

Social Determinants of Health and Use of Glucagon-like Peptide-1 Receptor Agonists in the Pediatric Population

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BACKGROUND

- Obesity is a significant health condition that is associated with other complications, including but not limited to type 2 diabetes (T2D), hypertension, hyperlipidemia, and cardiovascular disease.¹
- Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are approved to treat T2D or to support weight management. However, research among children is limited due to safety and regulatory barriers.²
- Social Determinants of Health (SDoH) are a set of social and economic domains that affect health outcomes.³
- Connecting individual-level SDoH information and electronic health records (EHRs) has been limited to date; although, recent federal policies advocate for increasing documentation.⁴

OBJECTIVES

- To compare the demographic and clinical characteristics of a general pediatric population with a pediatric population that received semaglutide or tirzepatide.
- To investigate the hypothesis that socioeconomic disparities, as measured by SDoH survey questions across 5 domains, exist between the target populations.

METHODS

- Two pediatric populations from the OMNY Health real-world data platform were accessed: individuals <18 years without GLP-1 RA use & individuals <18 years with GLP-1 RA use
- Diagnoses, encounters, prescription orders/administrations, and survey questions across 5 SDoH domains (economic instability, social issues, educational attainment, transportation access, and health instability) were evaluated.
- Demographic characteristics, clinical characteristics, and SDoH domains were analyzed at index prescription for GLP-1 RA users and at the earliest age for non-GLP-1 RA users.

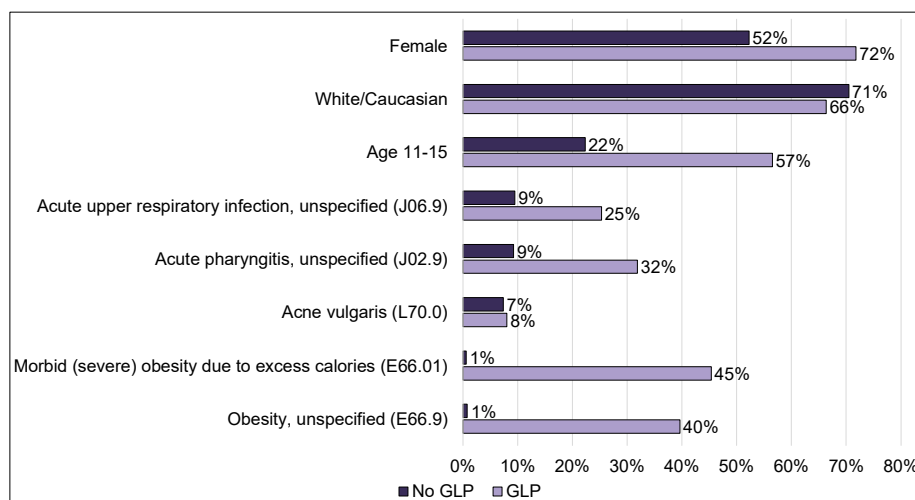
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RESULTS

- A total of 699 pediatric patients were prescribed a GLP-1 RA during the study period.
 - 92% Semaglutide users
 - 18% Tirzepatide users
- Demographic and clinical characteristics of the patient populations are presented in Figure 1.

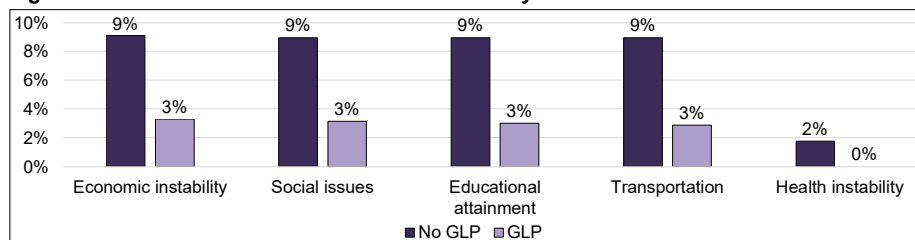
Figure 1: Demographic & Clinical Characteristics of Study Population by GLP use



Note: Clinical conditions that were Z codes (Factors influencing health status and contact with health services) were excluded from among the top diagnoses analysis.

- Both populations were primarily female and white.
- GLP-1 RA users experienced higher co-morbid conditions and were older (median age 16. vs. non-GLP-1 RA users median age 12).

Figure 2: Social Determinants of Health Domains by GLP-1 RA Use



- Distributions of age, gender, and top diagnoses were similar among GLP-1 RA users with and without poor SDoH measures, most of whom were taking semaglutide for weight loss (47%).
- Dietary counseling and surveillance was observed in 20% of GLP-1 RA patients with greater SDoH burden.

DISCUSSION AND CONCLUSIONS

- Disparities between in SDoH burden and use of GLP-1 RAs were observed.
- Ensuring equal access to GLP-1 RAs will be important to minimize an unbalanced burden of obesity-related comorbidities among non-GLP-1 RA users.
- Pediatric care settings offer an opportunity to reach a diverse socioeconomic population.

REFERENCES

- Alorfi NM, Alshehri FS. Usage of Glucagon-Like Peptide-1 for Obesity in Children; Updated Review of Clinicaltrials.gov. J Multidiscip Healthc. 2023 Jul 31;16:2179-2187. doi: 10.2147/JMDH.S419245.
- Latif W, Lambrinos KJ, Patel P, et al. Compare and Contrast the Glucagon-Like Peptide-1 Receptor Agonists (GLP1RAs) [Updated 2024 Feb 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK572151/>
- U.S. Department of Health and Human Services. Healthy People 2030, Social Determinants of Health. <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.
- U.S. Domestic Policy Council, Office of Science and Technology Policy. The U.S. Playbook to Address Social Determinants of Health. November 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/11/SDOH-Playbook-3.pdf>.