

# Quality of life improvements after bariatric surgery in reproductive age women with and without PCOS: a cohort study

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## Abstract

Objective: To understand the impacts of bariatric surgery on quality of life (QOL) in reproductive age women both with and without PCOS. Design: A cohort study assessing QOL prior to and a 3,6 and 12 month follow up appointments post bariatric surgery. Setting: Women completed questionnaires at clinic appointments or surveys posted to them for completion. Population or Sample: Sample taken from the RHAMS study (Reproductive Health after Metabolic Surgery). Methods: The BOSS42 Bariatric & Obesity-Specific Survey was used to assess QOL. Main Outcome Measures: QOL improvements were assessed over time and differences between the two groups compared. Secondary outcomes included assessment of hirsutism, irregular or absent periods, and Sex Hormone Binding Globulin levels pre- and post-surgery. Results: Bariatric surgery was shown to have significant QOL benefits for both groups. Resolution rates of irregular or absent periods was significant across both groups. Resolution of hirsutism was significant in women with PCOS after weight loss. Weight was significantly negatively correlated with QOL. Conclusions: Bariatric surgery results in significant physical and psychological health benefits for all women with obesity, and for women with PCOS, may alleviate a significant amount of disease related burden related to hyperandrogenism, sub-fertility, and metabolic disturbance. These results indicate the significance and breadth of benefits bariatric surgery can have for women both with and without PCOS. Funding This research did not receive any specific grant from funding agencies in public, commercial, or not-for-profit sectors. Keywords: 'bariatric surgery' 'PCOS' 'quality of life' MESH\* terms - Fertility\*, Reproduction\*, Women's Health

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