

Association between Anemia and Maternal Depression during Pregnancy: Systematic Review

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Abstract : Introduction: Maternal depression is a common psychological disorder that mostly occurs during pregnancy and after childbirth. It affects approximately one in four women worldwide. There is inconsistent evidence regarding the association between anemia and maternal depression. The objective of this systematic review was to examine the association between anemia and depression during pregnancy. Method: A comprehensive search of articles published before March 8, 2024, was conducted in seven databases such as PubMed, Scopus, Web of Science, PsycINFO, CINAHL, Cochrane Library, and Google Scholar. The Boolean operators "AND" or "OR" and "NOT" were used to connect the MeSH terms and keywords. Rayyan software was used to screen articles for final retrieval, and the PRISMA diagram was used to show the article selection process. Data extraction and risk bias assessment were done by two reviewers independently. JBI critical appraisal tool was used to assess the methodological quality of the retrieved articles. Heterogeneity was assessed through visual inspection of the extracted result, and narrative analysis was used to synthesize the result. Result: A total of 2,413 articles were obtained from seven electronic databases. Among these articles, a total of 2,398 were removed due to duplication (702 articles), by title and abstract selection criteria (1,678 articles), and by full-text review (18 articles). Finally, in this systematic review, 15 articles with a total of 628,781 pregnant women were included: seven articles were cohort studies, two were case-control, and six studies were cross-sectional. All included studies were published between 2013 and 2022. Studies conducted in the United States, South Korea, Finland, and one in South India found no significant association between anemia and maternal depression during pregnancy. On the other hand, studies conducted in Australia, Canada, Finland, Israel, Turkey, Vietnam, Ethiopia, and South India showed a significant association between anemia and depression during pregnancy. Conclusion: The overall finding of the systematic review shows the burden of anemia and antenatal depression is much higher among pregnant women in developing countries. Around three-fourths of the studies show that anemia is positively associated with antenatal depression. Almost all studies conducted in LMICs show anemia positively associated with antenatal depression.

Keywords : pregnant, women, anemia, depression

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