

Impact of cancer therapy on female fertility: a systematic review

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Abstract

Background: Cancers have become highly prevalent in developing countries and Africa is not far from it. The treatment of these cancers increases the risk of infertility in women. **Objectives:** This review aims to understand the effects of different types of cancer treatments on the fertility of women. **Search strategy:** The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were wielded for this systematic review. We systematically searched PubMed, Google Scholar and Medline databases to identify eligible articles on the effects of cancer treatments on the fertility of women. **Selection criteria:** The articles published between the years 2000 and 2021 were included in the current review. The search was limited to studies in humans and published in English. **Data collection and analysis:** The selected studies were scrutinized, and relevant data were extracted from the selected articles using excel sheet. **Main results:** A total of 19 articles were encompassed in this cutting-edge systematic review that met the selection criteria. Overall fertility deficits were observed in female survivors of cancers. Treatment with alkylating agents, second-line therapy and age > 35 years also influence chances of pregnancy. Pre-term delivery was also found to be linked to cancer-related therapy. **Conclusions:** The present study indicates that future measures should be taken to include assessment of women's desire for future fertility and also provide fertility preservation options. Counseling tools and guidelines for referral to oncofertility specialists should be developed for newly diagnosed young patients. **Funding:** None.

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