EXPLORING THE EFFECTS OF TELEMEDICINE ON BARIATRIC SURGERY FOLLOW-UP: A MATCHED CASE CONTROL STUDY

Thiyake Rajaratnam, MSc., **Benjamin Stall,** BSc., **Daniel Wang,** MSc.**, Sanjeev Sockalingam,** MD, MHPE

BACKGROUND

Bariatric surgery (BS) is recognized as an effective treatment for long-term obesity. Post-operative care and management is essential to avoid complications, but attending routine follow up appointments can be challenging for patients that live in rural areas with limited access to healthcare resources. Although telehealth services have had variable use in BS care, telehealth offers a potential solution to these challenges. The aim of this study was to compare 1) post-BS appointment adherence, and 2) psychosocial and BMI outcomes in patients that did or did not use telehealth.

METHODS

We examined data from 192 (96 telehealth and 96 non-telehealth) patients from Toronto Western Hospital (TWH) BS Program matched on gender, age, date of surgery, BMI, and distance from appointment site. Psychosocial and demographic variables including rurality index (RIO) were collected and analysed.

RESULTS

On average, telehealth and non-telehealth users were 383 ± 198 km and 18 ± 16 km away from TWH, respectively. The RIO for telehealth group was significantly higher than their non-telehealth counterpart ($p<0.001$), indicating that telemedicine users were predominantly from non-urban areas. Appointment attendance rates, BMI and psychosocial measures did not exhibit any statistically significant difference between the two groups.

CONCLUSION

This study demonstrates that telehealth services can establish comparable post-operative management and appointment adherence rates to patients in non-urban centres. Therefore, our results suggest that telehealth could help overcome geographical barriers to provide quality healthcare services to more remote regions. Findings from this study can help examine readiness of rural communities for telehealth, and aid in successful implementation of such services.