

Objective: To determine maternal and fetal outcomes in postoperative women with RHD who become pregnant after valve surgery and evaluate current anticoagulation management during pregnancy.

Methods: Data from the Rwandan RHD cardiac surgical registry identified all female patients who underwent valve surgery before or during childbearing age since 2006. 136 participants completed a mixed-methods questionnaire detailing each pregnancy after surgery, including anticoagulation regimen and outcomes.

Results: 38.2% (n=136) of patients reported at least one pregnancy after surgery, of which more than half were unintentional (53.9%, n=52). Among those with mechanical valves, most remained on warfarin alone during pregnancy (58.5%, n=53) while one third were switched to low molecular weight heparin during the first, second, or third trimesters (5 vs. 4 vs. 7, n=18). Women with bioprosthetic valve replacement or valve repair were more likely to experience live term births (84.6% vs 45.3%, $p<0.01$) and less likely to report spontaneous abortion (3.9% vs 30.2%, $p<0.01$) compared to women with mechanical valve replacement. Excessive bleeding was the most common complication during pregnancy (9.1%, n=79), and two infants were diagnosed with congenital defects associated with warfarin embryopathy (4.8%, n=42).

Conclusions: Despite preoperative counseling discouraging conception, many women with prosthetic valves still become pregnant after surgery. The results of this study will inform evidence-based and context-specific practices for anticoagulation during pregnancy in Rwanda and the region.