Cardiovascular diseases (CVDs) are a leading cause of global mortality, with significant healthcare costs projected to rise. Cardiac surgery, a crucial treatment for CVDs, is frequently associated with emotional distress (anxiety and depression) in patients, hindering recovery. Preoperative education, a key component of enhanced recovery pathways, aims to mitigate this distress by providing information on the perioperative process, improving psychological support, managing expectations, and promoting recovery. While some studies show preoperative education reduces anxiety, improves knowledge, and increases patient satisfaction, others report negligible effects on anxiety, depression, hospitalization length, and pain control. Previous reviews suffered from methodological limitations, lacking rigorous meta-analysis and consistent conclusions. This review, guided by PRISMA and Cochrane guidelines, aims to synthesize evidence on preoperative education's impact on perioperative outcomes (anxiety, depression, knowledge, pain, complications, hospitalization length, ICU stay, satisfaction, and HRQOL) in cardiac surgery patients using a meta-analysis of randomized controlled trials (RCTs) including published, unpublished, and ongoing studies in English, with participants aged 18 and older undergoing STS-defined cardiac procedures, excluding those with pre-existing psychological disorders or cognitive impairment. The review found that preoperative education significantly reduced anxiety, depression, ICU stay, and improved knowledge and satisfaction; however, further research is needed to assess its impact on pain, complications, hospitalization length, and HRQOL. Meta-analytic evidence supports consistent implementation of preoperative education in clinical settings and educational curricula.