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Effectiveness of the use of anti-obesity medications in underserved inner city youth attending the Live Light Live Right Program

Introduction: Obesity is a chronic, relapsing disease with severe obesity on the rise in adolescents is due to a progressively toxic obesogenic environment. The AAP recommends immediate intensive lifestyle treatment for children with obesity and pharmacologic interventions, and metabolic surgery when indicated . Anti-obesity medications (AOM) were approved for children 12 years and up, and off label use for those younger. Our study assessed the feasibility/effectiveness of AOM to a lifestyle modification program (LMP).

Methods: Medical records of Live Light Live Right patients prescribed AOM [metformin, phentermine, topiramate, semaglutide] and seen in the last six months were used. Pre-AOM weights were compared to the most recent clinical visit weight. Short term effects were assessed by pre/post weight loss percentages.

Results: 48 patients met the study criteria. Age range was 7-20 years (average: 15.2). Follow up time range was 1-43 months (average: 16.2). Average BMI at baseline was 42 kg/m². 38 patients (79%) responded to the LMP and AOM's with weight loss . Of these 21% had a 0-5% weight loss, 33% had >5-10%, 13% had >10-15%, 8% had >15-20% and 6% >20% of weight loss respectively. 21% of patients did not lose and gained weight.

Conclusion: Addition of AOMs was effective in nearly 80% of youth treated in the LMP and 60% lost >10% of their body weight. Minimal side effects were reported (mainly GI/fatigue). Non response was related to inter-individual variability to obesity treatment, non-adherence to medications, Cost and accessibility. Further research is necessary to assess long term success of the AOM in children for weight maintenance and recidivism which is frequently seen in weight management programs.