

EPV0666

Omega-3 and Postpartum Depression: Assessing the Effectiveness of Omega-3 Polyunsaturated Fatty Acids in Preventing Postpartum Depression

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doi: 10.1192/j.eurpsy.2025.1363

Introduction: Postpartum depression (PPD) affects approximately 9% of new mothers and can have profound consequences on both maternal well-being and infant development. Additionally, around 50% of women experience depressive symptoms or mood disturbances during pregnancy and lactation. A growing body of research suggests a potential link between omega-3 polyunsaturated fatty acids (PUFAs) and mood regulation, particularly in the prevention of PPD. Omega-3 PUFAs, primarily docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA), are found in high concentrations in oily fish and seafood. Over the past century, dietary intake of omega-3 fatty acids has significantly declined in industrialized societies, coinciding with increased rates of mood disorders. Notably, populations with higher fish consumption, such as those in Hong Kong, China, and Japan, report lower incidences of depression compared to Western countries, where lower fish consumption has been linked to higher rates of PPD. During pregnancy and lactation, women become particularly depleted in omega-3 PUFAs, as these essential fats are preferentially diverted to support fetal development, potentially increasing the risk of depression in mothers.

Objectives: This study aims to explore the effectiveness of omega-3 PUFAs in preventing PPD.

Methods: A comprehensive literature review was conducted to evaluate the effectiveness of Omega-3 in preventing PPD. The search was performed on PubMed using key terms such as "Omega-3," "Postpartum Depression," and "Prevention."

Results: In one study, women with low LCP intake were supplemented with 220 mg of DHA, which had no effect on depression, like in another study that reported no effect of 1.8 g of Omega-3 PUFAs on maternal depressive symptoms. Another trial involving 2,399 women found no significant difference in depressive symptoms between those receiving 800 mg of DHA and a control group during the first six months postpartum. A randomized controlled trial of 126 women at risk PPD also showed no benefit from EPA or DHA supplementation in reducing Beck Depression Inventory (BDI) scores compared to placebo. A meta-analysis of 11 trials (N = 3,181) similarly found no significant difference in depression scores between Omega-3 and placebo groups, and no association between the daily doses of DHA or EPA and PPD prevention.

Conclusions: Based on the reviewed trials, there is insufficient evidence to recommend Omega-3 fatty acid supplementation (DHA and EPA) at any dosage for the prevention of postpartum depression.

Disclosure of Interest: None Declared

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Results of Studying the correlation Between Stress and Depression of Miner Workers

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doi: 10.1192/j.eurpsy.2025.1364

Introduction: Mining work and environment are the hardest and most difficult jobs in the labor market, increasing the risk of physical and mental illness. A study was conducted to determine the level of stress in mine workers and evaluate the relationship between depression and stress.

Objectives: To determine the level of stress in mine workers and evaluate the relationship between depression and stress.

Methods: Questionnaires were collected from mine workers using the stress detection test (SRQ) and depression detection test (PHQ9) developed by the World Health Organization for doctors.

Results: 2.2% (95) of the respondents are male and 7.8% (8) are female workers. Of these, 70.9% work night shifts, 24.3% do not work night shifts, and 4.8% occasionally work night shifts. Comparing the stress levels of the respondents by age, 1.9% (2) of 20-24-year-olds are moderately stressed, 3.9% (4) of 25-29-year-olds are moderately stressed, and 4.8% (5) are stressed. 30-34-year-olds have moderate stress, 1.9% (2) have high stress, 1% (1) of 35-39-year-olds have moderate stress, 1.9% (2) have high stress, and 1% (1) have high stress. 40-44 have moderate, 1% (1) high, and 1% (1) 45-49 have moderate stress. The depression status of the participants compared to the 20-24-year-olds was 1% (1) transient mood depression, 1% (1) moderate depression, and 25-29-year-olds self-correcting transient mood 4.8% depression (5), 4.8% moderate depression (5), 1% (1) moderate depression, 1% (1) severe depression, 5.8% (6) depressed, 4.8% ((5)) moderate depression, 1.9% (2) moderate depression, 35-39-year-old spontaneous self-correction (68%). 7) with depression, 1.9% (2) with moderate depression, temporary self-correction at the age of 40-44 1.9% (2) with depression, 1% (1) with severe depression, temporary at the age of 45-49 2.9% (3) have depression. According to this, it can be considered that 25-44-year-olds are at risk of depression with a high depression index.

Conclusions: The study concluded that 25-44-year-olds are at risk of depression with a high depression index, indicating that they are at risk of depression.

Disclosure of Interest: None Declared

EPV0666

Effects of vitamin D levels on lipid, glucose profiles and depression in perimenopausal women

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doi: 10.1192/j.eurpsy.2025.1365