

ORIGINAL ARTICLE

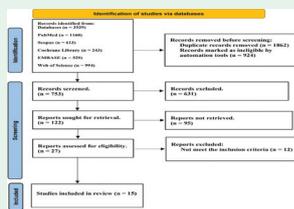
The risk factors for cardiovascular disease and chronic kidney disease in patients with nonalcoholic fatty liver disease in Saudi Arabia

Mohammedsaeed et al identify potential risk factors for chronic kidney disease (CKD) and cardiovascular disease (CVD) in Saudi Arabian patients with non-alcoholic fatty liver disease (NAFLD). A 6-year prospective cohort study is carried out from January 2018-2023, enrolling 1,500 patients. Patients are evaluated using biomarker analyses, and medical records are reviewed to assess the incidence of CVD and CKD. Of the 1500 patients, 735 (49%) are diagnosed with NAFLD in 2018, while 765 (51%) do not have the condition. Compared to non-NAFLD patients, those with NAFLD exhibit elevated blood creatinine levels, lower GFR, and higher urine albumin. They concluded that NAFLD is associated with alterations in lipid profiles, elevated high-sensitivity C-reactive protein (hs-CRP), and elevated aspartate aminotransferase (AST), all of which may contribute to early CKD and CVD development.

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SYSTEMATIC REVIEWS

Breast cancer incidence after hormonal treatment for infertility. A meta-analysis of population-based studies

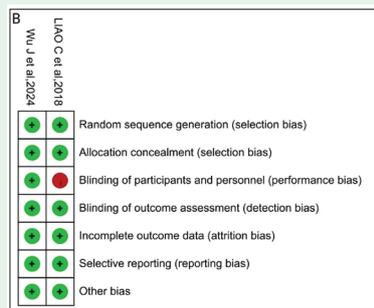


Preferred reporting items for systematic reviews and meta-analyses flow diagram. Process study selections through databases

Zaman et al comprehensively understand the relationship between infertility medications and the risk of breast cancer (BC) in females. Relevant literature search using different databases following preferred reporting items for systematic reviews and meta-analyses guidelines is carried out from 2003-2023. Population-based studies comparing the incidence of BC after hormonal fertility treatment and a control group are included. In addition, random and fixed effect models are used to carry out meta-analyses. A total of 15 studies involving 92,555 women are included in this review. The pooled analysis using risk ratios (RRs) shows no evidence of increased BC risk associated with hormonal fertility medications. The level of heterogeneity was low (32%), and the Q test is not statistically significant. Sensitivity analysis using a random-effects model yields consistent findings, suggesting no increased BC development risk with infertility medications. Among the 4 studies reporting hazard ratios (HRs), a significant protective effect on BC risk is observed. The heterogeneity is substantially high ($I^2=96\%$), and the Q test demonstrates statistical significance. Sensitivity analysis using a random-effects model shows that heterogeneity remained constant, suggesting that the heterogeneity is attributable to the methods utilized in the included studies rather than being a result of statistical heterogeneity. The overall effect is 1.01 and is not statistically significant ($p=0.94$). They concluded that this meta-analysis found no evidence of increased risk of BC following hormonal infertility treatment.

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Pocket-creation method versus conventional method of endoscopic submucosal dissection for early gastric cancer. A systematic review and meta-analysis



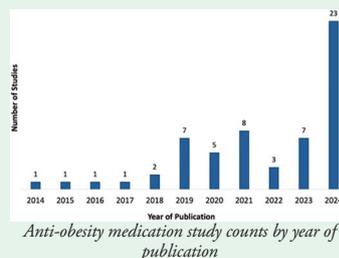
Risk of bias summary

Song et al compare the efficacy and safety between 2 endoscopic surgical approaches for early gastric cancer: pocket creation method of endoscopic submucosal dissection (PCM-ESD) and conventional ESD (CM-ESD). A comprehensive literature search is carried out in PubMed, China National Knowledge Infrastructure, and the Cochrane Library from their inception to July 2024 using medical subject headings and free-text terms. A total of 578 cases are included in the study, which sourced from 2 randomized controlled trials and 5 retrospective cohort studies. Among them, 258 cases are in the intervention group that received PCM-ESD, and 320 cases are in the control group that received CM-ESD. The PCM-ESD demonstrates a significantly faster dissection speed (mean difference=5.57 mm²/min; 95% confidence interval: [4.24-6.91]; $p<0.00001$) and shorter procedure time compared to CM-ESD. The incidence of intraoperative perforation in the PCM-ESD group is notably lower than that in the CM-ESD group. In terms of complete resection, R0 resection, or delayed bleeding, the 2 groups have no significant differences. They concluded that, for endoscopists, the use of PCM in early gastric cancer seems to be superior to CM-ESD in terms of dissection speed and the procedure time, and got a lower incidence of perforation. Moreover, there was no discernible difference between the 2 groups' rates of en bloc and R0 resection, and the use of PCM-ESD did not increase the chance of delayed bleeding.

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SCOPING REVIEW

Clinical studies on anti-obesity medications in Arab countries



AlOtaibi et al identify and summarize studies carried out in Arab countries on anti-obesity medications (AOMs), with a focus on the types of medications investigated, study designs, and the efficacy/effectiveness and safety metrics reported. They carried out a comprehensive scoping review of primary studies examining the use of AOMs in adult Arab populations. Five databases are searched for English-language publications up to October 2024. Data extraction is carried out on study characteristics, participant demographics, interventions, and outcomes related to weight reduction, metabolic parameters, and side effects. The risk of bias (RoB) is assessed using the Newcastle-Ottawa scale for non-randomized studies and a modified RoB tool for randomized controlled trials. They concluded that despite the growing body of research on AOMs in Arab countries, most studies remain observational and focus primarily on earlier-generation agents.

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