Effectiveness Of Health Education In Controlling Perinatal Depression: A Systemic Literature Review

Lina Herida Pinem¹, Tukimin Bin Sansuwito², Nisha Nambyar^{3,}

¹ Ph.D in Nursing, Lincoln University College, 47301, Petaling Jaya, Selangor, Malaysia, <u>lina@stikesmitrakeluarga.ac.id</u>, 089634548853

²Lincoln University College, 47301, Petaling Jaya, Selangor, Malaysia. <u>tukimin@lincoln.edu.my</u>,+60123463251 ³Lincoln University College, 47301, Petaling Jaya, Selangor, Malaysia.<u>nisha@lincoln.edu.my</u>,+60162192665

Abstract

Introduction: Perinatal depression can occur in 10-15% of women from pregnancy to postpartum. Lack of knowledge about the process of pregnancy and childbirth is a factor that influences the incidence of prenatal depression. Having prenatal depression also increases the risk of developing postpartum depression 6 weeks after giving birth and lack of knowledge about preparing for the role of motherhood, postpartum care, and newborn care are factors that cause postpartum depression. This shows that education about pregnancy, childbirth, postpartum care, newborn care, and mental health is very important from the time of pregnancy. Objective: This Systematic Literature Review was conducted to know the effectiveness of health education in controlling perinatal depression which will be assessed through the EPDS score. Methods: This systematic literature review was conducted using the PRISMA model by searching for articles through four electronic databases: ScienceDirect, Google Scholar, PubMed, and SAGE with inclusion criteria: respondent mothers with perinatal depression (prenatal or postpartum depression), original article, controlled trial methodology (RCT) or quasi-experiment, published from 2018 to 2023, in English, intervention in the form of education via telephone or internet media. Exclusion criteria were journals older than 2018, a mother with acute psychosis, and a lifetime history of depression. Based on the inclusion and exclusion criteria, through the process of extracting titles and abstracts of articles, 10 articles were obtained which entered the analysis stage. **Results:** The initial search found 2283 articles and after removing duplicate articles, the number of articles filtered was 1383 and 10 articles met the inclusion criteria. All of these articles provide education to control postpartum depression. The educational materials provided are almost the same including preparation for childbirth, care for pregnant women, postpartum women, baby care, and maternal mental health. The majority of educational methods use digital or online, use media in the form of booklets, videos, and text messages, and only one article uses face-to-face education using PowerPoint media. The minimum intervention duration is 4 weeks, and the maximum is 4 months. The effectiveness of the intervention in reducing the EPDS score or improving the mental health of the mother was not significant in the two studies, whereas 8 studies showed that there was a significant difference in the EPDS score between the intervention and control groups. Conclusion: Health education carried out since pregnancy is effective in controlling perinatal depression.

Keywords: Health Education, Perinatal, Postpartum, Depression

Beydokhti, T. B. *et al.* (2021) 'Effect of educational- counseling program based on precedeproceed model during Pregnancy on postpartum depression', *Nursing Open*, 8(4), pp. 1578– 1586. doi: 10.1002/nop2.770.

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Chan, K. L. *et al.* (2019) 'Using smartphone-based psychoeducation to reduce postnatal depression among first-time mothers: Randomized controlled trial', *JMIR mHealth and uHealth*, 7(5). doi: 10.2196/12794.

Danaher, B. G. *et al.* (2022) 'Trial of a patient-directed eHealth program to ameliorate perinatal depression: the MomMoodBooster2 practical effectiveness study', *American Journal of Obstetrics and Gynecology*. The Authors, 228(4), pp. 453.e1-453.e10. doi: 10.1016/j.ajog.2022.09.027.

Dol, J. *et al.* (2022) 'Effectiveness of the "Essential Coaching for Every Mother" postpartum text message program on maternal psychosocial outcomes: A randomized controlled trial', *Digital Health*, 8. doi: 10.1177/20552076221107886.

Matsumura, K. *et al.* (2019) 'Education level and risk of postpartum depression: Results from the Japan Environment and Children's Study (JECS)', *BMC Psychiatry*. BMC Psychiatry, 19(1), pp. 1–11. doi: 10.1186/s12888-019-2401-3.

Mekonnen, H. *et al.* (2019) 'Impact of perinatal and repeated maternal common mental disorders on educational outcomes of primary school children in rural Ethiopia: population-based cohort study', *BJPsych Open*, 5(6). doi: 10.1192/bjo.2019.69.

Sanaati, F. *et al.* (2018) 'A randomized controlled trial on the effect of lifestyle education for Iranian women and their husbands on post-partum anxiety and depression', *Health Education Research*, 33(5), pp. 416–428. doi: 10.1093/her/cyy026.

Sasaki N, Yasuma N, Obikane E, et al. (2021) 'Psycho- educational interventions focused on maternal or infant sleep for pr...: EBSCOhost'. Japan: John Wiley & Sons Australia, Ltd, pp. 2–13. doi: https://doi.org/10.1002/npr2.12155.

Sawyer, A. *et al.* (2019) 'The effectiveness of an app-based nurse-moderated program for new mothers with depression and parenting problems (EMUMS Plus): Pragmatic randomized controlled trial', *Journal of Medical Internet Research*, 21(6). doi: 10.2196/13689.

Sun, Y. *et al.* (2021) 'Effectiveness of smartphone-based mindfulness training on maternal perinatal depression: Randomized controlled trial', *Journal of Medical Internet Research*, 23(1). doi: 10.2196/23410.



International Conference on Recent Advancement in Sustainable Healthcare (ICRASH 2023)

Organized by : Lincoln University College, Malaysia Date : 23rd and 24th May 2023

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May 10, 2023

Ms. Lina Herida Pinem Mitra Keluarga College of Health Sciences Indonesia

Sub : Acceptance of Abstract for International Conference on Recent Advancement in Sustainable Healthcare (ICRASH 2023)

Dear Ms. Lina Herida Pinem

Thank you for submitting abstract entitled, "Effectiveness of Health Education in Controlling Perinatal Depression: A Systemic Literature Review" by Pinem et al., for oral presentation in our International Conference on Recent Advancement in Sustainable Healthcare (ICRASH 2023) to be held on 23rd and 24th May 2023 at Summit Hotel Subang USJ, Malaysia.

The Scientific committee have been reviewed your abstract and found that it meets preliminary acceptance requirements set forth by the Committee to be presented at Oral Paper session.

Looking forward to meet with you at ICRASH 2023, Malaysia.

Please feel free to contact with me if any queries.

With best regards

Prof. Dr. Sandeep Poddar

Jt. Convener ICRASH 2023

Deputy Vice Chancellor (Research & Innovation) Lincoln University College. H/P +60127071827



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Lack of knowledge about the process of pregnancy and childbirth is a factor that influences the incidence of prenatal depression.

Having prenatal depression also increases the risk of developing postpartum depression 6 weeks after giving birth

Lack of knowledge about preparing for the role of motherhood, postpartum care, and newborn care are factors that cause postpartum depression.

This shows that education about pregnancy, childbirth, postpartum care, newborn care, and mental health is very important from the time of pregnancy.



This Systematic Literature Review was conducted to know the effectiveness of health education in controlling perinatal depression which will be assessed through the EPDS score.

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• Exclusion criteria were journals older than 2018, a mother with acute psychosis, and a lifetime history of depression.

• Based on the inclusion and exclusion criteria, through the process of extracting titles and abstracts of articles, 10 articles were obtained which entered the analysis stage.

Results:

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- The initial search found 2283 articles and after removing duplicate articles, the number of articles filtered was 1383 and 10 articles met the inclusion criteria.
- All of these articles provide education to control postpartum depression. The educational materials provided are almost the same including preparation for childbirth, care for pregnant women, postpartum women, baby care, and maternal mental health.

• The majority of educational methods use digital or online, use media in the form of booklets, videos, and text messages, and only one article uses face-to-face education using PowerPoint media.

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 Health education carried out since pregnancy is effective in controlling perinatal depression

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CONCLUSION

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- Can Gurkan, O. and Eksi, Z. (2017) 'Effects of Antenatal Education Program on Postpartum Functional Status and Depression', Clinical and Experimental Health Sciences, 7(4), pp. 133–138. doi: 10.5152/clinexphealthsci.2017.284.
- 3. Chan, K. L. et al. (2019) 'Using smartphone-based psychoeducation to reduce postnatal depression among first-time mothers: Randomized controlled trial', JMIR mHealth and uHealth, 7(5). doi: 10.2196/12794.
- 4. Danaher, B. G. et al. (2022) 'Trial of a patient-directed eHealth program to ameliorate perinatal depression: the MomMoodBooster2 practical effectiveness study', American Journal of Obstetrics and Gynecology. The Authors, 228(4), pp. 453.e1-453.e10. doi: 10.1016/j.ajog.2022.09.027.

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REFERENCE

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- 2. Mekonnen, H. et al. (2019) 'Impact of perinatal and repeated maternal common mental disorders on educational outcomes of primary school children in rural Ethiopia: populationbased cohort study', BJPsych Open, 5(6). doi: 10.1192/bjo.2019.69.
- 3. Sanaati, F. et al. (2018) 'A randomized controlled trial on the effect of lifestyle education for Iranian women and their husbands on post-partum anxiety and depression', Health Education Research, 33(5), pp. 416–428. doi: 10.1093/her/cyy026.
- 4. Sasaki N, Yasuma N, Obikane E, et al. (2021) 'Psycho- educational interventions focused on maternal or infant sleep for pr...: EBSCOhost'. Japan: John Wiley & Sons Australia, Ltd, pp. 2-13. doi: https://doi. org/10.1002/npr2.12155.
- 5. Sawyer, A. et al. (2019) 'The effectiveness of an app-based nurse-moderated program for new mothers with depression and parenting problems (EMUMS Plus): Pragmatic randomized controlled trial', Journal of Medical Internet Research, 21(6). doi: 10.2196/13689.
- 6. Sun, Y. et al. (2021) 'Effectiveness of smartphone-based mindfulness training on maternal perinatal depression: Randomized controlled trial', Journal of Medical Internet Research, 23(1). doi: 10.2196/23410









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Certificate of Appreciation

Lina Herida Pinem

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