OUTCOMES AND EXPERIENCES OF INDIGENOUS PATIENTS IN NEWFOUNDLAND'S BARIATRIC SURGERY PROGRAM: A PILOT STUDY

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BACKGROUND

- Canadian Indigenous Peoples experience higher obesity rates (30-51%) compared to non-Indigenous populations (12-31%).
- The Truth and Reconciliation Commission of Canada (TRC) has called for expanded health research to address disparities between Indigenous and non-Indigenous communities.
- 9.3% of Newfoundland and Labrador's (NL) population is Indigenous and there is a need to improve this group's healthcare inequalities.
- This study compares bariatric surgery outcomes and patient experiences in NL's Bariatric Surgery Program amongst the Indigenous versus non-Indigenous population.

METHODS

- This is a mixed-methods retrospective cohort study, including patients who underwent bariatric surgery in NL's Bariatric Surgery Program from 2011-2022.
- Metabolic outcomes were assessed through chart reviews.
- Patient experiences were captured via phone surveys focusing on access to care, postoperative supports, and program improvement suggestions.

	Indigenous n= 8 (26.7%)	Non-Indigenous n= 22 (73.3%)	P value
Age, mean years (+/-SD)	51.0 (6.6)	48.0 (9.6)	0.21
Female, n (%)	8 (100.0)	19 (86.4)	0.04
Preop BMI, mean (kg/m2)	47.0	49.7	0.18
Comorbidities			
DM2, n (%)	3 (37.5)	8 (36.4)	0.95
GERD, n (%)	3 (37.5)	6 (27.3)	0.59
HTN, n (%)	3 (37.5)	13 (59.1)	0.30
OSA, n (%)	3 (37.5)	13 (59.1)	0.30
DLD, n (%)	1 (12.5)	10 (45.5)	0.10
OA, n (%)	1 (12.5)	6 (27.3)	0.40

Table 1: Baseline patient characteristics

	Indigenous	Non-Indigenous	P value
LSG, n (%)	6 (75.0)	21 (95.5)	0.10
Lap to open SG, n (%)	1 (12.5)	1 (4.5)	0.44
Lap reversal of VBG, n (%)	1 (12.5)	0 (0.0)	0.10

Table 2: Bariatric procedures performed

RESULTS

- 30 patients were included in the study
  - 8 Indigenous
  - 22 non-Indigenous
- There were no significant differences in metabolic outcomes, at one year follow-up:
  - Excess weight loss (45% vs. 48%, p=0.35)
  - BMI reduction (9.5 vs. 11.3 kg/m^2, p=0.15)
  - Comorbidity improvement (63% vs. 73%, p=0.59)
  - Postop complications (25% vs. 18%, p=0.59)

	Indigenous	Non-Indigenous	P value
%EWL mean (%)	44.8	47.6	0.35
Decrease in BMI, mean	9.5	11.3	0.15
Postop BMI, mean	37.5	38.4	0.37
Postop complications, n (%)	2 (25.0)	4 (18.2)	0.68
GERD, n (%)	0 (0.0)	2 (9.1)	0.38
Wound infection, n (%)	1 (12.5)	0 (0.0)	0.09
Hiatal hernia, n (%)	1 (12.5)	0 (0.0)	0.09
PE, n (%)	0 (0.0)	1 (4.5)	0.54
Comorbidity improvement, n (%)	5 (62.5)	16 (72.7)	0.59
DM2	1 (12.5)	9 (40.9)	0.14
HTN	3 (37.5)	8 (36.4)	0.95
DLD	0 (0.0)	5 (22.7)	0.14
GERD, n (%)	2 (25.0)	0 (0.0)	0.02
OSA, n (%)	1 (12.5)	4 (18.2)	0.71

Table 3: Bariatric surgery outcomes after 1 year

RESULTS CONTINUED

- On a 1-10 Likert scale, Indigenous patients reported
  - Lower satisfaction with weight loss (6.3 vs. 8.2, p=0.03)
  - Less likely to recommend the program (5.6 vs. 8.8, p=0.04)
  - Better financial accessibility (9.2 vs. 7.1, p<0.01)
- Both groups cited similar challenges with bariatric surgery program referral, transportation, and postoperative supports.
- Common recommendations included longer follow-up, increased mental health counselling services and more postoperative cosmesis education.

	Indigenous	Non-Indigenous	P value
Satisfaction with weight loss	6.3	8.2	0.03
Less likely to refer others	5.6	8.8	0.04
Financial accessibility	9.2	7.1	<0.01

Table 4: Patient experience questionnaire responses with significant findings

CONCLUSION

- As a response to TRC's "Calls to Action," our study shows bariatric surgery outcomes in NL were similar for Indigenous and non-Indigenous patients.
- Indigenous patients' weight loss satisfaction may improve with higher weight loss procedures such as RYGB & Duodenal Switch.
- There is need for extended postoperative follow-up and enhanced mental health support services.

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