

Does Language Affect Outcomes in Bariatric Surgery Patients?

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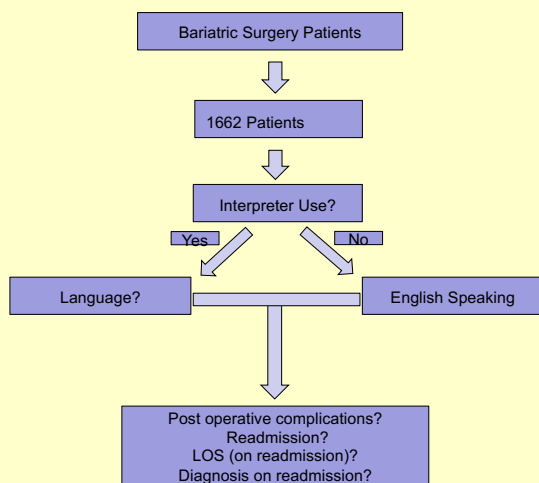
Background

- Bariatric surgery has the potential to result in profound improvements in a patient's quality of life.
- Communication between patients and providers is paramount to ensure adequate pre-operative preparation and to provide sustained success in the post-operative period.
- Language barriers may impact these outcomes.

Objective

- Goal:** to evaluate outcomes for patients undergoing bariatric procedures based on the patient's primary language.
- Hypothesis:** non-English speakers would have different outcomes than English-speakers.
- Setting:** urban academic medical center serving an ethnically diverse population.

Methods



Retrospective Chart Review January 2013 – December 2017

Results

- Study Duration: 5 years
- Total Population: 1662 patients
- Female Patients: 85.20% (1215/1426)

Table 1 – Frequency of Procedures Performed

Procedures	Frequency
Laparoscopic Roux-en-Y Gastric Bypass	66.73%
Laparoscopic Sleeve Gastrectomy	33.27%

Figure 1 – Language Distribution

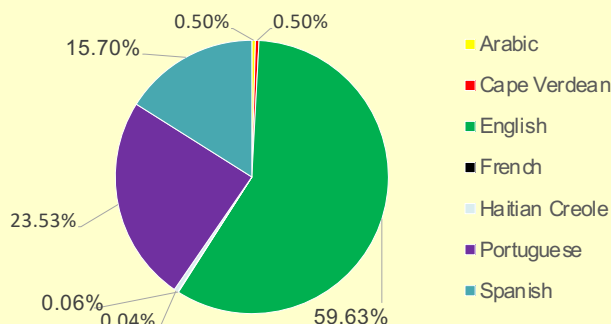


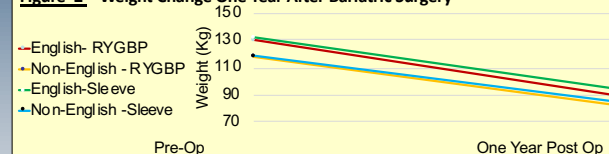
Table 2 – Readmissions at 30 Days and One Year

Language	% Total (n)	30 day ED Visits % (n)	30 day Readmission % (n)	1 Year ED Visits % (n)	1 Year Readmission % (n)
English	59.63% (991)	9.69% (96)	4.95% (49)	22.50% (223)	5.78% (56)
Non-English	40.37% (671)	7.00% (47)	4.47% (30)	14.31% (96)*	7.75% (52)

Table 3 – Reoperations and Complications

Language	% Total (n)	Complications prior to discharge % (n)	Complications in 30 days % (n)	Complications in 1 year % (n)	Reoperations in 1 year % (n)
English	59.63% (991)	2.42% (24)	7.27% (72)	12.21% (121)	4.64% (46)
Non-English	40.37% (671)	1.94% (13)	6.71% (45)	10.73% (72)	4.47% (30)

Figure 2 – Weight Change One Year After Bariatric Surgery



Discussion

- Nearly 1/3 of our bariatric surgery population required the use of an interpreter.
- Interestingly, fewer patients with limited English proficiency present to the ED within one year.
- This statistically significant finding stands true after multivariate regression for pre-existing comorbidities and risk factors.
- No difference in readmission at 30 days or one year.
- No difference in post-operative complications or rates of reoperation.
- No difference in LOS on re-admission.

Conclusion

- Limited English proficiency is NOT a predictor of outcomes following bariatric surgery.
- At our institution, we implement a variety of additional services and interventions to improve communication with patients of all languages to reduce readmission and minimize preventable post operative complications.

Recommendations

- Regular use of interpreter services pre-operatively to ensure thorough understanding of operative and post operative course across all consulting disciplines.
- Discharge paper work available in numerous different languages including a review of discharge paperwork with the assistance of an interpreter.

Future Directions

- Match-controlled analysis of outcomes of patients after bariatric surgery before and after adoption of the above recommendations
- Impact of Language on non-bariatric surgeries.