Effect of Anti-Obesity Medications (AOMs) Education on Prescription for Obesity Management in Diabetic Patients.

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INTRODUCTION

- Anti-obesity medications can be used as an adjunct with a reduced calorie diet and increased physical activity, to help achieve clinically significant weight loss.
- The purpose of this QI project was to educate and instill knowledge regarding these medications to physicians and to encourage their prescription. Additionally, we also evaluated the decrease in HbA1C.

BACKGROUND

- Recent meta-analyses of new anti-obesity drugs and their weight-loss efficacy have shown that the overall placebo-subtracted weight reduction (%) for at least 12 months ranged from 2.9 to 6.8% for the following drugs: phentermine/ topiramate (6.8%), liraglutide (5.4%), naltrexone/bupropion (4.0%), orlistat (2.9%) (1) .
- The outcomes to be noted from this QI project would be the rate of prescription of anti-obesity medication.
- This information can then be a basis for further education regarding the benefits of prescribing anti-obesity medications in target population which further conveys multiple benefits of co-morbid medical illnesses.

METHODS

- The method used in this QI project would be via a questionnaire outlining the knowledge of anti-obesity medication. The questionnaire includes general knowledge regarding the medications and how often they are prescribed.
- Patient data from the electronic record system would be extracted in a retrospective manner to assess the use of these medications during the time period of the study.
- The inclusion criteria would include obese patients with a BMI>30 and with a history of type II Diabetes Mellitus, adults between the ages of 18 and 70.
- The exclusion criteria would include patients outside the age criteria, pregnant patients, and patients with type 1 diabetes.
- The hypothesis to be tested in this QI project study is the rate of AOM prescriptions in the study population will be greater in the post than in the pre study period.

Data Obtained from CMMC

Measures	Outcome(s)
• Pre- & Post- Provider Questionnaire • Age, years • Sex (female, male) • Race • BMI at date seen in IM Clinic • Type 2 diabetes • Date seen in IM Clinic • Office Progress Note for IM Clinic visit. • Prescribed AOMs: ▫ Orlistat / Alli [OTC], Xenical ▫ Phenteramine-Topiramate / Qsymia ▫ Bupropion-naltrexone / Contrave ▫ Liraglutide / Saxenda, Victoza ▫ Semaglutide / Ozempic ▫ Benzphetamine / Regimex ▫ Phentermine / Adipex-P, Lomaira	• AOM prescription rate pre and post intervention • Aggregated Provider Questionnaire Responses

Medical Record Number (MRN), Hospital Account Record Number (HAR) &/or Contact Serial Number (CSN) will be collected, only until the final data set is complete, to allow for correlation and aggregation of data extracted at different times and/or from different databases and/or from distinct extractions into the single, final data set. Once accomplished, all data will be de-identified. Each unique case will receive a randomly generated and randomly assigned alphanumeric case identification. No means of patient identification will remain.

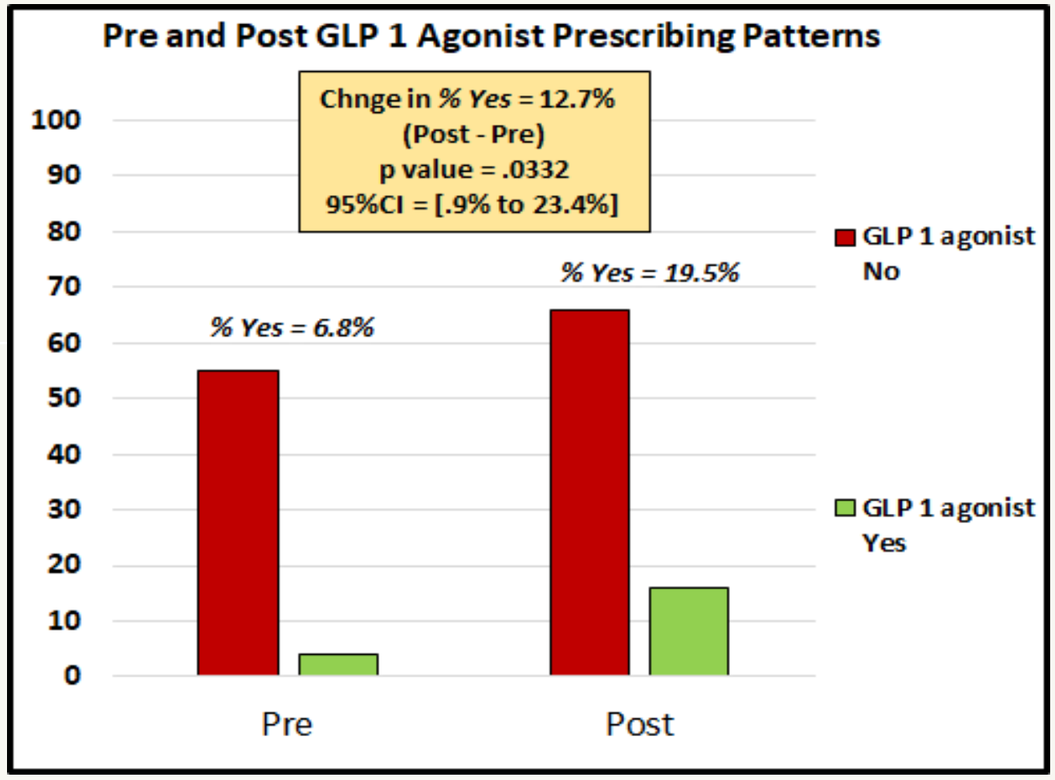
	Please Select One
1 How often have you prescribed anti-obesity medication in the past 3 months?	
Always	○
Sometimes	○
Never	○

	Please Select One
2 At what BMI (Weight Class) do you decide to intervene?	
25 to < 30 (Overweight)	○
30 to < 40 (Obese 30 to < 40)	○
> 40 (Morbidly / Severe Obese)	○

	Please Select One or More
3 Please select the anti-obesity medications that you are aware of	
Orlistat / *Alli [OTC], Xenical*	○
Phenteramine-Topiramate / *Qsymia*	○
Bupropion-naltrexone / *Contrave*	○
Liraglutide / *Saxenda, Victoza*	○
Semaglutide / *Ozempic*	○
Benzphetamine / *Regimex*	○
Phentermine / *Adipex-P, Lomaira*	○

	Most Likely *Please Select One*	Least Likely *Please Select One*
4 Which medication are you most and least likely to prescribe?		
Orlistat / *Alli [OTC], Xenical*	○	○
Phenteramine-Topiramate / *Qsymia*	○	○
Bupropion-naltrexone / *Contrave*	○	○
Liraglutide / *Saxenda, Victoza*	○	○
Semaglutide / *Ozempic*	○	○
Benzphetamine / *Regimex*	○	○
Phentermine / *Adipex-P, Lomaira*	○	○

	Most Likely *Please Select One*	Least Likely *Please Select One*
5 Please select the most and least important barrier to prescribing		
Side Effects	○	○
Cost	○	○
Comfort Level	○	○
Other	○	○



RESULTS

- GLP-1 agonist (semaglutide, liraglutide) prescription rate was 6.78% prior to study period and increased to 19.51% in post study period.
- An increase by 12.73%, with 95% CI (0.9357-23.41). With "p-value" 0.03, statistically significant.
- No statistically significant results were found for the provider questionnaire or a decrease in HbA1c

CONCLUSION

- Fewer than 2% of adults with obesity are offered and fill a prescription for one of these medications, creating a therapeutic gap in obesity treatment, especially in diabetic patients (2).
- Impact of education on house-staff increased the comfort level of prescribing AOMs to target DM & obesity.
- Our QI project showed a statistically significant (p value 0.03) increase in GLP-1 agonist prescription rate.
- The aim of this QI project is to evaluate existing knowledge among physicians and to encourage the prescription of anti-obesity medications amongst diabetic patients with a BMI of more than 30.

LIMITATIONS

- Limitations included short duration of time, small sample size and refusal of insurance authorization for the drugs.

REFERENCES

1. Tak, Young Jin, and Sang Yeoup Lee. "Long-term efficacy and safety of anti-obesity treatment: where do we stand?." *Current obesity reports* 10.1 (2021): 14-30.
2. Pilitsi, Eleni, et al. "Pharmacotherapy of obesity: available medications and drugs under investigation." *Metabolism* 92 (2019): 170-192.