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Jason Tallis, Darren Richardson, Michael J Duncan, Ricardo Martins, Thomas M Barber, Leigh Breen, Anna Higo, Helen M Jones & David R Broom

Perceptions, Attitudes, and Experiences of GLP-1 Receptor Agonists for Weight Management in the United Kingdom: A Cross-Sectional Survey Study

Jason Tallis[1,2] (*), Darren Richardson[3], Michael J Duncan[3,4], Ricardo Martins[5], Thomas M Barber[6,7,8], Leigh Breen[9], Anna Higo[4], Helen M Jones[2], David R Broom[10].

[1] Research Centre for Discoveries in Life Sciences, Coventry University, Coventry, CV1 5FB, UK.

[2] School of Science, Coventry University, Coventry, CV1 5FB, UK.

[3] Research Centre for Physical Activity, Sport and Exercise Science, Coventry University, Coventry, CV1 5FB, UK.

[4] Research Centre for Healthcare and Community Transformation, Coventry University, Coventry, CV1 5FB, UK.

[5] Faculty of Kinesiology, Sport, and Recreation, University of Alberta, Edmonton, Alberta, Canada

[6] Research Centre for Health and Life Sciences, Coventry University, Coventry, CV1 5FB, UK.

[7] Division of Biomedical Sciences, Warwick Medical School, University of Warwick, Coventry, CV4 7AL, UK

[8] Warwickshire Institute for the Study of Diabetes, Endocrinology and Metabolism, University Hospitals Coventry and Warwickshire, Clifford Bridge Road, Coventry, CV2 2DX, UK

[9] Diabetes Research Centre, College of Life Sciences, University of Leicester, Leicester LE5 4PW, UK

[10] Institute for Health and Care Improvement, York St John University, York, YO31 7EX, UK

*ab0289@coventry.ac.uk

ABSTRACT (318 words)

Background: Glucagon-like peptide-1 receptor agonists (GLP-1RAs) have significantly influenced contemporary obesity pharmacotherapy, emerging as a major development in obesity care. Rising visibility in public discourse, healthcare practice, and commercial markets highlights the need to understand how these medications are accessed and experienced outside controlled experimental studies. Despite widespread use, real-world patterns of engagement, motivations, and concerns remain poorly understood amid high discontinuation rates, substantial and accelerated weight regain following cessation compared to traditional weight management intervention, and the potential for reduced effectiveness outside of the controlled setting of clinical trials. This study is the first to explore public perceptions, attitudes, and lived experiences of GLP-1RA use among UK adults, with attention to age, sex, BMI and use duration-specific responses.

Methods: A cross-sectional design was employed using a self-administered online survey (n = 684), including 544 current or former GLP-1RA users. The survey captured demographic characteristics, health status, medication use, satisfaction, side effects, and body image.

Results: Findings showed high satisfaction with GLP-1RA use, however effects on perceived energy, dietary habits, and concerns about a reduction in muscle mass were reported, with age and BMI influencing these experiences. Most users sourced medication from online pharmacies, reporting inconsistent pre-assessment rigour. Social media was the dominant information source, while healthcare professionals were less frequently consulted. A minority of users reported behaviours suggestive of misuse, including exceeding recommended doses, often driven by perceived inefficacy. Non-users expressed conditional willingness to adopt GLP-1RAs, influenced by clinical recommendation and stronger evidence, though concerns about side effects and long-term safety were prevalent.

Conclusion: This study suggests potential implications for regulatory strategy and highlights a need for targeted education and integrated behavioural support, particularly in light of reported rapid weight regain and reversal of beneficial effects on cardiometabolic markers following medication cessation. These results also provide important insights into demographic-specific experiences and provide important considerations to aid development of holistic, evidence-informed strategies to ensure safe and effective GLP-1RA use.

Key Words: Obesity, Health, Pharmacological Weight Management, Lived Experience, Health Behaviour

BACKGROUND

Obesity is a global epidemic (1) with significant personal, economic, and societal impacts (2, 3). Given its association with numerous comorbidities and an increased risk of all-cause mortality (4-6), the prevention and treatment of obesity is recognised as a global public health priority (7). In particular, an estimated 64% of adults in the UK are living with overweight or obesity (8), making obesity management a specific focus of Fit for the Future: 10-Year Health Plan for England (9). Recent advancements in pharmacotherapy, particularly the development of glucagon-like peptide-1 receptor agonists (GLP-1RAs) and associated dual acting therapies, have emerged as effective therapeutic options for supporting weight management and are becoming internationally established in clinical use in synergy with expanding commercial availability. These medications now have regulatory approval for inclusion in the UK's weight management pathway. Despite their growing prominence, there remains limited understanding of public perceptions, expectations, and real-world experiences of GLP-1RA use in the UK, despite substantial and increasing public interest (10).

GLP-1RAs and dual agonists targeting the GLP-1 and glucose-dependent insulinotropic polypeptide (GIP) receptors (here collectively referred to as GLP-1RAs) represent a class of novel pharmacological agents that have demonstrated clinical efficacy in improving glycaemic control, supporting weight management, and enhancing lipid profiles in individuals with type 2 diabetes mellitus (11). Mechanistically, GLP-1 RAs activate the GLP-1 receptor leading to enhanced glucose-dependent insulin secretion, suppressed glucagon release, slower gastric emptying, and increased satiety (12), where additional GIP receptor agonism augments insulinotropic signalling and energy regulation (13). Based on robust evidence from clinical trials confirming safety and effectiveness for weight management (14) and the increased efficacy of dual GLP-1/GIP therapy (15), GLP-1RAs monotherapies and dual-agonist therapies in the form

of Semaglutide, Tirzepatide and specific brands of Liraglutide have approval in the UK for use as a pharmacological treatment for obesity. GLP-1RAs exert their effects by modulating brain regions involved in appetite regulation, influencing neurotransmitter and peptide release to control hunger and energy expenditure (16). Multiple randomised controlled trials (RCTs) have shown that GLP-1RAs can lead to significant weight loss (17-19), with evidence suggesting that weight loss may be more pronounced in individuals without diabetes (14). Their approval has resulted in widespread interest and increasing use, with recent data estimating that more than 1.6 million adults in the UK reporting using incretin mimetics in the last year (20).

Interestingly, outside the controlled environment of RCTs, real-world data indicate high discontinuation rates (32% to 50% after one year) when GLP-1RAs are used specifically for obesity treatment. Additionally, the magnitude of weight loss observed in real-world settings may be lower than that reported in clinical trials (21). Reasons for discontinuation are not fully understood but are likely multifactorial, including cost, procurement practices, self-management challenges, and the impact of commonly reported adverse effects. Understanding the lived experiences of GLP-1RA medication users is therefore essential. Such insights may help not only explain discontinuation but also promote the understanding of real-world efficacy and aid in the development of guidelines for safe practice. Moreover, it has been demonstrated that the media's agenda-setting, priming and framing of medication can influence attitudes, uptake and adherence (22). Public knowledge, practices, and attitudes toward GLP-1RA medications have been significantly influenced by increased mainstream and social media coverage, making it essential to understand this impact to inform public health messaging, support safe self-management, and improve treatment adherence. This is particularly important considering evidence demonstrating inaccuracies and poor quality of health-related social media information (23). Given this context, understanding perceptions among non-users is also important, as anticipated benefits, perceived risks, and expectations which are often shaped by media narratives may influence future uptake, adherence, and broader public discourse surrounding GLP-1RA use.

Despite growing interest, few studies have explored public perceptions, acceptability, and lived experiences of GLP-1RA medication use. Information that is essential for patients, practitioners and carers. While a small number of studies have employed focus groups and social media analysis to investigate views and experiences, most have been conducted within the context of diabetes management (24). These studies often do not explicitly examine the patient experience of taking GLP-1RAs, are limited by small sample sizes, and rarely focus on the UK population. Research specifically exploring GLP-1RA use in the context of weight loss remains limited (24). Consequently, there is currently a lack of understanding of how GLP-1RA medications are perceived, accessed, and experienced outside clinical settings, particularly in real-world contexts of use.

To date, only a single study has examined these factors and is specific to a cross-sectional UK population. Using an online survey, Auerbach et al. (25) concluded that a mismatch exists between preconceptions about the safety of GLP-1 RAs, established clinical reality and lived experience of current and past users. Whilst this study represents an important and timely addition, knowledge gaps remain regarding how GLP-1RAs are perceived and experienced in real-world settings. Specifically, there has been no systematic examination of experiences of treatment-related side effects in real world contexts, considering their prevalence, severity, and functional impact. The broader consequences of GLP-1RA use for perceived energy, dietary

behaviours, and overall satisfaction with treatment outcomes also remain under-explored. Moreover, the rapidly evolving landscape of GLP-1RA research highlights the need for further investigation particularly in light of growing concerns such as reduced muscle mass (26), publicised adverse effects in mainstream media (27-29), and other developments that have occurred since the work conducted by Auerbach et al. (25). In this regard, empirical evidence is lacking on perceptions of prescribing accessibility and rigour, as well as on the social, informational, and media influences shaping treatment initiation, and (dis)continuation. Importantly, no existing study has examined how perceptions, attitudes, and experiences of GLP-1RA use vary by sex, age, weight status or use duration. These factors may be especially influential given evidence suggesting a greater efficacy in females (30), younger adults (14), a coinciding reduction in muscle mass may pose elevated risks for older adults (31), and effectiveness has been shown to be influenced by initial BMI (14).

This gap in understanding presents a significant barrier to evaluating real-world effectiveness, guiding safe self-management, informing public health strategies, and identifying obstacles to adoption. The present study was designed to address these gaps and provides the first UK-based examination of perceptions, attitudes, and experiences of GLP-1RA use for weight management, with a primary emphasis on user experiences and a complementary analysis of non-user perspectives to situate these experiences within the wider public and social context, while also examining potential moderating influences of age, sex, BMI, and use duration. This work represents a timely and important contribution to the literature, particularly considering the recent surge in GLP-1RA use among UK adults.

METHOD

Following ethics approval from the Coventry University Research Ethics Committee (Ref: P187463), participants were invited to take part in a cross-sectional, self-administered online survey incorporating qualitative thematic analysis. All participants were asked to provide informed consent as part of the online survey, before accessing and completing the questions. The survey was conducted and reported in accordance with the Consensus-Based Checklist for Reporting of Survey Studies guidelines (32) (Supplementary File 1).

Participants & Recruitment Strategy

Participants aged over 18 years, currently residing in the UK, were recruited to complete the survey. Inclusion criteria comprised the ability to provide informed consent, sufficient English language proficiency to complete the survey, and internet access to complete the online questionnaire. The survey was designed to be inclusive of individuals regardless of their current body weight, as well as their use and understanding of GLP-1 medication. An *a priori* sample size calculation was conducted using Cochran's formula for estimating population proportions (33), assuming a 95% confidence level, a ±5% margin of error, and a conservative proportion of 0.50, which indicated a minimum required sample size of 384 participants. This calculation was based on the quantitative survey items, while open-ended questions were included to provide complementary qualitative insights. In addition, to ensure adequate statistical power for planned subgroup analyses involving categorical comparisons, a separate *a priori* power analysis was conducted in G*power (version 3.1.9.7) for chi-squared tests. Given that contingency tables of varying dimensions were examined, sample size estimation was conservatively based on a 3 × 5 contingency table, reflecting the upper range of table sizes used in the majority of analyses.

Assuming a medium effect size (w = 0.30), α = 0.05, and 80% power, this indicated a minimum required total sample size of approximately 167 participants.

Promotional materials to elicit participation were disseminated using a non-probabilistic dissemination strategy through the Chartered Association of Sport and Exercise Sciences, the United Kingdom Coalition for People Living with Obesity, Coventry City Council's Sport and Health networks, the Active Partnerships network, dedicated social media groups on Reddit and Facebook, and the wider professional networks of the authors. Social media recruitment used an open dissemination approach across multiple relevant communities. Responses were collected anonymously.

Survey Design

The survey was designed, distributed, and managed using Jisc Online Surveys (https://www.onlinesurveys.ac.uk), and available as supplementary information (Supplementary File 2). The opening page outlined the study context and requested informed consent. Participants were first asked to provide demographic information (e.g. age, sex, ethnicity, self-reported height and body mass, employment status), diagnosed health conditions, and whether their current physical activity levels met nationally recommended guidelines. They were then asked about their perceptions of their body weight and any interventions they had engaged with for weight management. Participants were subsequently asked whether they were currently using, or had ever used, GLP-1RA medication specifically for the purpose of managing body weight. This question directed respondents into one of two distinct survey pathways.

GLP-1RA users were asked a series of questions regarding current use, how they obtained medication, and the sources of information consulted to learn about GLP-1RAs. They then completed questions assessing perceived satisfaction with the medication's effectiveness and any experienced side effects. Non-users were asked about sources of information accessed to learn about GLP-1RAs, followed by questions exploring scenarios that might influence future use. Although typically not specific to weight management and often derived from small focus group samples or analyses of online social media posts, the survey questions were informed by previous research exploring the experiences, views, and perceptions of patients, carers, and clinicians (24). Several resources were consulted to devise questions related to adverse effects (34-38).

All participants then completed the Body Appreciation Scale-2 (BAS-2), a validated 10-item questionnaire designed to assess individuals' acceptance, respect, and positive attitudes towards their bodies (39). The BAS-2 has demonstrated excellent test–retest reliability (ICC = .90), high internal consistency (Cronbach's α > 0.90), and has established construct validity in the form of strong positive associations with appearance evaluation and strong negative associations with body dissatisfaction in both women and men (39). Items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (always), with all items positively worded and scored in the same direction. A total score was computed as the mean of all item responses, such that higher scores indicate greater body appreciation.

All questions were multiple choice, with an 'Other' option provided where relevant to encourage participants to offer specific details. Questions relating to adverse effects, satisfaction, influence on future use, and the BAS-2 employed Likert scales. All survey items were mandatory and participants were required to complete each question before progressing, resulting in no

item-level missing data. In addition, response constraints (e.g., predefined categorical options and numeric range restrictions where applicable) were applied to ensure data were entered in the correct format. Consequently, no imputation or missing-data handling procedures were required. A final optional open-text box was included to allow participants to share any additional thoughts or experiences not captured by the preceding questions. A human verification question, which required respondents to correctly answer a simple logic-based prompt prior to submission, was included to protect against unauthorised responses.

Prior to dissemination, the survey was piloted with six individuals: two GLP-1 users, two people living with overweight or obesity who were not using GLP-1 medication, and two individuals classified as a healthy weight and not currently using GLP-1 medication. The pilot led to several refinements, including changes to the survey title, simplification of technical terminology to improve accessibility, the inclusion of more specific examples in multiple-choice questions, and the addition of a question exploring use of doses exceeding recommendations

The survey was open from 1st June to 4th September 2025. Participants could complete the survey online using a computer or any mobile device.

Data & Statistical Analysis

Prior to analysis data were screened for age verification and suspected duplicate responses based on reported age, height and body mass data, resulting in five records being removed. To examine the potential moderating effects of age, sex, and BMI classification (derived from self-reported height and body mass and classified according to WHO criteria (40)) on health conditions, body-weight satisfaction, experiences with weight-loss interventions, experiences of GLP-1RA use and side-effect prevalence, as well as barriers to and influences on future use among non-users, chi-square tests were conducted. Where applicable, standardised residuals exceeding ±1.96 were used to identify significantly different observed versus expected frequencies. In cases where expected counts fell below five, chi-square tests or likelihood ratio tests were performed on individual response categories (41). Cramér's V was calculated as a measure of effect size, with interpretation guided by conventional thresholds (.20-.60 moderate, large ≥ .60) (41). Age was categorised (<40, 40 to 59, ≥60 years) to reflect adult life-course stages commonly used in health research and to capture age-related differences in health risk profiles, with the ≥60-year threshold representing a clinically meaningful transition associated with increased morbidity and mortality (42). Examining responses among adults aged ≥60 years is particularly pertinent due to the proposed risk of exacerbating the sarcopenic obesity phenotype (43). Due to the smaller sample size of GLP-1RA non-users, age was dichotomised into under 40 years and 40 years and above for subgroup analyses. Further chi-square analyses were conducted to examine the effects of duration of GLP-1RA use on perceptions, with use categorised as <3 months, 3 to 6 months, and ≥12 months. Between group differences in BMI and BAS-2 were compared using the Mann-Whitney U Test.

All statistical analyses were conducted using JASP (Version 0.18.3.0) and an alpha level of .05 was used to determine statistical significance for all analyses. GraphPad Prism (Version 10) was used to generate visual representations of the data. Data is reported as absolute number of respondents, percentage (%) of respondents with total or subgroup number used as the denominator, or median ± interquartile range.

An optional open-text question invited participants to provide “any additional thoughts or experiences not captured by the preceding questions.” Additional thoughts were received from 327 participants (272 users (50%) and 55 non-users (39%)). The open-text data were analysed to capture emergent perceptions and experiences that complemented the quantitative findings. Despite being derived from a single open-text item, the responses were sufficiently rich to support an interpretative analysis. A reflexive thematic approach was therefore used to identify patterns of shared meaning, rather than relying solely on descriptive categorisation (44, 45). This analysis followed the six phases outlined by Braun and Clarke (44): 1) data familiarisation, 2) initial coding, 3) theme development, 4) review, 5) definition, and 6) reporting. Themes were then inductively developed through comparison between user and non-user groups, following a reflexive, data-driven approach to ensure transparency and consistency (44). To enhance descriptive clarity, frequencies were used to indicate relative prominence of themes, these were not derived from frequency counts but from an interpretative process focused on meaning. This approach complemented the structured items by highlighting contextual, emotional, and behavioural nuances surrounding GLP-1RA use and perceptions of risk.

RESULTS

Participant Demographics

Participant demographics are summarised in Table 1. A total of 684 individuals completed the survey, of whom 544 were currently using or had previously used GLP-1RAs for weight management. The majority of respondents were aged under 60 years (57%), were female (78%), and reported being from White ethnic backgrounds (91%). Median age of responders was 42 (IQR 33 - 51) yrs and with no difference in age distribution between users and non-users ($\chi^2 = 5.51$, $p = .064$).

The median BMI was 30.1 (IQR 25.1 - 30.1) kg/m² and was higher in the user group ($p < .001$). Eighty-one percent of responders were living with overweight, or obesity and BMI distribution differed between groups ($\chi^2 = 51.40$, $p < .001$, $V = .124$), with a greater proportion of users classified as obese and more non-users classified as having a ‘healthy weight’. Only 19% of respondents perceived their physical activity as meeting all recommended guidelines, with the majority reporting activity levels below guideline thresholds. A significantly greater proportion of non-users self-reported adherence to all guideline components ($\chi^2 = 62.67$, $p < .001$, $V = .303$), whereas a greater proportion of users reported not meeting any components ($\chi^2 = 14.24$, $p < .001$, $V = .144$).

Participants reported a range of health conditions, with mental health (26%), cardiovascular (16%), and musculoskeletal conditions (13%) being the most prevalent. Users were significantly more likely to report cardiovascular ($\chi^2 = 12.16$, $p < .001$, $V = .133$) and inflammatory/immune conditions ($\chi^2 = 64.23$, $p < .001$, $V = .306$), as well as having two ($\chi^2 = 11.69$, $p < .001$, $V = .131$) or three or more conditions ($\chi^2 = 6.51$, $p = .011$, $V = .098$), whereas non-users more frequently reported no known health conditions ($\chi^2 = 26.30$, $p < .001$, $V = .196$). Among ‘other’ conditions ($n = 91$), the most commonly reported were polycystic ovary syndrome (PCOS; $n = 22$), hypothyroidism ($n = 13$), attention-deficit/hyperactivity disorder ($n = 6$), sleep apnea ($n = 6$), and autism ($n = 5$), alongside a range of metabolic, autoimmune, connective tissue, and neurodevelopmental disorders.

Median BAS-2 score across the full sample was 3.0 (IQR 1.7 – 4.3) and was lower in the user group (2.9 IQR 1.7 – 4.1) compared to non-users (3.5 IQR 2.2 – 4.8; P<.001). When comparing

non-users living with overweight or obesity to users, BAS-2 scores were still lower in the user group (P<.001).

***** INSERT TABLE 1 HERE *****

Body Weight Satisfaction, Intervention Use, and Perceived Effectiveness

Perceptions of body weight satisfaction, engagement with weight management interventions, and the perceived effectiveness of such interventions are summarised in Supplementary Table 1. Across the full sample, most participants reported low body-weight satisfaction with 31% “very unhappy” and 36% “somewhat unhappy”. Users reported lower body weight satisfaction than non-users ($\chi^2 = 26.49$, $p < .001$, $V = .196$).

Nearly all participants reported engaging in at least one weight-management intervention, most commonly dietary changes (96%) and increased physical activity or structured exercise (83%), with only 2% reporting no prior intervention. Users reported greater engagement with most interventions compared with non-users ($p < .024$, $V > .087$), except for physical activity and weight-loss surgery, which did not differ between groups. Perceived long-term effectiveness of weight-management interventions was low, with 52% of participants reporting dissatisfaction, and users reporting significantly lower satisfaction than non-users ($\chi^2 = 113.62$, $p < .001$, $V = .411$).

When comparing non-users living with overweight or obesity to users, differences remained in satisfaction with current body weight ($\chi^2 = 21.82$, $p < .001$, $V = .186$) and satisfaction with weight management interventions ($\chi^2 = 72.61$, $p < .001$, $V = .341$). Non-users living with overweight or obesity were less likely to have tried over-the-counter weight loss supplements ($\chi^2 = 12.92$, $p < .001$, $V = .143$), behavioural or psychological support ($\chi^2 = 5.41$, $p = .020$, $V = .093$), and mobile/digital apps for weight management ($\chi^2 = 19.61$, $p < .001$, $V = .176$). However, a greater proportion of non-users had undergone weight loss surgery ($\chi^2 = 4.68$, $p = .043$, $V = .086$).

Experience of GLP-1RA Users: Information Sources, Access, and Satisfaction

User experiences are summarised in Figures 1 and 2. Mounjaro was the most commonly used GLP-1 medication, with most participants reporting use for 3–6 months (73%) and nearly all within the first 12 months of initiation (91%). Duration of use did not differ by age or sex but varied by BMI category ($\chi^2 = 68.75$, $p < .001$, $V = .257$), with individuals of healthy weight or living with overweight reporting longer use. Thirteen participants reported discontinuing treatment, most commonly due to achieving weight-management goals (n = 6), side effects (n = 4), or other reasons including pregnancy, weight plateaus, planned dosing breaks, medication changes due to excessive weight loss, or medical advice.

Primary sources of information regarding GLP-1 medication included social media (48%), traditional media (31%), friends/family (46%), and online forums (31%). Social media was less commonly used by participants aged 40–59 ($\chi^2 = 12.627$, $p = .002$, $V = .154$), while advertisements were less commonly used by those under 40 ($\chi^2 = 8.379$, $p = .015$, $V = .125$). Individuals living with overweight more frequently used social media ($\chi^2 = 46.411$, $p < .001$, $V = .298$), traditional media ($\chi^2 = 42.32$, $p < .001$, $V = .285$), online forums ($\chi^2 = 28.60$, $p = .002$, $V = .234$), and advertisements ($\chi^2 = 6.89$, $p = .032$, $V = .115$), but were less likely to rely on friends and family ($\chi^2 = 61.34$, $p < .001$, $V = .343$). Males more frequently cited healthcare professionals ($\chi^2 = 40.97$, $p < .001$, $V = .275$) and friends/family ($\chi^2 = 49.087$, $p < .001$, $V = .301$) as sources of

information. Use of online health forums ($\chi^2 = 7.31$, $p = .007$, $V = .116$) and advertisements ($\chi^2 = 30.50$, $p < .001$, $V = .237$) also varied by sex.

GLP-1 RAs were overwhelmingly sourced from online pharmacies, with fewer than 8% obtained elsewhere. Source of medication did not differ by sex ($\chi^2 = 8.25$, $p = .083$, $V = .124$), age ($\chi^2 = 8.06$, $p = .428$, $V = .087$), or BMI ($\chi^2 = 13.33$, $p = .101$, $V = .111$). Perceptions of rigour in the pre-assessment process varied, though most participants reported moderate rigour (42%), with 29% of responders perceiving lower levels of rigour. These perceptions did not differ by sex ($\chi^2 = 2.549$, $p = .636$, $V = .090$), age ($\chi^2 = 6.768$, $p = .562$, $V = .076$), or BMI category ($\chi^2 = 4.644$, $p = .765$, $V = .062$).

Ninety-three percent of participants reported being satisfied with the effectiveness of GLP-1RA medication on body weight. Satisfaction differed by BMI, with participants of healthy weight or living with overweight more frequently reporting being somewhat satisfied ($\chi^2 = 11.91$, $p = .003$, $V = .136$). Eighty-three percent of participants reported satisfaction with effects on overall appearance, which was also higher among those in the healthy and overweight BMI groups ($\chi^2 = 12.78$, $p = .002$, $V = .126$). Satisfaction with body weight did not differ between participants using GLP-1RAs for 0–3 months versus 3–6 months ($p > .105$, $V < .063$), however, those using the medication for 3–6 months more frequently reported satisfaction with appearance outcomes ($p < .002$, $V > .134$), while participants in the 0–3-month group more often indicated that it was too early to judge ($\chi^2 = 18.56$, $p < .001$, $V = .206$).

***** INSERT FIGURE 1 HERE *****

Misuse Behaviours and Impacts on Perceived Energy, Diet, and Muscle Mass

Forty participants (7.4%) reported taking more than the recommended dose or administering doses more frequently than advised. Common reasons included perceived ineffectiveness of the prescribed dose (n = 22), increased appetite or cravings (n = 17), and perceived safety based on self-directed research (n = 23). A smaller number reported doing so to accelerate weight loss (n = 6), while others cited bridging doses (n = 5) or accidental dosing (n = 1).

Eighty-seven percent of users reported confidence in their ability to maintain a balanced diet while using GLP-1 medication. However, 62% reported skipping meals at least 2–3 times per week, including 11% who reported daily meal skipping. Sixty-two percent of participants reported at least moderate reductions in perceived energy that affected their ability to perform physical activity or complete daily tasks, with 26% of these reporting more severe effects. Additionally, over 46% of respondents expressed more than slight concern regarding the potential effects of GLP-1 medication on muscle mass.

Perceived changes in energy, meal skipping, confidence in maintaining a balanced diet, and concerns about muscle mass loss (Figure 3A) were generally not influenced by age ($p > .138$, $V < .107$), sex ($p > .082$, $V < .124$), or BMI ($p > .533$, $V < .081$). Notable exceptions included confidence in maintaining a balanced diet, which differed by BMI ($\chi^2 = 13.119$, $p = .041$, $V = .112$), with lower confidence reported among individuals categorised as healthy weight and those living with obesity. Meal skipping patterns also varied by age ($\chi^2 = 17.601$, $p = .024$, $V = .127$), with younger and middle-aged adults less frequently reporting occasional skipping, and older adults less frequently reporting frequent skipping. Additionally, perceived changes in energy and ability to complete daily tasks were influenced by age ($\chi^2 = 20.729$, $p < .001$, $V = .195$), although no consistent trend was observed across age groups.

Changes in perceived energy were influenced by medication duration ($\chi^2 = 41.08$, $p < .001$, $V = .194$), with participants using GLP-1RA medication for ≥12 months less frequently reporting moderate effects and more frequently reporting substantial effects, and the reverse pattern observed among those with shorter durations of use. Perceived ability to maintain a balanced diet was also associated with medication duration ($\chi^2 = 19.31$, $p = .013$, $V = .133$), however, no consistent directional trend was evident across duration categories. In contrast, duration of medication use did not influence reported meal-skipping behaviours ($\chi^2 = 10.70$, $p = .219$, $V = .099$) or concerns related to changes in muscle mass ($\chi^2 = 13.00$, $p = .112$, $V = .109$).

***** INSERT FIGURE 2 HERE *****

***** INSERT FIGURE 3 HERE *****

Prevalence of Side Effects

The prevalence of side effects is presented in Figure 4. Nausea or vomiting (59%), diarrhoea (49%), and constipation (74%) were the most reported side effects, but typically side effects were slight to moderate. A smaller proportion of participants perceived side effects for constipation (12%), nausea or vomiting (6%), diarrhoea (4%), abdominal pain (2%), headache (3%), and injection-site reactions (3%) to be greater than moderate. The frequency of symptoms did not differ by BMI ($p > .431$, $V < .048$), age ($p > .209$, $V < .061$), or sex ($p > .056$, $V < .070$).

***** INSERT FIGURE 4 HERE *****

Influences to Future Use

Figure 5 and 6 summarise participants' perceptions regarding the likelihood of future GLP-1RA use. The most influential factors included a recommendation from a healthcare provider (53%), the presence of a medical condition related to overweight or obesity (61%), a clinical diagnosis of overweight or obesity (54%), and stronger research evidence supporting the use (55%).

Age group and sex did not influence reported likelihood of intervention use across most scenarios (all $p > .05$, $V < .25$) In contrast, BMI consistently influenced responses, with participants living with obesity more likely to report being "likely" or "very likely" to use the intervention when recommended by a healthcare provider ($p < .001$, $V > .350$), when current weight-management methods were ineffective ($\chi^2 = 33.38$, $p < .001$, $V = .357$), in the presence of a weight-related medical condition ($p < .007$, $V > .277$), to improve overall health ($\chi^2 = 29.89$, $p < .001$, $V = .338$), if unhappy with body weight ($\chi^2 = 29.83$, $p < .001$, $V = .337$), and if supported by further research evidence ($p = .001$, $V = .325$). Additionally, age group showed effects in two scenarios: when current weight management methods were ineffective ($\chi^2 = 10.572$, $p = .032$, $V = .275$), with older participants more frequently selecting a neutral response, and when considered clinically overweight or obese ($\chi^2 = 13.522$, $p = .009$, $V = .311$), where younger participants more often selected "likely" and older participants "very likely."

***** INSERT FIGURE 5 HERE *****

Figure 6 summarises the perceived influence of potential adverse effects on the likelihood of future GLP-1RA use. All factors, except for social stigma associated with medication, were rated as at least moderately influential by over 50% of participants. The most influential concerns included: developing a serious health condition (86%), reduced ability to be physically active

(88%), becoming dependent on medication (88%), negative impact on mood (83%), potential for weight regain (81%), and possible effects on muscle mass (Figure 3B; 53%).

Age and sex did not influence responses for most perceived barriers, including concerns about common side effects (e.g., nausea, vomiting, diarrhoea), serious health risks (e.g., pancreatitis or gallbladder issues), reduced physical activity, dietary limitations, mental health impact, cost, and self-administration ($p > .05$; $V < .25$). However, BMI influenced responses in several scenarios. Participants classified as having a healthy weight status more often rated several barriers as “very” or “extremely” influential, including fatigue/low energy ($\chi^2 = 6.11$, $p = .047$, $V = .246$), reduced ability to be physically active ($\chi^2 = 21.46$, $p < .001$, $V = .405$), difficulty maintaining a nutritious diet ($\chi^2 = 12.20$, $p = .002$, $V = .305$), weight regain after stopping medication ($\chi^2 = 9.00$, $p = .011$, $V = .263$), appetite suppression leading to missed meals ($\chi^2 = 8.40$, $p = .015$, $V = .254$), social stigma ($\chi^2 = 7.07$, $p = .029$, $V = .233$), and concerns about muscle mass loss ($\chi^2 = 8.38$, $p = .015$, $V = .254$).

Age group influenced responses in a few specific cases. Younger participants more often rated fatigue (LHR = 6.02, $p = .024$, $V = .191$) and weight regain (LHR = 11.02, $p < .001$, $V = .234$) as “not at all influential” and more frequently rated self-injection as “extremely influential” ($\chi^2 = 10.29$, $p = .036$, $V = .271$), while older participants more often rated medication dependence as “moderately influential” ($\chi^2 = 4.19$, $p = .041$, $V = .173$). Sex differences were minimal, with a significant effect only for appetite suppression ($\chi^2 = 15.32$, $p = .004$, $V = .332$), where female participants more often rated it as “moderately influential.”

***** INSERT FIGURE 6 HERE *****

Qualitative analysis of open text responses

Thematic analysis identified several key themes across both groups, summarised in Table 2. Among users, the dominant theme of "perceived transformation and renewed control" captured accounts of substantial weight loss, appetite suppression, and improved confidence, often framed as life changing. Many participants described a reduction in persistent “food noise” and a regained sense of control over eating behaviours. However, these benefits were frequently contextualised alongside the theme of "embodied side-effects and physical cost", with users reporting fatigue, nausea, loose skin, and concerns regarding muscle loss, reflecting an ongoing negotiation between positive outcomes and physiological burden. The theme of "behavioural and psychological recalibration" was also evident, with participants describing shifts towards smaller portions, slower and more mindful eating, and a broader reorientation from weight loss to overall health. Despite these changes, the theme of "dependency and sustainability anxiety" emerged, with concerns about long-term affordability, continued access, and the potential for weight regain following cessation. In parallel, "persistent self-image and emotional ambivalence" highlighted a disconnect between physical change and psychological outcomes, as some users reported ongoing dissatisfaction with their appearance and enduring negative self-perceptions despite significant weight loss.

Among non-users, perceptions were characterised by a combination of cautious openness and scepticism. The theme of "cautious interest under medical supervision" reflected a conditional willingness to consider GLP-1RA use, particularly if supported by healthcare professionals and stronger clinical evidence. However, this was counterbalanced by "ethical and moral tension", with some participants framing pharmacological weight loss as a form of “cheating” or reduced personal responsibility. Concerns captured under "safety and long-term uncertainty" further

contributed to hesitation, particularly regarding side-effects, unknown long-term risks, and the sustainability of outcomes. Additionally, "access and affordability barriers" were noted as practical constraints limiting uptake. Across both groups, the cross-cutting theme of "information credibility and social discourse" highlighted the influential role of social media, peer networks, and inconsistent medical guidance in shaping perceptions. While these sources were often seen as accessible and supportive, they were also associated with conflicting information and uncertainty, underscoring challenges in establishing trust and making informed decisions regarding GLP-1RA use.

***** INSERT TABLE 2 HERE *****

DISCUSSION

This study provides timely insights into perceptions, attitudes, and experiences of GLP-1RA use for weight management among UK adults, amid a notable rise in public use and visibility. Despite reporting lower body satisfaction, GLP-1RA users expressed high satisfaction with the medication's effects on body weight and appearance, often describing it as transformative and life-changing. This perception was markedly higher than satisfaction reported for other, mainly lifestyle-based, weight management interventions. However, these perceived benefits were accompanied by negative impacts on perceived energy, dietary habits, physical appearance, and concerns about muscle loss, which in specific cases varied by sex, age, BMI and use duration. Additionally, the data revealed varied experiences regarding the thoroughness of pre-assessment evaluations and the prevalence of common side effects, which were typically slight to moderate and equivalent across assessed subgroups. Concerns regarding serious health risks, dependency, mental wellbeing, and muscle deterioration, ethical reservations and uncertainty about long-term safety emerged as key barriers to uptake. Regardless of prior use, reliance on social media, traditional media, friends and family as primary sources of information was common, in several cases citing these as more helpful than healthcare professionals. Collectively, these findings have important implications for clinical practice, public health strategy, and future research, supporting the need for clearer guidance, improved support, and more consistent oversight to ensure the safe and effective use of GLP-1RAs within broader obesity-management strategies in the UK.

Although the benefits of lifestyle interventions, primarily through dietary modification and increased physical activity, are well established for weight management (46), their long-term effectiveness remains limited, with at least half of individuals regaining weight within two years (47, 48). This is driven by multiple factors, including the impracticality of restrictive diets, metabolic consequences as a result of reduced muscle function, genetic predispositions, socioeconomic status, and psychological influences (49-51). These challenges may help explain the dissatisfaction with previous weight management interventions observed in the present study and the between-group differences indicating dissatisfaction as a key motivator for GLP-1RA initiation. Importantly, GLP-1RA users reported high satisfaction with the medication's effects on body weight and appearance, with satisfaction regarding appearance increasing with use duration. However, these responses largely reflect experiences of participants within the initial six-months of treatment, where effectiveness of other weight management strategies may reflect outcomes over a longer timeframe. Despite the perceived benefits, GLP-1RA users exhibited lower body satisfaction compared to non-users, including those living with overweight or obesity. This may suggest that low body satisfaction itself is a driver for GLP-1RA use, a notion supported by previous research indicating that body dissatisfaction can motivate health-

related behaviour change (52), and GLP1-RA use (53). Some users further expressed ongoing difficulties related to self-image and emotional wellbeing, even after or as a result of significant weight loss, highlighting a need to develop appropriate support mechanisms.

Our findings confirm the prevalence of common side effects associated with GLP-1RA use, particularly gastrointestinal symptoms, injection site reactions, and headaches, consistent with previous research (54). In most cases, these side effects were reported as mild to moderate, however, a small proportion of participants experienced more severe symptoms of nausea (6%), diarrhoea (4%), constipation (12%), abdominal pain (2%), headache (3%), and injection site reactions (3%). Despite this, side effects rarely led to discontinuation of medication use, with fewer than 3% of participants reporting discontinuation, compared with substantially higher rates of 32–50% reported in previous work (21). However, it should be noted that discontinuation rates reported in prior research generally pertain to the first 12 months of treatment where the present work largely captures experiences closer to treatment initiation. Importantly, the prevalence and severity of side effects did not significantly differ across sex, age, or BMI, indicating a relatively consistent tolerability profile across demographic subgroups. However, the present data are not appropriate to reliably distinguish between current symptoms and retrospective experiences earlier in treatment, where longitudinal mapping of symptom profiles across the course of treatment would provide further valuable insight.

Among non-users, responses suggested conditional openness GLP-1RA, consistent with and extending prior work (25) by indicating potential future may be shaped by body-weight status, perceived health risk, and healthcare-professional endorsement, rather than age or sex. Concerns about potential harms and broader perceived functional and long-term consequences of treatment appeared more salient among those likely further from clinical need, implying that acceptability is partly influenced by subjective assessments of eligibility and appropriateness for treatment. This pattern aligns with previous work reporting greater scepticism and risk sensitivity among individuals studying or practising within medical or pharmaceutical fields in Arab countries (55). The present findings also reinforce a potential mismatch between preconceived expectations and lived experiences of GLP-1RA safety, consistent with prior work (25). Extending this insight, these data indicate that perceptions of these barriers varied across demographic factors such as age, sex, and BMI. This underscores the need for targeted, evidence-informed communication strategies to build trust and address misconceptions, thereby supporting informed decision-making around GLP-1RA use. Qualitative themes contextualise these patterns, describing cautious interest under medical supervision that may be tempered by ethical/moral tension, safety and long-term uncertainty, and access/affordability constraints. Collectively, this indicate a spectrum of conditional decision-making where perceptions beyond clinically eligible groups may shape wider public narratives about obesity pharmacotherapy. Therefore, targeted strategies that address subgroup-specific concerns related to long-term safety, dependency and weight regain, and potential muscle-health implications are warranted. This is particularly important given that perceptions extending beyond those closest to established clinical eligibility help shape wider public narratives around obesity pharmacotherapy. Such approaches may also play an important role in mitigating the recognised stigma associated with GLP-1RA use (56), important in light of research in other contexts demonstrating that self-stigmatisation influences medical treatment behaviour (57, 58).

Sources of information about GLP-1RA medications were varied by sex, age, and BMI, although friends and family were consistently identified as influential sources and are recognised as

important determinants of health behaviour (59). Positive perceptions of GLP-1RA outcomes appear to be a key driver of increased future use and the development of informal support networks established to provide support. Social media also emerged as a prominent source of information. Previous research has shown that health-related social media use plays a valuable role in increasing knowledge, exchanging advice, and providing social support (60). While misinformation and public scepticism are evident in social media forums, a study using a large language model to analyse over 390,000 unique GLP-1RA-related Reddit discussions found that public sentiment was predominantly neutral to positive (61). Notably, healthcare professionals were a less frequently consulted source of information regarding GLP-1RA medications, which may be cause for concern. Improving access to healthcare professionals in this context represents an important strategy for delivering evidence-based guidance and support, and for countering misinformation.

Online pharmacies were the predominant source for obtaining GLP-1RA medications. Despite clear government guidelines outlining the criteria for prescription (62), participants reported variation in the perceived rigour of pre-assessment processes, ranging from “not at all rigorous” to “extremely rigorous”. While this finding warrants further investigation to characterise the nature of these assessments, this variability raises concerns regarding the consistent application of prescribing standards and highlights a potential need for stronger regulatory oversight, particularly within private and online prescribing pathways.

In line with recent concerns regarding GLP-1RA misuse (63-65), the present provides valuable insight into real-world usage patterns. Although it is not possible to fully capture all dimensions of behaviours suggestive of misuse, our findings suggest that the majority of participants reported using GLP-1RA medications as prescribed. However, a small proportion (7%) disclosed self-reported behaviours suggestive of potential misuse, including taking higher than recommended doses, administering doses more frequently than advised, or using a "bridging dose" prior to an intended increase. These behaviours were primarily driven by perceived ineffectiveness of the initial dose and, in some cases, a desire to accelerate weight loss. Such practices raise concerns about the adequacy of patient education, the clarity of dosing instructions, and the potential for harm. They also highlight the need for clearer, more robust guidelines around safe use, particularly in the context of self-administered injectable medications. Strengthening regulatory oversight, improving communication between prescribers and patients, and ensuring that individuals have access to evidence-based information are important steps to mitigate misuse and support safe, effective treatment. These findings should also be considered within the broader context of GLP-1RA misuse, particularly its use for aesthetic purposes, appetite-related maladaptive behaviours, and administration in individuals with complex medical needs (63-65).

Findings of the present study are consistent with the possibility for appetite-related maladaptive behaviours in some individuals using GLP-1RA medications. Increased meal skipping, low levels of physical activity, and reduced energy for daily tasks reported in this study may paradoxically compromise skeletal muscle health. Concerns about muscle mass reduction were prevalent among both GLP-1RA users and non-users, aligning with emerging evidence that GLP-1RA use can lead to significant reductions in lean mass (26, 66). This is particularly concerning given the established link between obesity and compromised muscle function (67), especially in vulnerable populations with already low muscle mass (38). However, the effects of GLP-1RA medications on skeletal muscle health are not yet fully elucidated. Some studies

suggest potential benefits, such as reduced intramuscular lipid accumulation, improved mitochondrial function and reduced chronic low-grade inflammation (38, 66, 68, 69), though these findings require further validation. Weight management interventions that rely heavily on caloric restriction are known to increase the risk of reduced muscle function, which may ultimately compromise their long-term effectiveness. This is particularly concerning given the critical role of adequate muscle function in the homeostatic regulation of body weight (68), and may be a primary mechanism driving the recently established substantial weight regain and reversal of beneficial effects on cardiometabolic markers following cessation of GLP-1RA use, that occurs an accelerated rate compared to weight loss as a result of engagement in behavioural weight management programmes (70). While further research is clearly warranted, the present findings underscore the need for robust, evidence-based programmes that offer broader behavioural support, particularly in relation to dietary habits and physical activity.

Although the long-term effects of GLP-1RA medications on healthy weight status are yet to be fully explored, there is growing concern, consistent with other weight management therapies, that sustained weight loss is difficult to achieve (71-73). While prolonged pharmacological intervention may appear attractive for mitigating weight regain, its sustainability and long-term safety remain uncertain (74-76). Despite recommendations to combine GLP-1RA use with physical activity, most users in the present study self-reported that their activity levels below recommended guidelines, with many perceiving themselves as not regularly active. This suggests a need to develop supportive strategies that promote physical activity, while accounting for potential energy-related limitations associated with GLP-1RA use, which appear to increase with longer treatment duration. Of particular concern is the low engagement in muscle-strengthening exercises among GLP-1RA users. Given the potential for compromised muscle function, this may represent both a risk and an opportunity to develop targeted interventions that may promote long term weight loss maintenance. These findings also suggest a need to evaluate the effectiveness of GLP-1RAs and multifaceted interventions using more comprehensive metrics than body mass alone. Measures such as body composition and waist circumference may offer a more representative assessment of outcomes, especially when interventions incorporate physical activity and resistance training.

Strengths, Limitations & Future Directions

This study provides important novel insights into the perceptions, attitudes, and experiences of GLP-1RA use, and includes one of the largest samples of UK-based GLP-1RA users. However, it is not without limitation. As convenience sampling was employed, the results are intended to be informative rather than population-representative and should be interpreted as reflecting patterns observed within this sample rather than prevalence estimates for the wider UK adult population. Future research employing probability-based or stratified sampling designs would strengthen generalisability. The demographic composition of the sample should also be considered. The predominance of female and White participants may influence the interpretation of findings, as access pathways, perceptions, treatment experiences, and concerns may differ across sex and ethnic groups. This limits generalisability to more diverse populations and is particularly relevant in light of documented racial and ethnic disparities in GLP-1RA prescribing, albeit primarily reported in US-based research (77). Future studies should therefore prioritise recruitment strategies that better reflect the demographic diversity of the UK population.

Although the total sample size exceeded the sample size calculation, there was a marked imbalance between GLP-1RA users and non-users. While this provided adequate power for analyses conducted for the user group, the smaller non-user group may have limited the ability to reliably detect moderate effects in some subgroup comparisons. Accordingly, findings relating to these comparisons should be interpreted with caution. Nevertheless, the patterns observed across analyses and the complementary qualitative insights, which are not constrained by statistical power in the same manner, support the overall interpretative value of the data.

Given the predominantly categorical structure of the survey data, chi-square analyses provided an appropriate and easily interpretable approach for exploring subgroup patterns and has been used in similar contexts (78, 79). However, as chi-square tests do not permit adjustment for covariates, the resulting associations are unadjusted and should be interpreted with caution. Future studies using multivariable modelling approaches would be valuable to examine whether these patterns persist after accounting for potential confounders.

As with other cross-sectional online surveys, selection bias is possible, whereby individuals with particularly strong views or experiences may be more likely to participate. Online-only recruitment may also have limited participation from individuals with lower digital engagement or health literacy. GLP-1RA use was self-reported and not clinically verified, meaning misclassification of medication type, duration of use, or adherence cannot be fully excluded. While this reflects real-world survey practice, future work incorporating clinical verification or prescribing data linkage would strengthen confidence in reported use patterns.

Importantly, the study captures the experiences largely relating to treatment initiation and early use, offering valuable insight into early adaptation and emerging concerns that may not be evident in longer-term users. However, this limits the strength of inference regarding sustained use, longer-term behavioural change, or outcomes following discontinuation. Longitudinal research is therefore needed to examine how perceptions, behaviours, clinical outcomes, and safety concerns evolve over time.

While the survey approach balanced feasibility with respondent burden, self-reported physical activity remains vulnerable to recall bias and misclassification. Nevertheless, the present findings provide valuable insight into real-world physical activity patterns among GLP-1RA users, highlighting potential gaps between clinical recommendations and lived behaviour. Future research examining the interaction between GLP-1RA use, physical activity, and long-term outcomes should incorporate validated physical activity instruments or device-based measures to more accurately characterise behaviour.

Finally, although the survey design enabled the collection of data from a large sample, and the inclusion of open-text responses offered some qualitative depth, future work should aim to develop a richer understanding through more in-depth qualitative methodologies. Nevertheless, the qualitative themes derived from participants' open-text responses offer important contextual, emotional, and behavioural insight that extends beyond the structured survey items. These findings serve an important role in identifying priority areas and shaping data-driven future research, particularly the design of targeted focus groups or in-depth interviews. Collectively, a deeper exploration of lived experiences informed by the present findings will support the development of more precise, contextually relevant, and robust interventions to optimise GLP-1RA use and associated lifestyle behaviours.

CONCLUSION

This cross-sectional survey provides timely real-world insight into perceptions, attitudes, and experiences of GLP-1RA use for weight management among UK adults. Users typically reported high satisfaction with body weight and appearance outcomes, yet concerns about energy, dietary habits, and muscle mass loss were prevalent. Most sourced medication from online pharmacies, with inconsistent pre-assessment processes and limited engagement with healthcare professionals, highlighting the need for better regulation and guidance. Social media was a dominant information source, raising concerns about the potential for misinformation. While most users reported following dosing instructions, some reported behaviours suggestive of misuse, often driven by perceived inefficacy. Low physical activity and limited muscle-strengthening behaviours suggest a need for integrated support beyond medication to support the maintenance of healthy weight status following treatment. In the context of the inherent limitations of cross-sectional online survey, the present findings strengthen the importance of combining pharmacological treatment with multidisciplinary obesity management approaches that integrate behavioural interventions. The results also highlight the need for improved patient education, greater access to evidence-based clinical support, and more consistent regulatory oversight of prescribing pathways, particularly in relation to online provision. While this work provides important insight into behaviours and perceptions commonly associated with treatment initiation and early adoption, future research should prioritise longitudinal designs to examine how experiences and behaviours evolve with continued or prolonged GLP-1RA use.

FIGURE TITLES

Figure 1. Patterns of GLP-1RA Use: Sources of Information, Access Methods, and User Satisfaction

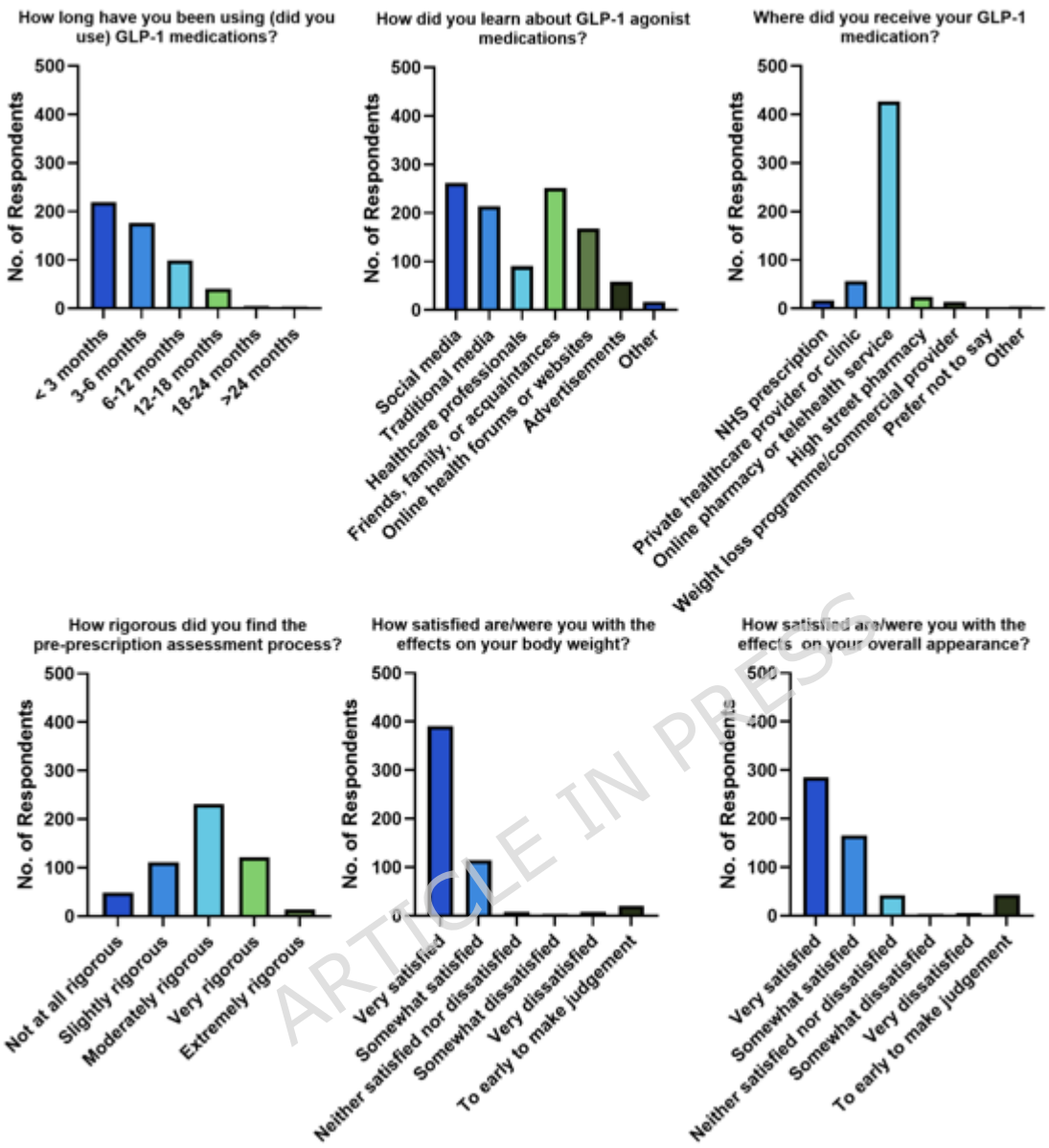
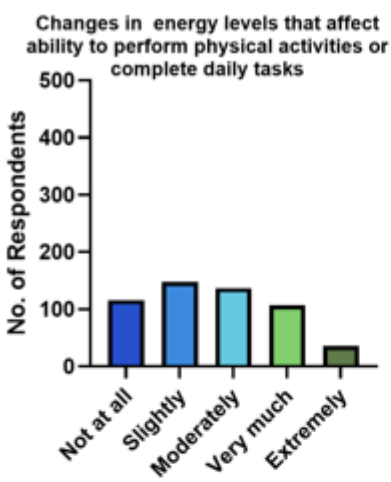
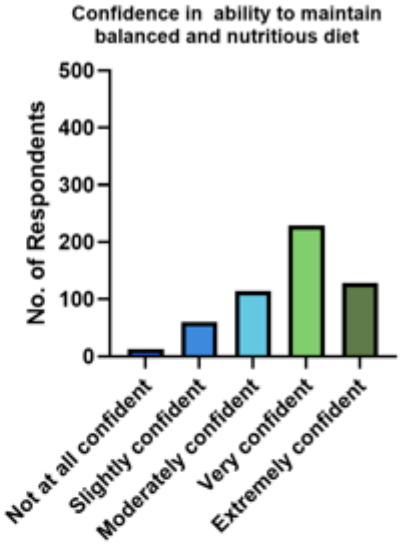
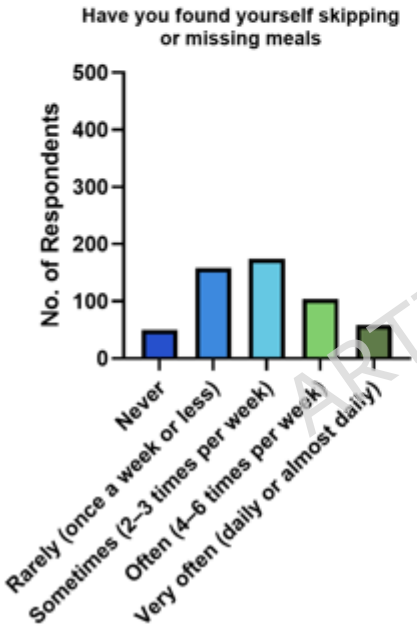


Figure 2. Impact of GLP-1RA Medication on Energy, Dietary Habits, and Muscle Mass Concerns







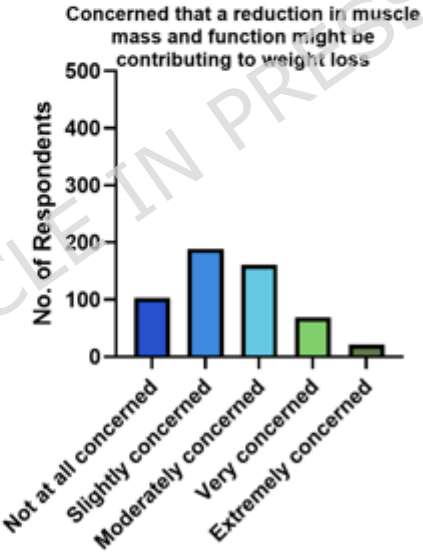


Figure 3. Concerns About GLP-1RA-Associated Muscle Mass Loss in GLP-1RA Users (A) and Non-users (B)

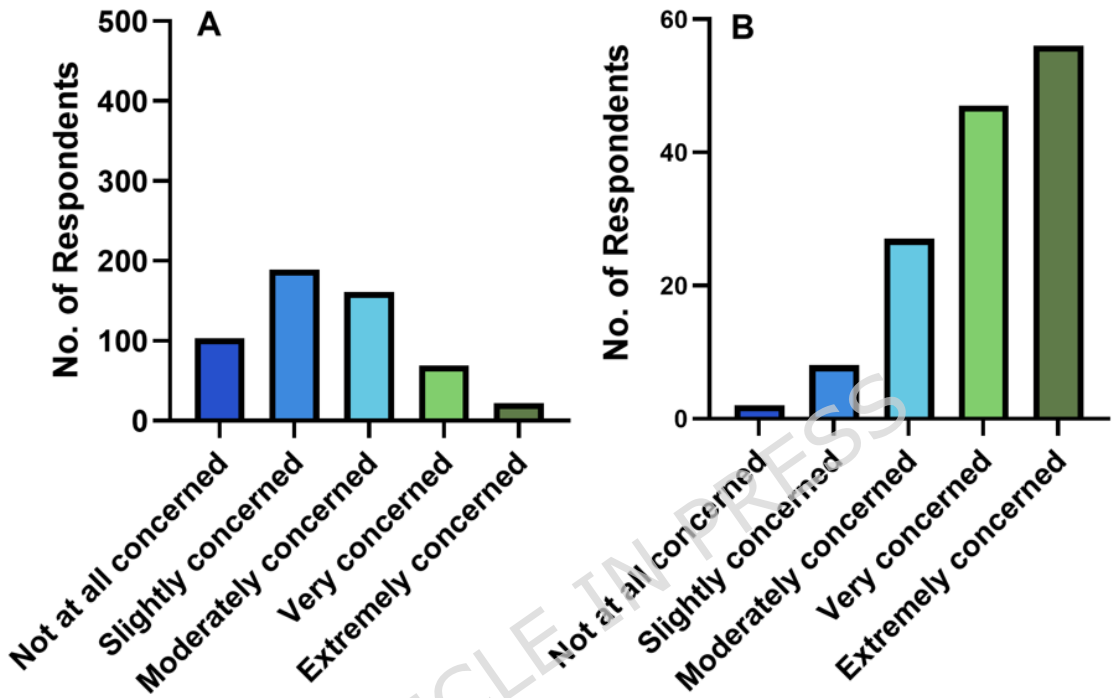


Figure 4. Prevalence and Severity of Side Effects Experienced by GLP-1RA Users

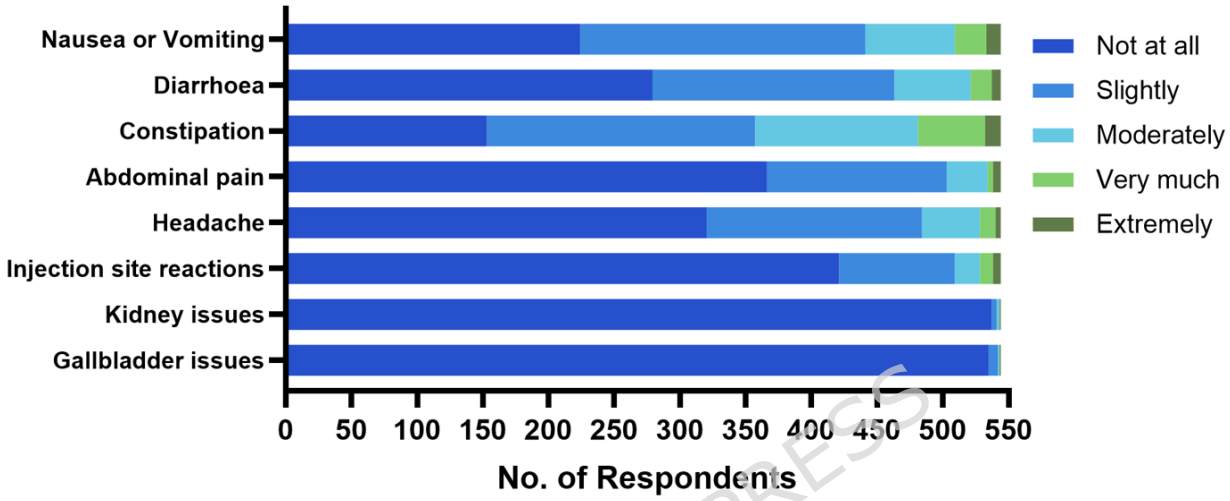


Figure 5. Factors Influencing Willingness to Use GLP-1RA Medication

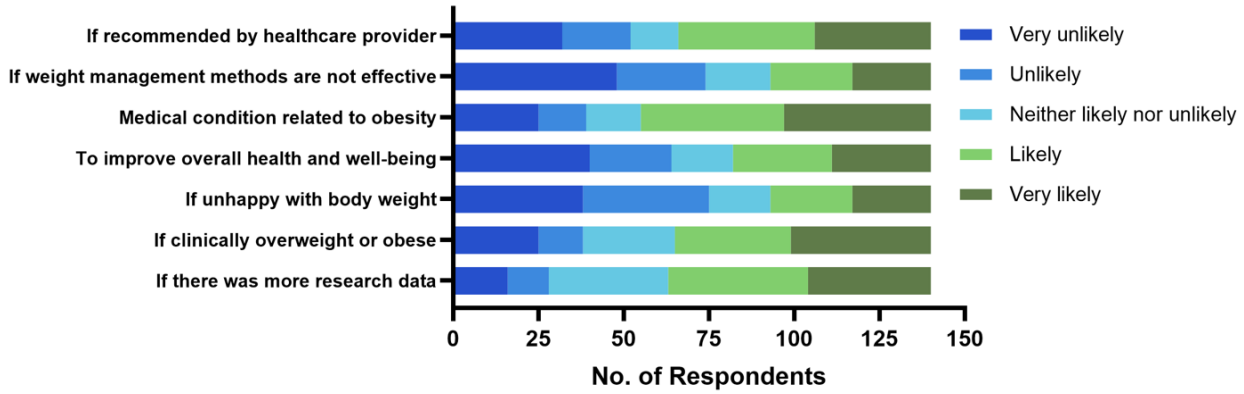


Figure 6. Perceived Barriers to GLP-1RA Use: Health Risks, Lifestyle Impacts, and Social Concerns

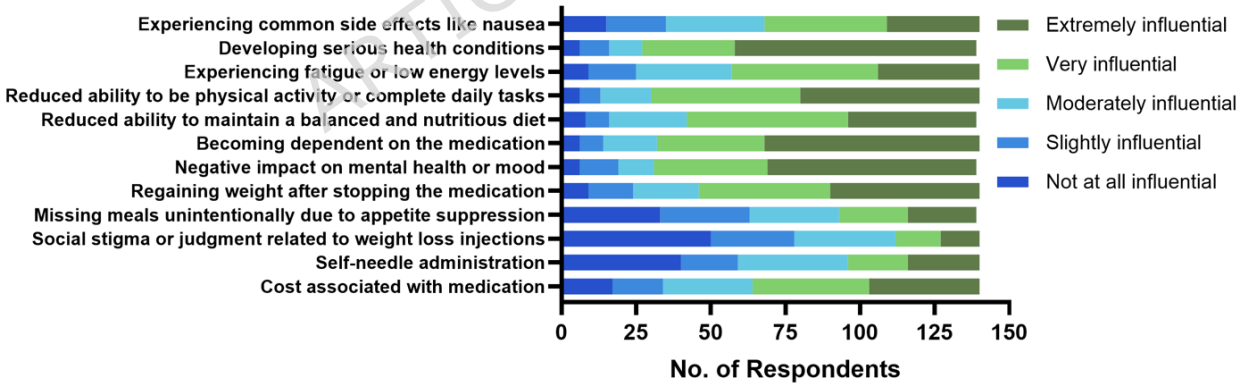


TABLE TITLES

Table 1. Participant demographics

		All	Users	Non-Users
	N=	684	544	140
	Sex	531 F; 151 M	438 F; 104 M	93 F; 47 M
Age	Age (yrs)	42 (18)	43 (17)	37 (17)
	<40 yrs	63 (9%)	55 (10%)	8 (6%)
	40 to 59 yrs	330 (48%)	276 (51%)	54 (39%)
	>60 yrs	291 (43%)	213 (39%)	78 (56%)
BMI	BMI (kg/m²)	30.1 (10)	30.8 (9.4)	26.1 (8.3)
	Underweight	19 (3%)	13 (2%)	6 (4%)
	Healthy Weight	109 (16%)	61 (11%)	48 (34%)
	Overweight	204 (30%)	163 (30%)	41 (29%)
	Obese	352 (51%)	307 (56%)	45 (32%)
Ethnicity	White	624 (91%)	506 (93%)	118 (84%)
	Asian or Asian British	21 (3%)	9 (2%)	12 (9%)
	Black, Black British, Caribbean or African	9 (1%)	5 (1%)	4 (3%)
	Mixed or Multiple Ethnic Groups	24 (4%)	21 (4%)	3 (2%)
	Other Ethnic Group	5 (1%)	3 (1%)	2 (1%)
	Prefer not to say	1 (<1%)	0 (0%)	1 (<1%)
Physical Activity	Meets All PA Guidelines	127 (19%)	81 (15%)	46 (33%)
	Meets MVPA Guidelines	211 (31%)	167 (31%)	44 (31%)
	Meets Muscle Strengthening Guidelines	68 (10%)	55 (10%)	13 (9%)
	Activities to improve balance	8 (1%)	6 (1%)	2 (1%)
	Some PA but do not meet guidelines	201 (29%)	178 (33%)	23 (16%)
	Do not engage in regular PA	69 (10%)	57 (10%)	12 (9%)
Employment Status	Employed full-time	433 (63%)	333 (61%)	100 (71%)
	Employed part-time	81 (12%)	69 (13%)	12 (9%)
	Self-employed	66 (10%)	54 (10%)	12 (9%)
	Unemployed	12 (2%)	10 (2%)	2 (1%)
	Student	18 (3%)	10 (2%)	8 (6%)
	Retired	43 (6%)	39 (7%)	4 (3%)
	Unable to work	25 (4%)	23 (4%)	2 (1%)
	Prefer not to say	6 (1%)	6 (1%)	0 (0%)
Diagnosed Health Conditions	Asthma/respiratory conditions	112 (16%)	93 (17%)	19 (14%)
	Diabetes	29 (4%)	27 (5%)	2 (1%)
	Cardiovascular conditions	110 (16%)	101 (19%)	9 (6%)
	Mental health conditions	180 (26%)	151 (28%)	29 (21%)
	Musculoskeletal conditions	90 (13%)	78 (14%)	12 (9%)
	Neurological conditions	21 (3%)	19 (3%)	2 (1%)
	Renal or urogenital conditions	3 (<1%)	3 (1%)	0 (0%)
	Oral or gastrointestinal conditions	40 (6%)	34 (6%)	6 (6%)
	Inflammatory and immune system conditions	56 (8%)	51 (9%)	5 (4%)
	No known health conditions	249 (36%)	172 (32%)	77 (55%)
	Prefer not to say	3 (<1%)	2 (<1%)	1 (1%)
	Other	95 (14%)	85 (16%)	10 (7%)
	2 Health Conditions	121 (18%)	110 (20%)	11 (8%)
	3 Health Conditions	41 (6%)	39 (7%)	2 (1%)

4 or More Health Conditions	29 (2%)	24 (3%)	5 (2%)
BAS-2	3 (1.3)	2.9 (1.2)	3.5 (1.3)

Data reported as median (IQR) or frequency (%); F = Female; M = Male; PA = Physical Activity; MVPA = Moderate to Vigorous Physical Activity

Table 2. Summary of Key Themes Identified from User and Non-User Responses Regarding GLP1-RA Use

Group	Theme	Frequency (n)	Subthemes	Quotes
Users	Perceived transformation and renewed control	110	Weight loss success; appetite suppression; confidence gain	P371 – "I've lost 16 stone on MJ. Absolutely changed my life." / P381 – "Mounjaro has transformed my life… I felt I constantly thought about food before, but now I am a changed person."
	Embodied side-effects and physical cost	75	Fatigue; nausea; loose skin; muscle loss	P109 – "I look good in clothes these days but have loose skin and muscle wastage… I'll take that over being overweight."
	Behavioural and psychological recalibration	55	Smaller meals; mindful eating; re-prioritised health	P433 – "Shift from 'I want to lose weight' to 'I want to be healthy.' Now I crave vegetables instead of sugar." / P57 – "Food noise turned down… eat slower and more consciously."
	Dependency and sustainability anxiety	32	Fear of rebound; financial burden; need for ongoing supply	P381 – "…Cost is a barrier that may stop me and with more weight to lose I am scared I will lose access and fail."
	Persistent self-image and emotional ambivalence	25	Self-criticism; body dissatisfaction despite change	P147 – "I've lost around 50 lbs… the change is noticeable, but the self-loathing hasn't changed."
Non-users	Cautious interest under medical supervision	17	Conditional acceptance; trust in clinical evidence	P24 – "I view Mounjaro as a wonder drug… the potential is huge should affordability come down."
	Ethical and moral tension	20	"Cheating"; loss of discipline; perceived laziness	P125 – "Seems like a lazy and unsustainable way to lose weight if you don't have conditions." / P129 – "These injections support laziness and Big Pharma only."
	Safety and long-term uncertainty	12	Fear of side-effects; unknown consequences	P27 – "…Biggest worry is I couldn't maintain the financial obligation and would pile the weight back on."
	Access and affordability barriers	6	Price; eligibility; limited availability	P12 – "Hit weight after meno… nothing shifts it… hate it."
Cross-group	Information credibility and social discourse	Users 20 / Non-users 8	Misinformation; social-media influence; uneven medical guidance	P31 (User) – "TikTok groups help more than my GP." / P7 (Non-user) – "Too many conflicting messages about safety."

Supplementary Table 1. Body Weight Satisfaction, Intervention Use, and Perceived Effectiveness

LIST OF ABBREVIATIONS

ADHD	*Attention-Deficit/Hyperactivity Disorder*
BAS-2	*Body Appreciation Scale-2*
BMI	*Body Mass Index*
CROSS	*Consensus-Based Checklist for Reporting of Survey Studies*
GLP-1RA	*Glucagon-like peptide-1 receptor agonists*
PA	*Physical activity*
PCOS	*Polycystic ovary syndrome*
RCT	*Randomised Control Trial*

DECLARATIONS

Ethics approval and consent to participate

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Ethics approval for this project was sought from the Coventry University Research Ethics committee (Ref: P187463). All participants were asked to provide informed consent as part of the online survey, before accessing and completing the questions.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare no competing interests.

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Author Contributions

Conceptualization (JT, DR, DB, MD, TB, LB); Data curation (JT, RM); Formal analysis (JT, RM, DB, MD), Investigation (JT, DR, DB, MD); Methodology (JT, DR, MD, TB, LB, AH, HJ, DB);

Project administration (JT, DB); Validation (JT, DB, RM); Visualization (JT, RM); Writing – original draft (JT, RM); Writing – review & editing (JT, DR, MD, RM, TB, LB, AH, HJ, DB).

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