and Google Scholar. Only articles that contain full text will be included in this study. The search was carried out by entering the first keywords, such as "psychological disorders" and "postpartum mother", then the second keyword, such as "holistic" and "mind body soul". The search for articles for this study was limited to the last 10 years.

Inclusion and Exclusion Criteria

The inclusion criteria in this study were articles in English; samples are postpartum mothers; and experimental type of research. While the exclusion criteria in this study were articles that not in English; samples other than postpartum mothers; and non-experimental research.

Data Extraction

The search for research articles was carried out on July 2020 to August 2020. The author extracts the research articles that have been obtained by recording them in the article screening form. In the article screening form, research articles are screened and analyzed for titles and abstracts to group research articles according to the type of intervention, determine the suitability of the research articles with inclusion and exclusion criteria, and detect duplication of research articles.

The results of the extraction of research articles are written in tabular form containing article titles, author names, years, methods, and results.

RESULTS

A search of research articles through the Science Direct, PubMed, Wiley Online Library, and Google Scholar databases resulted in 42 articles that passed the initial screening after entering the first and second keywords. Of the 42 articles, there were 8 articles that were not full text research articles, leaving 34 relevant research articles for screening. After the review was carried out, there were 22 research articles that did not fit the inclusion criteria, such as articles that were not in English (N = 5), the sample did not match the criteria (N = 10), and the type of research was not an experimental (N = 7). After further review, 12 research articles were included in the analysis of this study.

The 12 research articles that were included in the analysis of this study were divided based on the holistic therapy method provided, namely mindfulness (N = 4), massage (N = 4), and aromatherapy (N = 5).

No.	Title	Authors	Year	Methods	Results
1	The effectiveness of mindfulness training on reducing the symptoms of postpartum depression	Hajieh Sheydaei, Azizreza Ghasemzadeh, Amir Lashkari, Parvaneh Ghorbani Kajani	2017	Quasi experimental design. The sample were 67 primiparous postpartum mothers in 2014. The measurement of depression score used the Beck Depression Inventory (BDI), Structured Clinical Interview and Clinical Psychological Diagnosis. The experimental group was given 8 therapy sessions for 8 weeks within 2 hours. The control group was given nothing.	There was a significant difference in the reduction in depression scores in the intervention group compared to the control group (p 0.001). The mean pre and post depression scores in the control group were 25.81 and 25.12. The mean pre and post intervention scores in the experimental group were 24.75 and 18.5.
2	Staying Well during Pregnancy and the Postpartum: A Pilot Randomized Trial of Mindfulness Based Cognitive Therapy for the Prevention of Depressive Relapse/Recurrence	Sona Dimidjian, Sherryl H. Goodman, Jennifer Felder, Robert Gallop, Amanda P. Brown, Arne Beck.	2016	An experimental study conducted in 86 pregnant women with a history of depression. The intervention group was given 8 MBCT sessions for 8 weeks and the control group was given standart treatment. The measurement of the depression score used the Edinburgh Postpartum Depression Scale (EPDS) and followed up until 6 months postpartum.	During the postpartum period, there was a significant difference in depression scores in the intervention and control groups (p 0.005). The percentage increase in depression score was 4.6%, while in the control group it was 34.6%.
3	Feasibility of a Mindfulness-Based Cognitive Therapy Group Intervention as an Adjunctive Treatment for Postpartum Depression and Anxiety	Barbara Shulman, Royce Dueck, Deirdre Ryan, Genevieve Breau, Isabel Sadowski, Shaila Misri	2017	A quasi-experimental non-equivalent control group design. Sample 31 postpartum mothers who suffer from depression or anxiety during the postpartum period. The intervention group was given MBCT for 8 weeks while the control group was given standard care. Anxiety measurement use Generalized Anxiety Disorder (GAD).	There was a decrease in anxiety levels from week 1 to week 8 in the MBCT group compared with the control group (p 0.01). In the control group, anxiety levels were relatively constant from week 1 to week 8.
4	Postpartum Outcomes and Formal	Christina M. Luberto, Elyse R. Park,	2018	Experimental research with a sample of 24 primiparous pregnant women. Modified	There was a significant reduction in anxiety symptoms from baseline

Mindfulness Practice in Mindfulness-Based Cognitive Therapy for Perinatal Women	Janice H. Goodman	MBCT intervention was given, namely CALM pregnancy that conducted for 8 weeks. Anxiety measurements were performed using the Beck Anxiety Inventory (BAI) and the Penn State Worry Questionnaire (PSWQ). The follow up conducted until 3 months of the puerperium.	measurement to 3 months of the postpartum period (p <0.003). There was a significant reduction in depressive symptoms from baseline measurement up to 3 months of the postpartum period (p 0.001).
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Table 1. Articles Reviews : Mindfulness

No	Title	Authors	Year	Methods	Results
1	The Effect of Slow-Stroke Back Massage on the Anxiety Levels of Iranian Women on the First Postpartum Day	Fereshteh Jahdi, Maryam Mehrabadi, Forough Mortazavi, and Hamid Haghani	2016	A single blind controlled clinical study conducted in 100 primiparous puerperal women with normal delivery. The intervention group was given a slow-stroke back massage treatment at 4 to 18 hours after delivery for 20 minutes. In the control group, postpartum mothers will only be accompanied by researchers. Anxiety measurement was performed using Spielberger's state anxiety inventory (STAI) questionnaire.	There was a statistically significant difference in anxiety scores in the intervention group and the control group (p 0.001).
2	The Effect of Massage Therapy With Effleurage Techniques as A Prevention of Baby Blues Postpartum Mother	Desi Sarli, F. N. Sari	2018	A quantitative research with pre-experimental analytical research design. The study sample were 30 mothers ≥ 7 days to 6 weeks of the postpartum period. Samples were given effleurage massage treatment twice a week. Measurement of depression symptoms used the Edinburgh Postnatal Depression Scale (EPDS).	There is a significant difference in depressive symptoms before and after treatment with p value <0.05. Effleurage massage has been shown to reduce symptoms of depression by 20% to 80%.
3	Aromatherapy Massage as an Alternative in Reducing Cortisol Level and Enhancing	Agustina C.S, Hadi, Melyana Nurul Widyawati	2016	A quasi experimental research with non-equivalent control group design. The samples were 44 postpartum mothers divided into 4 groups, namely the massage group, the fennel and jasmine aromatherapy group,	The mean cortisol levels in the massage group decreased from 185.36 ng / mL to 110.55 ng / mL after treatment (p-value 0.004). The aromatherapy group had cortisol levels decreased to

	Breastmilk Production on Primiparous Postpartum Women in Semarang			the aromatherapy massage combination group, and the control group who were not given any treatment. Intervention was carried out twice, namely the 3rd and 4th day of the puerperium. Anxiety is measured using the parameter of the hormone cortisol.	115 ng / mL from 168.18 ng / mL. In the third group (combination massage and aromatherapy), cortisol levels decreased from 128.36 ng / mL to 97.9 ng / mL. The highest decrease in cortisol levels occurred in the massage group (74.82 ng / mL).
4	Effects of Meridian Acupressure Massage on Body Composition, Edema, Stress, and Fatigue in Postpartum Women	Geum-Sook Jung, In-Ryoung Choi, Hee-Young Kang, Eun-Young Choi	2016	A quasi-experimental research with a non-equivalent control group conductud in 39 postpartum mothers who were divided into 19 mothers in the experimental group and 20 mothers in the control group. The intervention was given a meridian acupressure massage for 90 minutes every day for 5 days. Measurement of stress scores using a researcher questionnaire.	There was a bigger decrease in psychological stress score in the experimental group than in the control group (p = 0.029).

Tabel 2 Articles Reviews : Massage

No	Title	Authors	Year	Methods	Results
1	Effectiveness of Aromatherapy Treatment in Alleviating Fatigue and Promoting Relaxation of Mothers during the Early Postpartum Period	Kyoko Asazawa, Yoshihiro Kato, Ryosuke Koinuma, Nao Takemoto, Shiho Tsutsui	2018	A quasi-experimental research with a two-group pretest-post-test design conducted in 242 postpartum mothers. The participants selected from 5 essential oils: pure lavender, ylang-ylang, citron, rosewood, and sweet orange. Measurement of the level of relaxation using a questionnaire from the researcher.	There was a significant difference in the level of relaxation of the postpartum mother in the intervention group compared to the control group (p <0.001). Giving aromatherapy can increase the relaxation of postpartum mothers.
2	The effects of clinical aromatherapy for anxiety and depression in the high	Pam Conrad, Cindy Adams	2012	The pilot study was observational with repeated measurements and samples of 28 postpartum mothers. The treatment group was divided into 2, namely the aromatherapy inhalation group and the	There was a significant difference in depression scores based on EPDS and GAD-7 in the intervention group and the control group (p 0.03 and p 0.02).

	risk postpartum woman – A pilot study			aromatherapy hand technique group. The treatment was given in 15 minutes twice a week. The control group was given standard care. The measurement of depression and anxiety scores used the Edinburgh Postnatal Depression Scale (EPDS) and the General Anxiety Disorders Scale (GAD-7).	
3	Effect of Lavender Oil Aroma in the Early Hours of Postpartum Period on Maternal Pains, Fatigue, and Mood: A Randomized Clinical Trial	Farideh Vaziri, Mahsa Shiravani, Fatemeh Sadat Najib, Saeedeh Pourahmad, Alireza Salehi, Zahra Yazdanpanahi	2017	A randomized clinical trial with a sample of 56 post-partum mothers divided into 29 mothers in the intervention group and 27 mothers in the control group. The intervention group was given lavender oil in three doses during the first 24 hours after delivery. The control group was given sesame oil. Postpartum mothers mood measurements using the positive and negative affect schedule (HOT).	There was a significant difference in the mood changes of the mothers in the intervention group (42.75 ± 3.22) and the control group (36.62 ± 2.84) with p value <0.001 . Lavender aromatherapy can improve the mood or positive mood of postpartum mothers.
4	Effect of lavender scent inhalation on prevention of stress, anxiety and depression in the postpartum period	Kianpour M, Mansouri A, Mehrabi T, Asghari G	2016	A clinical trial with a sample of 140 post-partum mothers. The intervention group was given lavender aromatherapy for 4 weeks, while the treatment group was given standard postpartum care. Measurement of levels of stress, anxiety, and depression use the Edinburgh stress, anxiety, and depression scale and the 21 - item Depression, Anxiety, and Stress Scale (DASS-21)	There was a significant difference in the reduction of anxiety ($P = 0.012$) and depressive symptoms ($P = 0.003$) in the intervention group compared to the control group.

Table 3. Articles Reviews : Aromatherapy

DISCUSSION

The physical and psychological changes that occur during the puerperium make the puerperal mother prone to psychological disorders such as anxiety to postpartum depression (Field, 2018). Psychological disorders in postpartum mothers, especially primiparous mothers, can damage the intention, motivation and self-confidence of the mother to breastfeed which lead into a failure of exclusive breastfeeding (Adedinsewo *et al.*, 2014b; Fallon *et al.*, 2016). Maternal anxiety has been linked to decreased prolactin

synthesis which results in decreased milk production (Adedinsewo *et al.*, 2014a; Agustina, Hadi and Widyawati, 2016).

Holistic therapy is a therapy that focuses not only on the symptoms felt by the patient but also on the condition of the patient's body, mind, and spirit as a whole. Holistic therapy can provide an effective and efficient healing effect with fewer side effects compared to modern medicine (Papathanasiou, Sklavou and Kourkouta, 2013).

Mindfulness therapy is one of the holistic therapies that aims to increase someone's skills in order to be aware, accept, and not judge a condition that occurs to them so that someone will be fully aware and can respond adaptively to various sensations of the body physically, mind, and emotional (Gu *et al.*, 2015). This will increase the individual's ability to adapt to a problem in a positive manner and increase self-confidence (Gu *et al.*, 2015; Sheydaei *et al.*, 2017). Mindfulness can increase the activation of the afferent vagus nerves which affect the medulla oblongata, cerebrum, and limbic system such as decreasing the activation of cortical midline structures and amygdala and increasing activation of the insula and hippocampus, thereby reducing emotional symptoms such as anxiety (Cook-Cottone, 2017).

Mindfulness therapy has been shown to reduce psychological disorders in postpartum mothers such as depression levels (Dimidjian *et al.*, 2014; Sheydaei *et al.*, 2017; Luberto, Park and Goodman, 2018) and anxiety level (Shulman *et al.*, 2017; Luberto, Park and Goodman, 2018) significantly compared to the control group.

Massage will affect the regulation of the autonomic nervous system which has an impact on reducing levels of the cortisol, adrenaline and noradrenaline hormone. Massage also regulates the activity of nerves in the frontal brain and amygdala, and stimulates the skin's sensory afferent fibers so that they can affect the human body and mind. The intermittent pressure applied during massage can increase blood circulation and lymphatic drainage which causes changes in heart rate and blood pressure, which has an impact on relaxing the body and mind, as well as reducing pain and psychological disorders (Sarli and Sari, no date; Jahdi *et al.*, 2016).

Massage therapy has been shown to reduce psychological disorders in postpartum mothers such as anxiety (Jahdi *et al.*, 2016), depression (Sarli and Sari, no date), stress scores (Jung *et al.*, 2017), to decrease levels of the body's cortisol hormone (Agustina, Hadi and Widyawati, 2016) significantly compared to the control group.

The administration of aromatherapy can reduce the release of cortisol and increase serotonin secretion which has an impact on reducing anxiety (Kianpour *et al.*, 2016). The essential oils used for aromatherapy increase relaxation by stimulating the hypothalamus and activating the parasympathetic nervous system (Asazawa *et al.*, 2018).

Aromatherapy has been shown to induce relaxation in postpartum mothers (Asazawa *et al.*, 2018), reducing depression scores (Kianpour *et al.*, 2016; Conrad, Conrad and Adams, 2018), anxiety scores (Kianpour *et al.*, 2016), and causes an increase in positive mood (Varizi *et al.*, 2017).

Research articles on holistic therapy to reduce the psychological disorders of postpartum mothers still have several limitations, such as the absence of a randomization when selecting samples and did not involve interfering variables within the study. However, research articles on holistic therapy to reduce the psychological disorders of postpartum mothers can be used as a basis for carrying out holistic therapy in postpartum mothers as well as development materials for further research.

CONCLUSION

Holistic therapies such as mindfulness, massage, and aromatherapy have been shown to be beneficial in reducing psychological disorders such as anxiety and depression in postpartum mothers which have an impact on increased relaxation and positive mood.

REFERENCES

- Adedinsewo, D. A. *et al.* (2014a) 'Human Lactation Maternal Anxiety and Breastfeeding', *Journal of Human Lactation*, 30(1). doi: 10.1177/0890334413504244.
<https://journals.sagepub.com/doi/10.1177/0890334413504244>
- Adedinsewo, D. A. *et al.* (2014b) 'Maternal Anxiety and Breastfeeding : Findings from the MAVAN (Maternal Adversity , Vulnerability and Neurodevelopment) Study', *Journal of Human Lactation*, 30(1). doi: 10.1177/0890334413504244.
<https://www.ncbi.nlm.nih.gov/pubmed/24065719>
- Agustina, C. S., Hadi and Widyawati, M. N. (2016) 'aromatherapy massage as an alternative in reducing cortisol level and enhancing breastmilk production on primiparous postpartum women in semarang', *4th Asian Academic Society International Conference*, pp. 381–388. <http://aasic.org/proc/aasic/article/view/203>
- Asazawa, K. *et al.* (2018) 'Effectiveness of Aromatherapy Treatment in Alleviating Fatigue and Promoting Relaxation of Mothers during the Early Postpartum Period', pp. 196–209. doi: 10.4236/ojn.2018.83017.
<https://www.scirp.org/journal/paperinformation.aspx?paperid=83346>
- Conrad, P., Conrad, P. and Adams, C. (2018) 'The effects of clinical aromatherapy for anxiety and depression in the high risk postpartum woman – A pilot study Complementary Therapies in Clinical Practice The effects of clinical aromatherapy for anxiety and depression in the high risk postpartum woman e A pilot study', *Complementary Therapies in Clinical Practice*. Elsevier Ltd, (August 2012), pp. 5–10. doi: 10.1016/j.ctcp.2012.05.002. <https://pubmed.ncbi.nlm.nih.gov/22789792/>
- Cook-Cottone, C. P. (2017) *Mindfulness and Yoga in Schools: a guide for teachers and practitioners*. I. Edited by D. Riegert. New York: Springer Publishing Company.
- Dimidjian, S. *et al.* (2014) 'An open trial of mindfulness-based cognitive therapy for the prevention of perinatal depressive relapse / recurrence'. doi: 10.1007/s00737-014-0468-x.
- Fallon, V. *et al.* (2016) 'Postpartum Anxiety and Infant-Feeding Outcomes : A Systematic Review', *Journal of Human Lactation*, 32(4). doi: 10.1177/0890334416662241.
<https://www.ncbi.nlm.nih.gov/pubmed/27565200>
- Field, T. (2018) 'Postnatal anxiety prevalence, predictors and effects on development: A narrative review', 51(February), pp. 24–32. doi: 10.1016/j.infbeh.2018.02.005.
<https://www.sciencedirect.com/science/article/abs/pii/S0163638317302357>
- Gu, J. *et al.* (2015) 'Clinical Psychology Review How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies', *Clinical Psychology Review*. Elsevier Ltd, 37, pp. 1–12. doi: 10.1016/j.cpr.2015.01.006.
<https://www.ncbi.nlm.nih.gov/pubmed/25689576>
- Hall, H. G., Mckenna, L. G. and Griffiths, D. L. (2012) 'Midwives ' support for Complementary and Alternative Medicine : A literature review', *Women and Birth*. Australian College of Midwives, 25(1), pp. 4–12. doi: 10.1016/j.wombi.2010.12.005. <https://www.womenandbirth.org/article/S1871->

- 5192(10)00088-0/pdf
- Jahdi, F. *et al.* (2016) 'The Effect of Slow-Stroke Back Massage on the Anxiety Levels of Iranian Women on the First Postpartum Day', 18(8). doi: 10.5812/ircmj.34270.Research.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5068252/#:~:text=The%20aim%20of%20this%20study,postpartum%20day%20in%20primiparous%20women>.
- Jordan, R. G., Farley, C. L. and Grace, K. T. (2019) *Prenatal and Postnatal Care*. 2nd edn. Edited by R. G. Jordan. Hoboken, USA: Wiley.
- Jung, G. *et al.* (2017) 'Effects of Meridian Acupressure Massage on Body Composition, Edema, Stress, and Fatigue in Postpartum Women', *The Journal of Alternative and Complementary Medicine*, 00(00), pp. 1–7. doi: 10.1089/acm.2016.0362.
<https://pubmed.ncbi.nlm.nih.gov/28714769/>
- Kementerian Kesehatan, R. (2013) *Buku Saku Pelayanan Kesehatan Ibu Di Fasilitas Kesehatan Dasar Dan Rujukan*. Jakarta: Kementerian Kesehatan RI.
- Kianpour, M. *et al.* (2016) 'Effect of lavender scent inhalation on prevention of stress, anxiety and depression in the postpartum period', pp. 197–201. doi: 10.4103/1735-9066.178248. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4815377/>
- Luberto, C. M., Park, E. R. and Goodman, J. H. (2018) 'Postpartum outcomes and formal mindfulness practice in mindfulness based cognitive therapy for perinatal women', *HHS Public Access*, 9(3), pp. 850–859. doi: 10.1007/s12671-017-0825-8. Postpartum. <https://pubmed.ncbi.nlm.nih.gov/30079120/>
- María, A. *et al.* (2012) 'Coping and adaptation process during puerperium', *Colombia Medica*, 43(2).
- Papathanasiou, I., Sklavou, M. and Kourkouta, L. (2013) 'Holistic nursing care : theories and perspectives', *American Journal of Nursing Science*, 2(1), pp. 1–5. doi: 10.11648/j.ajns.20130201.11.
https://www.researchgate.net/profile/Ioanna_Papathanasiou/publication/235759117_Holistic_Nursing_Care_Theories_and_Perspectives/links/02bfe513359fc613bc000000/Holistic-Nursing-Care-Theories-and-Perspectives.pdf
- Sarli, D. and Sari, F. N. (no date) 'The Effect of Massage Therapy With Effleurage Techniques as A Prevention of Baby Blues Prevention on Postpartum Mother', 1(3), pp. 15–21. doi: 10.31632/ijalsr.2018v01i03.003.
<http://ijalsr.org/index.php/journal/article/view/24>
- Sheydaei, H. *et al.* (2017) 'The effectiveness of mindfulness training on reducing the symptoms of postpartum depression', *Electronic Physician*, 9(July), pp. 4753–4758. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5586989/>
- Shorey, S. *et al.* (2018) 'Prevalence and incidence of postpartum depression among healthy mothers : A systematic review and meta-analysis', *Journal of Psychiatric Research*. Elsevier, 104(August), pp. 235–248. doi: 10.1016/j.jpsychires.2018.08.001. <https://pubmed.ncbi.nlm.nih.gov/30114665/>
- Shulman, B. *et al.* (2017) 'Feasibility of a Mindfulness-Based Cognitive Therapy Group Intervention as an Adjunctive Treatment for Postpartum Depression and Anxiety', *Journal of Affective Disorders*. Elsevier B.V. doi: 10.1016/j.jad.2017.12.065. <https://pubmed.ncbi.nlm.nih.gov/29653295/>
- Varizi, F. *et al.* (2017) 'Effect of Lavender Oil Aroma in the Early Hours of Postpartum Period on Maternal Pains , Fatigue , and Mood : A Randomized Clinical Trial', *International Journal of Preventive Medicine*, 8(29), pp. 1–7. doi: 10.4103/ijpvm.IJPVM. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5439291/>