

## Perceptions, Attitudes, Behaviours and Barriers in Obesity Care: Findings from the ACTION-Vietnam Study

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### Abstract

**Objective.** The ACTION Asia Pacific (ACTION-APAC) study was designed to identify the perceptions, attitudes, behaviours and potential barriers to effective obesity management in people with obesity (PwO) and healthcare professionals (HCPs) in nine countries of Southeast Asia. This study represents the findings in Vietnam.

**Methodology.** This cross-sectional, non-interventional study gathered information from Vietnamese PwO (n = 1000) and HCPs (n = 200) via an anonymous online survey between April and May 2022.

**Results.** The majority of PwO (67%) and HCPs (80%) believed that obesity is a chronic disease that profoundly impacts a person's overall health (76% PwO, 81% HCPs). About 58% of PwO agreed that managing weight loss was solely their responsibility. Meanwhile, 76% of HCPs believed they should actively contribute to their patients' weight loss efforts. Most of the PwO (82.7%) had attempted weight loss with an average of four times. PwO and HCPs cited lack of exercise (63% vs. 86%) and lack of motivation (60% vs. 80%) as the principal barriers to weight loss. HCPs cited PwOs' lack of interest (52%) and motivation to lose weight (45%) as top reasons for not discussing weight.

**Conclusion.** The study emphasised raising awareness for obesity management among PwO and HCPs and suggested early weight management conversations with HCPs.

**Key words:** barriers to weight loss, healthcare professionals, patients with obesity, Vietnam, weight management

### INTRODUCTION

Obesity is a globally prevalent, chronic, progressive disease,<sup>1,2</sup> with an alarming rise in prevalence in the Asia-Pacific (APAC) region. The prevalence is estimated to have doubled between 2010 and 2030 in South and Southeast Asia.<sup>3</sup> Consistently, obesity prevalence in Vietnam has also increased from 10% in 2009 to 16.4% in 2015 amongst women and from 10.3% to 15% amongst men.<sup>4</sup> The prevalence of obesity and overweight among children and adolescents in Vietnam has increased from 8.5% to 19% from 2010 to 2020. Interestingly, the prevalence is greater in urban areas (26.8%) than in rural areas (18.3%).<sup>5,6</sup> This may partly be attributed to significant economic transition and urbanisation in the last two decades in Vietnam, leading to an increasingly obesogenic environment due to high-calorie food consumption and an inactive lifestyle.<sup>7,8</sup>

The rise in obesity impelled the Vietnamese government to understand its considerable association with chronic non-communicable diseases (NCD), reduced quality of life and premature mortality.<sup>4</sup> The Vietnam government has launched the "National Strategy for the Prevention and Control of NCD 2015–2025" program to keep overweight and obesity prevalence under 15% in adults.<sup>4,9</sup> Despite the endorsement of the national strategy, the steady rise in obesity prevalence in Vietnam indicates a lack of implementation or assurance of consistent obesity care.

A consensus guideline on the care and management of obesity in South and Southeast Asian countries suggested prioritising effective management approaches, setting realistic and clinically meaningful weight loss targets to lower health risks or improve quality of life (QoL) and maintaining it long-term. A 5% to 15% weight loss over 6

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months was considered safe and realistic.<sup>3</sup> Modest lifestyle modifications (reduced food intake with a healthy diet and physical activity) and behavioural therapies are important first-line interventions to target obesity.<sup>3,10,11</sup> Pharmacologic treatment is an adjunct therapy when lifestyle alterations fail to reduce weight in people with obesity (PwO). Furthermore, bariatric surgery is suggested in addition to lifestyle modifications for those PwO having BMI  $\geq 35$  kg/m<sup>2</sup> and are unresponsive to medications.<sup>3,10,11</sup>

The ideal obesity management requires awareness and interaction among PwO and healthcare professionals (HCPs) regarding obesity- its relapsing nature, associated comorbidities and complexities.<sup>12</sup> The Awareness, Care, and Treatment in Obesity Management International Observation (ACTION-IO) study reported that a lack of awareness about clinical obesity management among PwO and HCPs led to delays in initiating conversations on weight management.<sup>13</sup> Similar to the ACTION-IO study, the Asia-Pacific study also identified perceptions, attitudes and behaviours toward obesity, its management and barriers to effective care among PwO and HCPs in the APAC region.<sup>14</sup> This remains to be unexplored in Vietnam. The current study is a sub-analysis of the ACTION-APAC study and aims to present the results on perceptions, attitudes, behaviours and barriers of obesity among PwO and HCPs of Vietnam.

## METHODOLOGY

### Study design

The ACTION-APAC study was a non-interventional, cross-sectional descriptive study, which gathered information from PwO and HCPs across nine Asia-Pacific countries: Vietnam, Malaysia, Philippines, Indonesia, Singapore, Pakistan, India, Bangladesh and Thailand via an anonymous online survey between April 14, 2022 and May 23, 2022. The countries included are a part of the APAC region as categorised by the World Obesity Federation.<sup>15</sup> A third-party vendor (KJT Group, Inc., Rochester, NY, USA) surveyed existing online databases/panels using English and Vietnamese. They assisted in developing detailed inclusion and exclusion criteria for participant selection and worked with local panel partners to access samples from opted-in respondents. A thorough data review was conducted and strict quality control procedures were implemented to maintain data integrity throughout the study. The ACTION-APAC study methodology was recently published.<sup>14</sup> The current study is a subgroup analysis of the Vietnam cohorts of the ACTION APAC study. It was exempted from the Western Copernicus Group (WCG) Institutional Review Board due to sufficient protections taken to maintain the data confidentiality and privacy of the study participants.

### Study cohorts

Separate surveys were conducted for PwO and HCPs. Before the survey initiation, all participants provided electronic informed consent. Eligible Vietnamese PwO

(n=1000) were  $\geq 18$  years old with a current BMI of  $\geq 25$  kg/m<sup>2</sup> (obese)<sup>16</sup> determined based on self-reported height and weight. The main exclusion criteria included pregnancy, previous participation in the study, enrolment in intense fitness programs, or significant unintended weight loss 6 months before completing the survey.

Eligible HCPs (n = 200) were adult medical practitioners of Vietnam ( $\geq 18$  years old) with  $\geq 2$  years of practice experience, who spent  $\geq 50\%$  of their time in direct patient care and had seen  $\geq 100$  patients (including  $\geq 10$  PwO) during the past month. HCPs were excluded if they previously participated in the study or had language barriers that hindered understanding of or cooperation in the study. Sample sizes for both HCPs and PwO were determined to balance statistical power, recruitment feasibility and cost. The sample sizes of PwO were calculated to obtain an error margin of 2-3% around a proportion estimate of 50%, with the error margin calculated using standard normal (Z-) distribution with  $Z = 1.96$ , or around a 95% level of confidence.<sup>14</sup>

### Study outcomes

Survey questions were developed based on the earlier ACTION worldwide study.<sup>13</sup> However, questions were modified based on inputs from scientific experts from Vietnam and were formulated to ensure comprehensive data collection. In the PwO questionnaire, participants provided insights on (a) readiness for change and prior weight loss success; (b) their perceptions and attitudes towards obesity; (c) available support structures; (d) interactions with HCPs regarding obesity; and (e) strategies for weight management. In the HCP questionnaire, participants shared their views on (a) patient readiness for change and past weight loss outcomes; (b) their awareness and attitudes towards obesity; (c) perceived helpful support structures for patients; and (d) patient interactions. HCPs were also asked demographic questions regarding clinical specialty, years of practice, practice setting, frequency of obesity diagnosis among patients, comfort discussing weight, and adherence to obesity management guidelines. The responses on diverse obesity-related issues were quantified using single-item and multiple-item selection (reported as percentages or frequencies). To measure certain attitudes or opinions, a 5-point Likert scale was used where 1 meant "strongly disagree" and 5 meant "strongly agree." However, the results would focus only on the responses of the participants who responded with 4 (Agree) or 5 (Strongly Agree).

### Data collection

Data of eligible respondents (PwO and HCPs) collected through an online survey programmed with Decipher Survey Software (Focus Vision Worldwide Inc., Stamford, CT, USA) were reviewed by the WCG Institutional Review Board and approved according to local regulations. The study and data collection process complied with all country, federal, or state laws. All participants provided informed consent. The data was collected online via a

27-minute survey for PwO and a 31-minute survey for HCPs compliant with the requirements of each country. A secure link was sent to all the participants so they could complete the consent form, screener and online survey. The survey was designed to ensure every question was answered so there were no missing data. This study was sponsored by Novo Nordisk and was conducted in accordance with the Declaration of Helsinki and the European General Data Protection Regulation (GDPR).

### Data analysis

De-identified data were analysed using different statistical software programmes, such as SPSS (version 23.0, IBM, Armonk, NY, USA), Stata (version IC 14.2, StataCorp LLC, College Station, TX, USA), and Excel (version 365, Microsoft, Redmond, WA, USA). Descriptive statistics were calculated using Q Research Software for Windows 23 (A Division of Displayr, Inc., New South Wales, Australia). Categorical variables were presented as counts and percentages.

## RESULTS

### Demographics

In the current study, 200 HCPs and 1000 PwO from Vietnam completed the survey. The participating PwO had an average age of 39.2 years, with 51% classified as Class 1 obesity (BMI: 25–29.9 kg/m<sup>2</sup>) and 33% as Class 2 obesity (BMI 30–34.9 kg/m<sup>2</sup>). The obesity classification was based on the WHO Asia-Pacific region cutoff.<sup>16</sup>

Among the participating HCPs, 56% were male, had an average practice experience of 11.3 years and spent about 78% of their professional time on patient care. In the HCP cohort 25% were obesity specialists (i.e., ≥50% of patients seen primarily for obesity) 57% considered themselves obesity experts, and 59% had advanced training in obesity management (Table 1).

### Perceptions of obesity

The majority of PwO (67%) and HCPs (80%) agreed that obesity is a chronic disease (Figure 1). A weight loss of 5–10% body weight was regarded to be highly beneficial to health by both PwO (78%) and HCPs (92%) (Figure 1). Both cohorts believed that obesity profoundly affects a person's overall health (76% of PwO and 81% of HCPs).

### Attitude toward weight loss and their motivators

More than half of PwO (58%) assumed full responsibility for their weight loss, and even 55% of HCPs believed that PwO was solely responsible for their weight loss. Half (50%) of the PwO expected active involvement of their HCPs towards their weight loss, while a substantial proportion (76%) of HCPs considered they were responsible for actively contributing to their patients' weight loss. Over half of PwO (55%) were motivated to achieve weight loss, while HCPs

thought 69% of PwO were motivated to do so (Figure 1). Approximately 32% of PwO had weight loss intentions within the next month or were committed to/enrolled in a weight loss program. The top three motivators for weight loss as per PwO were to become more fit/have better shape (32%), feel better physically and more energetic (31%), and improve confidence/self-esteem (29%) (Supplementary Figure 1). However, HCPs considered general health concerns (60%) as the chief weight loss motivator apart from being in better shape or fitter (48%) or improving self-esteem/confidence (49%) (Supplementary Figure 1).

### Weight loss barriers

PwO considered lack of exercise (63%), lack of motivation (60%), unhealthy eating habits (59%) and the possibility of regaining weight (60%) to be the principal weight loss barriers. Consistently, most HCPs believed lack of exercise

**Table 1.** Key demographics and characteristics of the study population

	PwO (n = 1,000)	HCPs (n = 200)
<b>Age, years, mean</b>	39.2	39
<b>Male, n (%)</b>	500 (50)	112 (56)
<b>Obesity class, n (%)</b>		
Class 1 (BMI 25–29.9 kg/m <sup>2</sup> )	510 (51)	Not applicable
Class 2 (BMI 30–34.9 kg/m <sup>2</sup> )	330 (33)	
Class 3 (BMI 35–39.9 kg/m <sup>2</sup> )	120 (12)	
Class 4 (BMI ≥40 kg/m <sup>2</sup> )	50 (5)	
<b>Setting, n (%)</b>		
Urban area	720 (72)	182 (91)
Suburban area	210 (21)	16 (8)
Rural area	70 (7)	2 (1)
<b>Comorbidities, n (%)<sup>a</sup></b>		
High blood pressure	230 (23)	Not applicable
High cholesterol	260 (26)	
Eating disorder	190 (19)	
Depression / anxiety	140 (14)	
Type 2 diabetes	150 (15)	
Cardiovascular disease	200 (20)	
Others	10 (1)	
None listed	300 (30)	
<b>HCP practice category, n (%)</b>		
Family practice		12 (6)
General practice		42 (21)
Internal medicine		48 (24)
Endocrinology / Diabetology		28 (14)
Cardiology		30 (15)
Gastroenterology		NA
Nutrition specialist		NA
Obstetrics / Gynaecology	Not applicable	14 (7)
Bariatrics / Obesity Medicine		Not applicable
Aesthetics medicine		16 (8)
Orthopaedist		16 (8)
<b>Years in practice, mean</b>		11.3
<b>Considered self an obesity expert, n (%)</b>		114 (57)
<b>Obesity specialist, n (%)<sup>b</sup></b>		50 (25)
<b>Received advance training in obesity</b>		118 (59)

BMI, body mass index; HCPs, healthcare professional; PwO, people with obesity

<sup>a</sup>Percentages do not add to 100 because respondents could select more than one condition.

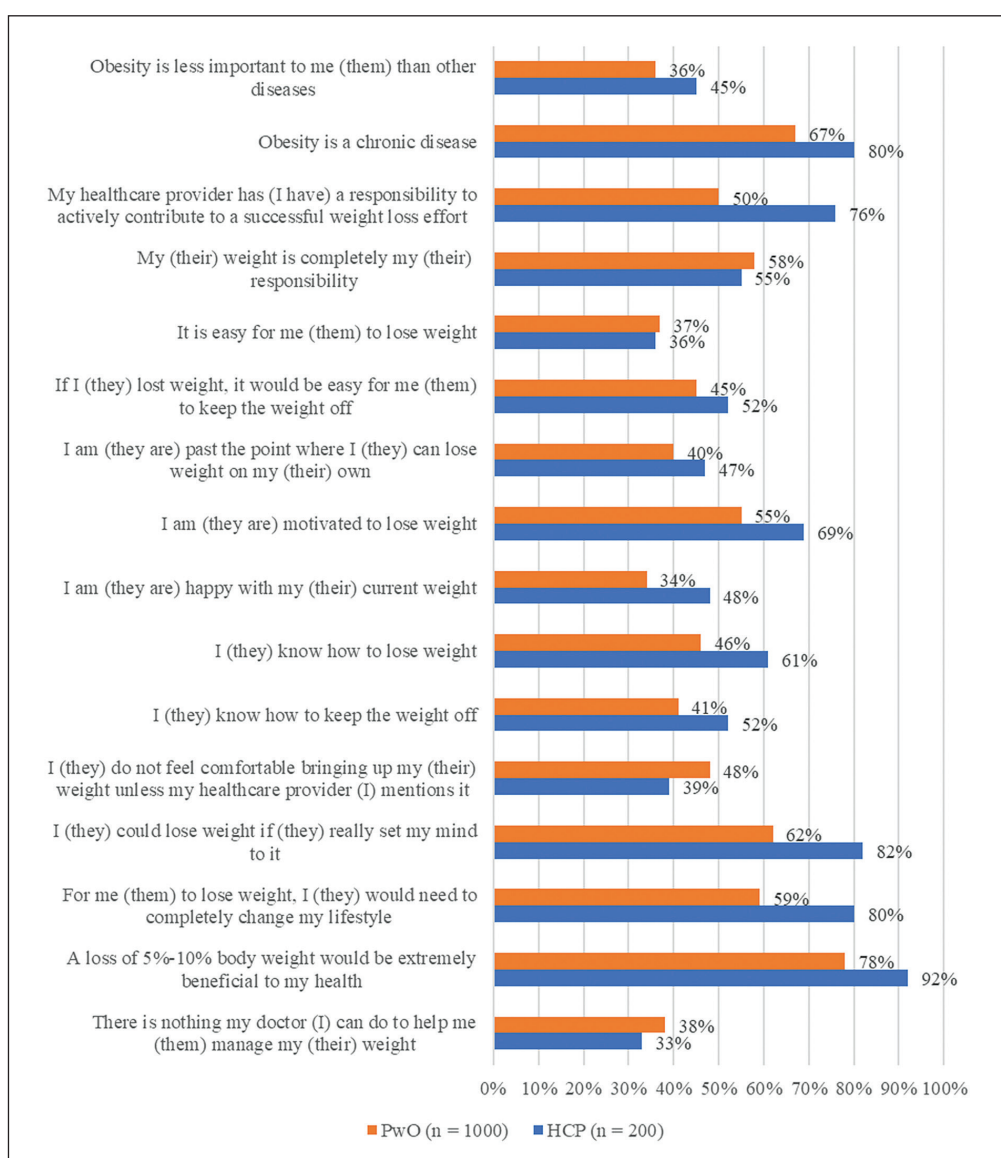
<sup>b</sup>An obesity specialist is defined as a physician who reported seeing 50% or more patients specifically for obesity/weight management.

(86%), unhealthy eating (86%), limited mobility (82%) and lack of motivation (80%) as the top barriers to weight loss for PwO. Additionally, PwO also blamed the nature of their jobs (58%) and the tendencies to regain weight (60%) as other weight loss barriers (Figure 2).

### Interactions between PwO and HCPs about weight management and outcomes

About 50% of PwOs had discussed obesity with their HCPs (obesity specialist or dietitian) in the past 5 years; 62% of HCPs acknowledged discussing weight issues with their PwO, and in 53% of cases, HCPs initiated the conversation. Of these, 56% of PwOs whose HCP raised the topic of weight appreciated their HCP for raising the topic. Meanwhile, 40% of HCPs stated that they felt uncomfortable discussing weight loss with their patients unless it was patient-initiated, as they assumed that their patients lacked

interest in weight loss. The primary reasons mentioned by PwO for not initiating weight discussion with HCPs was the belief that weight loss was their responsibility (24%) and also lack of financial means to support weight loss efforts (24%) (Figure 3). In contrast, HCPs cited a lack of patients' interest (52%) and motivation (45%), as well as the absence of weight-related comorbidities (38%) and lack of confidence among PwO (39%) as the main reasons for not initiating weight loss discussions (Figure 3). About 75% of PwO were diagnosed with obesity by their HCPs. Nearly 75% of PwO said they felt positive following weight loss discussions with their HCPs. Three in four PwO (76%) who discussed weight with their HCP scheduled a follow-up appointment. Although 70% of HCPs mentioned recording obesity diagnoses in patient records most or all the time and had notified approximately 71% of patients about obesity diagnoses, 52% of their patients scheduled follow-up appointments with them.



**Figure 1.** PwO and HCPs' attitudes towards obesity and weight management.

PwO and HCPs indicated their level of agreement (4 or 5) on a 5-point scale (1: Do not agree; 5: Completely agree)

HCPs, healthcare professionals; PwO, people with obesity



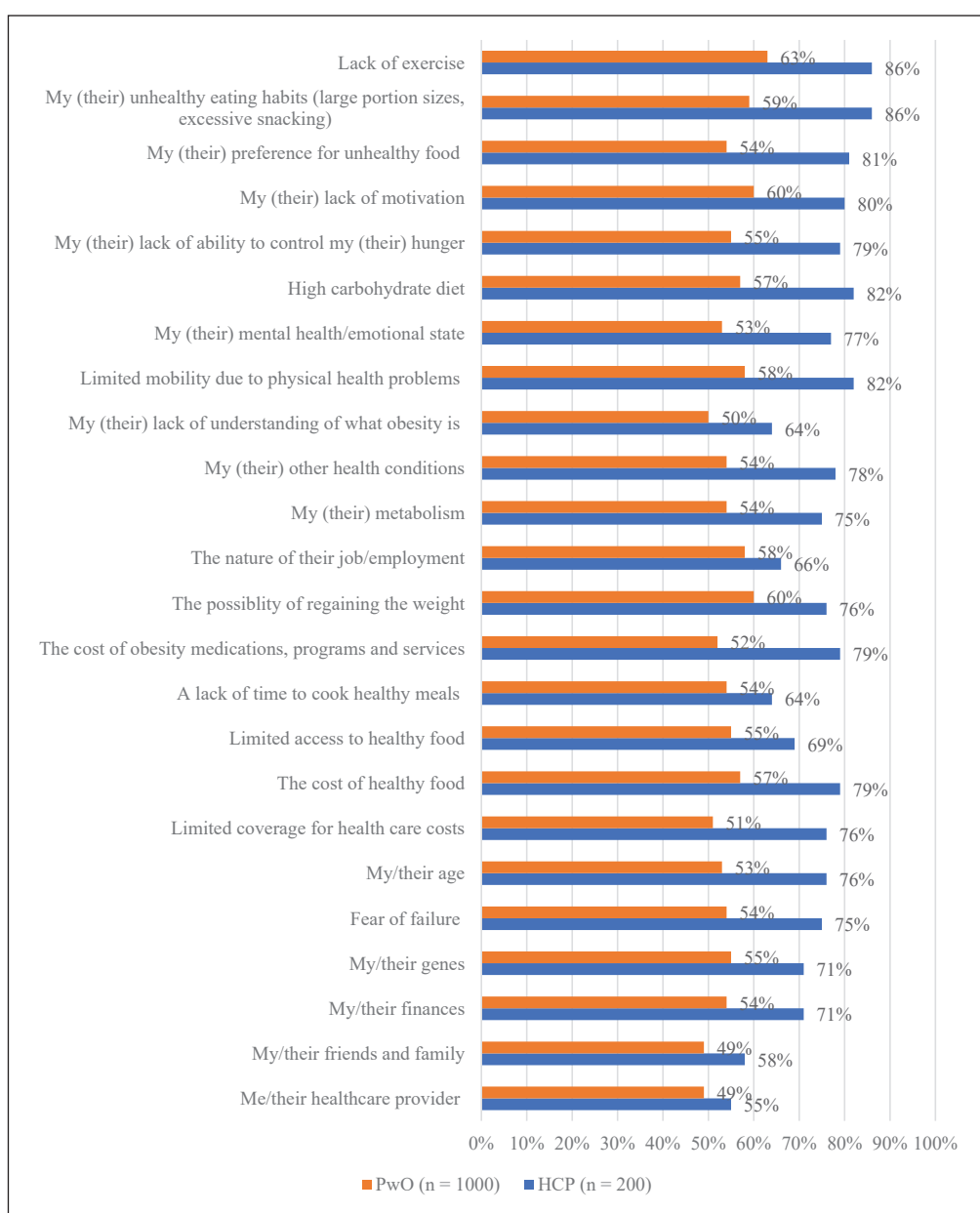
### Perceptions about current weight, weight loss efforts by PwO and outcome

Although all participating PwO were obese (based on their self-reported weights and heights), only 30% of PwO considered themselves overweight and 56% as obese (Supplementary Figure 2). Most PwO began struggling with their weight at a median age of 30 years and first discussed weight loss with HCP at a median age of 35 years (Supplementary Figure 3). However, 34% of PwO were happy with their current weight despite struggling with weight loss. Although 51% of the PwO mentioned about 1 to 4 weight loss attempts, 45% regained weight after successfully maintaining a low weight for at least 6 months. Only 4% of PwO had  $\geq 10\%$  weight loss (not due to illness or injury) and had maintained weight loss for  $\geq 1$

year (Supplementary Figure 4A). HCPs, on the other hand, believed less than half of the PwO had made a serious weight loss effort, and nearly 40% were successful. The three most common reasons for regaining weight cited by PwO were not following an eating plan (34%), difficulty in staying motivated (32%), and discontinuing exercise (28%) (Supplementary Figure 4B).

### Perceptions of weight stigma among overweight patients

According to both PwO and HCPs, the societal stigma towards obesity negatively impacted PwO to develop a romantic relationship (30% and 59%, respectively), obtain a job (17% and 57%, respectively) and be successful in the workplace (16% and 41%, respectively) (Supplementary Figure 5). Moreover, weight stigma influences how



**Figure 2.** Barriers to weight loss reported by PwO and HCPs.

PwO and HCPs indicated their level of agreement (4 or 5) on a 5-point scale (1: Do not agree; 5: Completely agree)

HCPs, healthcare professionals; PwO, people with obesity

people are perceived in terms of athleticism, health and intelligence. Only half of the PwO are viewed as athletic (PwO: 50%; HCP: 49%) or healthy (PwO: 54%; HCP: 60%), and an even lesser percentage is considered as smart (PwO: 43%; HCP: 26%).

### Weight management strategies and goals

The majority of PwO relied on the internet (42%), or smartphone apps (36%) as a source of information for weight management, and about 32% of PwO sought relevant information from their HCPs and 34% from their dietitian (Supplementary Figure 6). The most common weight management goals among PwO after weight loss discussion with their HCP were to improve mental and

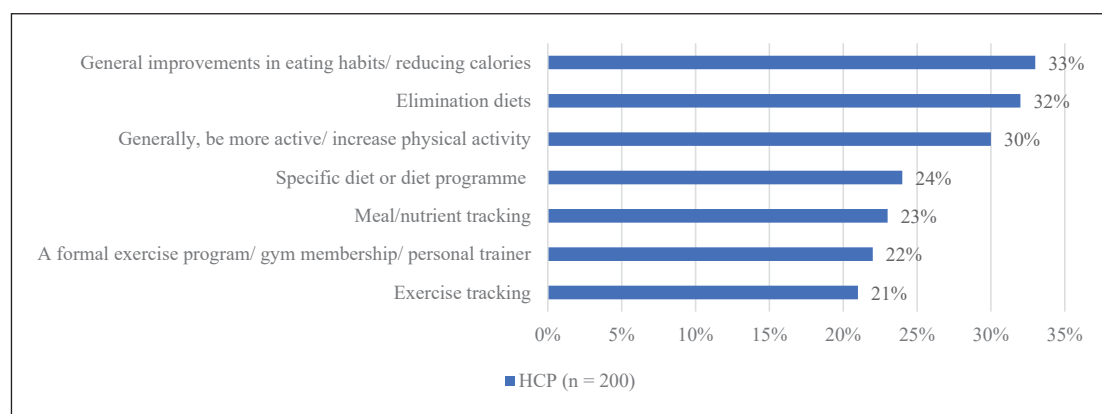
physical well-being (32%), lifestyle (31%) and appearance (30%) (Supplementary Figure 7). Additionally, 60% of PwO who had weight-related conversations with their HCPs agreed that their HCPs listened to them and they trusted their HCP's advice on weight management.

The top three weight management strategies considered by PwO were improvement in eating habits or decreasing calories (33%), elimination diets (32%) and specific diet or diet programme (24%) (Figure 4). On the other hand, 53% of HCPs considered exercise and increased physical activity for effective weight management. Most PwO (64%) preferred losing weight by themselves rather than using anti-obesity medications. Most PwO (69%) and HCPs (67%) were worried about the side effects and long-term safety



**Figure 3.** Reasons for not having weight discussion between PwO and HCPs.

HCPs, healthcare professionals; PwO, people with obesity.



**Figure 4.** Methods recommended by HCPs for weight management, as reported by HCPs.

HCPs, healthcare professionals.

of anti-obesity medications (Supplementary Figure 8). Most PwO (72%) and HCPs (84%) preferred weight loss through diet and exercise rather than undergoing bariatric surgery.

## DISCUSSION

Results from the ACTION-Vietnam subgroup analysis revealed differences in perceptions, attitudes and knowledge about obesity management between PwO and HCPs, as well as a lack of awareness about obesity in both groups. Even though a large majority of PwOs (76%) and HCPs (81%) believed that obesity considerably impacts overall health, fewer PwOs (67%) than HCPs (80%) recognised obesity as a chronic disease. This was in line with the global population (ACTION-IO) and ACTION-APAC studies.<sup>13,14</sup> The study showed that although both PwO and HCPs were aware of obesity and its impact on overall health, it is still undermined in the country. Despite all participating PwO being obese, only 56% of PwO considered themselves obese. This misperception of weight status among PwO is alarming as it could deter them from seeking help or attempting to manage their weight.

Most PwOs (58%) assumed complete accountability for their weight management, and 50% believed HCPs should support their weight loss efforts. This is in accordance with the ACTION-APAC study, where 63% of PwO reportedly held themselves responsible for weight loss.<sup>14</sup> The Korean and Japanese ACTION-IO studies echoed similar opinions.<sup>10,11</sup> Over half of the HCPs (55%) believed that PwO are solely responsible for their weight loss, compared with the findings from the ACTION-APAC study, where 41% of HCPs considered weight loss a responsibility of PwO entirely.<sup>14</sup> This could be due to cultural and economic differences between different countries in the APAC region.

In Vietnam, 47% of the PwO who had weight-related conversations with HCPs reported that they initiated the conversation. Similar results were reported from the APAC region.<sup>14</sup> In contrast to the ACTION-IO studies from Japan and Korea, where the PwO did not prefer their HCPs to initiate the weight loss conversations,<sup>10,11</sup> most PwO in

Vietnam preferred their HCPs to initiate the conversation. This finding aligns with the ACTION-IO study from Israel.<sup>17</sup> Moreover, in this ACTION-Vietnam study, PwO thought that weight loss was their responsibility (24%), and only half sought consultation with an obesity specialist or dietitian. From these findings, it is evident that there is a lack of adequate communication between PwO and HCPs about obesity management and weight loss discussions, leading to the increasing obesity rates in the country.

The current study identified poor dietary habits and lack of exercise as the leading weight loss barriers, consistent with ACTION-IO and ACTION-APAC studies.<sup>13,14</sup> However, only 59% of PwO in the current study considered these two as the main barriers, suggesting a lack of awareness about obesity in the general population. More than 50% of PwO stated that they were motivated to lose weight, and most of them had already made a minimum of one serious weight loss attempt in the past. Conversely, less than 50% of HCPs appreciate the weight loss efforts in their patients. This lack of acknowledgment and motivation from HCPs may discourage and dishearten PwO from discussing their efforts openly with HCPs, resulting in either failed weight loss attempts or revert to unhealthy lifestyles. A significant proportion (48%) of PwO felt embarrassed or ashamed if their HCPs initiated a weight loss discussion. This self-blame mindset of PwO often creates barriers for the HCPs to initiate weight loss conversations. This could be why PwO seeks weight loss-related information from other sources, such as the internet and social media, rather than HCPs. Inaccurate and short-term solutions for faster weight loss from the internet or non-HCPs might lead PwO to follow extreme lifestyle changes without proper healthcare guidance, causing more harm than benefit. Therefore, HCPs should develop a supportive, empathetic and compassionate approach toward their patients.<sup>18</sup>

Obesity management is a team effort with the active involvement of HCPs and PwO. However, only half of the PwO in this study considered HCP involvement vital in weight loss. This aligns with the findings from ACTION-APAC study, which revealed that PwO hesitated to initiate

discussions about their weight with HCPs, and only 43% sought advice on weight loss strategies.<sup>14</sup> Moreover, the Vietnamese HCPs cited the patient's lack of interest in losing weight as the main reason for not initiating weight discussion. This indicated the importance of developing effective obesity management guidelines and health policies in Vietnam, aligned with the current Southeast Asian consensus to include regular patient counseling, regular health check-ups and encouraging obesity-related open discussions between HCPs and PwO.<sup>3</sup>

The study demonstrated that HCPs and PwO agreed on obesity diagnosis (74%), follow-up appointments (76%), specialist referrals and weight loss strategies. Both cohorts preferred lifestyle modifications over pharmacotherapy and bariatric surgery for weight loss. This may be attributed to a knowledge gap among HCPs and the unavailability of other effective treatment methods in the country, similar to the global study, Japanese and Korean ACTION studies.<sup>10,11,13</sup> The limited availability of pharmacotherapy and bariatric surgery options, as well as a scarcity of effective and individualised treatment and referral options in Vietnam, affect HCPs' understanding of weight loss treatment options. It is, therefore, essential to educate the HCPs on different approaches to obesity management with a clear specialist referral pathway. Moreover, regular follow-up visits with HCPs should be encouraged for adequate monitoring and timely implementation of appropriate treatment strategies.

Lastly, this study included aspects of weight bias and stigma. Both PwO and HCPs deemed that it is difficult to find a job and form a romantic relationship due to the stigma of obesity. Different societal and environmental stigmas, such as stereotyping, prejudice and discrimination, faced by PwO have a profound negative impact on their overall perception and attitude toward obesity.<sup>19</sup> Weight prejudice ensuing stigma is reported to be widespread globally, both in public and personal domains.<sup>20,21</sup> This weight stigma among HCPs might impact the relationship between PwO and HCPs, making PwO reluctant to participate in weight management in clinical settings.<sup>14</sup> The stigma associated with obesity can be mitigated through proper awareness among the general population and HCPs. The HCPs should be adequately trained and educated to use patient-first language and should be aware of the obesity-related stigma and bias typically experienced by patients. This will help strengthen the patient-HCP interaction and even the wider population, regarding obesity care.<sup>20,22,23</sup> Moreover, it is crucial to educate society about the obesity stigma to debunk the myths around obesity and encourage empathy towards PwO. A collaborative approach involving HCPs, PwO, their family members, dietitians, psychologists and key decision-makers in society will be essential to reduce the societal stigma associated with obesity.<sup>23</sup>

### Strengths and limitations of the study

This study is the first to focus on views and attitudes about obesity and its management in Asia. This study included a

relatively large cohort of PwO and HCPs, including both primary care providers and specialists from Vietnam. The survey also covered stigma and bias related to weight, which were not covered in earlier studies.

Although this study included a sizable percentage of respondents from urban regions, this may not accurately represent the opinions of all PwO and HCPs in Vietnam. Self-reported heights and weights may also underestimate BMI among included PwO. Moreover, using only BMI may undervalue excess adiposity and fail to represent the entire PwO cohort in this region correctly. Furthermore, participants of online surveys could differ from those who do not belong to survey research panels. Participants were blinded about the theme and the study goal to reduce bias before meeting the study's eligibility criteria. To mitigate selection bias, the data from PwO were adjusted based on age, gender, level of education, household income and region to align with each country's representative demographic targets.

## CONCLUSION

The current study highlighted the need to address knowledge gaps in obesity complications and treatments among PwO and HCPs in Vietnam. It emphasises the importance of national-level education on weight management for PwO and the general public, as well as specialised training for HCPs in obesity care. The findings suggested that improved education and training could reduce stigma, enhance patient-provider relationships and increase the effective use of interventions. Collaboration between governmental and non-governmental organisations is recommended to develop and implement comprehensive strategies for weight loss and obesity management on a large scale. Subsequent research is warranted to formulate and assess approaches to close these perception gaps and convert enhanced comprehension into more efficient obesity treatment strategies.

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### Statement of Authorship

All authors are certified in fulfillment of ICMJE authorship criteria.

### Authors Disclosure

Drs. Tran and Bich received honoraria as Advisory Board and speaker of Abbott, AstraZeneca, Bayer, Boehringer Ingelheim, Novo Nordisk, Roche and Sanofi. Dr. Nhuyet received honoraria as Advisory Board and speaker of Novo Nordisk and Abbott. Dr. Ahn received honoraria as Advisory Board and speaker of Medtronic, Braun and Novo Nordisk. Drs. Huu, Ba and Ha are employees of Novo Nordisk.

### CRediT Author Statement

**NQT:** Conceptualization, Software, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization, Supervision,



Project administration, Funding acquisition; **DNTB**: Validation, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization; **TNN**: Validation, Resources, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization; **TNA**: Validation, Resources, Writing – review and editing, Visualization, Project administration; **NLL**: Conceptualization, methodology Software, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization, Supervision, Project administration, Funding acquisition; **TDB**: Conceptualization, methodology Software, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization, Supervision, Project administration, Funding acquisition; **YSH**: Conceptualization, methodology Software, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing – original draft preparation, Writing – review and editing, Visualization, Supervision, Project administration, Funding acquisition.

### Data Availability Statement

Datasets generated and analysed are included in the published article.

### Funding Source

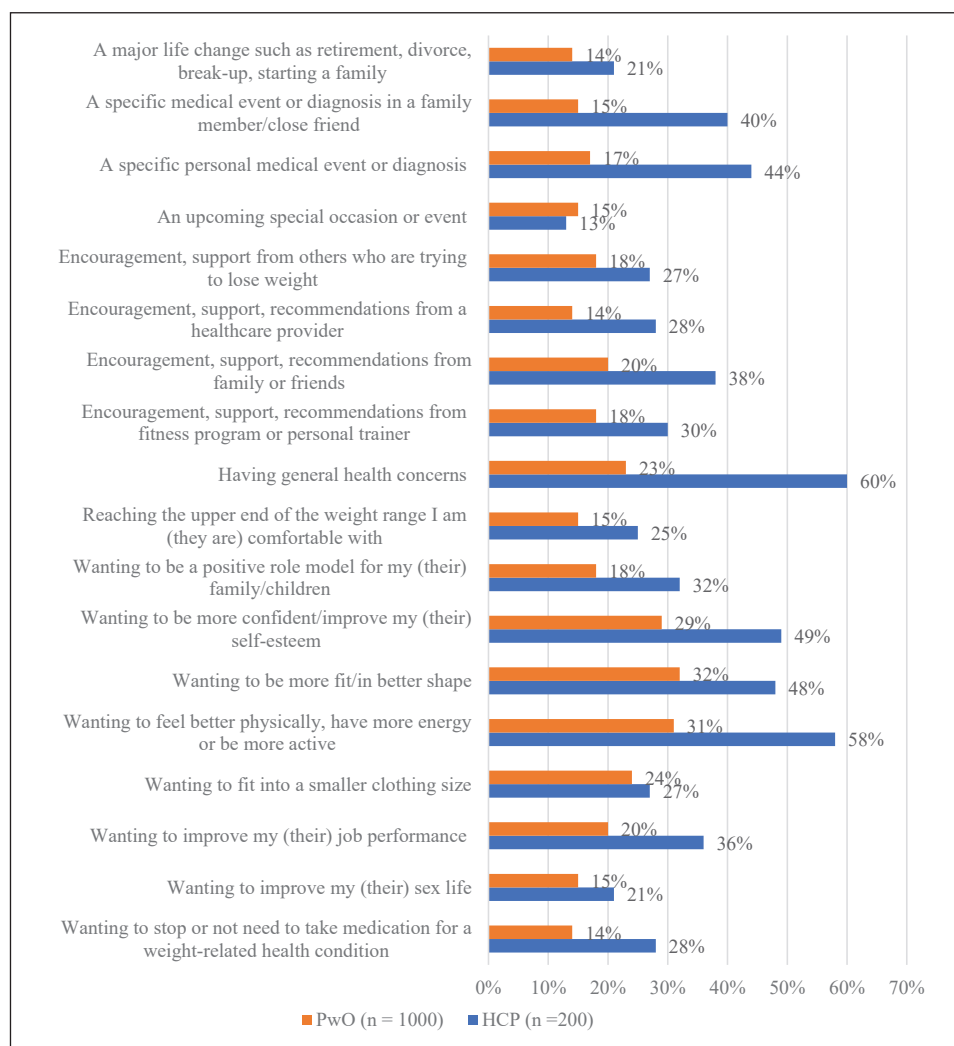
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### References

- Kim BY, Kang SM, Kang JH, et al. 2020 Korean Society for the Study of Obesity Guidelines for the management of obesity in Korea. *J Obes Metab Syndr*. 2021;30(2):81-92. PMID: 34045368 PMCID: PMC8277596 DOI: 10.7570/jomes21022
- Hughes CA, Ahern AL, Kasetty H, et al. Changing the narrative around obesity in the UK: A survey of people with obesity and healthcare professionals from the ACTION-IO study. *BMJ Open*. 2021;11(6):e045616. PMID: 34193488 PMCID: PMC8246368 DOI: 10.1136/bmjopen-2020-045616
- Tham KW, Abdul Ghani R, Cua SC, et al. Obesity in South and Southeast Asia-A new consensus on care and management. *Obes Rev*. 2023;24(2):e13520. PMID: 36453081 PMCID: PMC10078503 DOI: 10.1111/obr.13520
- Pham T, Bui L, Giovannucci E, et al. Prevalence of obesity and abdominal obesity and their association with metabolic-related conditions in Vietnamese adults: An analysis of Vietnam STEPS survey 2009 and 2015. *Lancet Reg Health West Pac*. 2023;39:100859. PMID: 37547595 PMCID: PMC10400857 DOI: 10.1016/j.lanwpc.2023.100859
- Tan PY, Som SV, Nguyen SD, et al. Demographic variation and socioeconomic inequalities in all forms of malnutrition among children aged 6 months to 9 years: Findings from the Vietnamese General Nutrition Survey 2020. *BMJ Public Health* 2025;3:e001177. DOI:10.1136/bmjph-2024-001177
- Minh H, Long K. Landscape analysis on childhood overweight and obesity: Vietnam: UNICEF; 2021. <https://www.unicef.org/eap/media/12176/file>
- Nguyen TT, Trevisan M. Vietnam a country in transition: Health challenges. *BMJ Nutr Prev Health*. 2020;3(1):60-6. PMID: 33235972 PMCID: PMC7664505 DOI: 10.1136/bmjnp-2020-000069
- Van Minh H, Khuong DQL, Tran TA, Do HP, Watson F, Lobstein T. Childhood overweight and obesity in Vietnam: A landscape analysis of the extent and risk factors. *Inquiry*. 2023;60:00469580231154651. DOI: 10.1177/00469580231154651
- National strategy for prevention and control of cancer, cardiovascular disease, diabetes, chronic obstructive pulmonary disease, asthma and other non-communicable diseases 2015–2025. Hanoi, Vietnam: Ministry of Health. Accessed on November 16, 2023. [https://www.iccp-portal.org/system/files/plans/VNM\\_B3\\_Quyet%20dinh%20TTg%20phe%20duyet%20chien%20luoc%20NCD.pdf](https://www.iccp-portal.org/system/files/plans/VNM_B3_Quyet%20dinh%20TTg%20phe%20duyet%20chien%20luoc%20NCD.pdf)
- Iwabu M, Yamauchi T, Shimomura I, Eguchi K, Ogawa Y. Perceptions, attitudes and barriers to obesity management: Japanese data from the ACTION-IO study. *J Obes Metab Syndr*. 2021;12(5):845-58. PMID: 33021048 PMCID: PMC8089010 DOI: 10.1111/jdi.13427
- Lim S, Oh B, Lee SH, Kim YH, Ha Y, Kang JH. Perceptions, attitudes, behaviors, and barriers to effective obesity care in South Korea: Results from the ACTION-IO study. *J Obes Metab Syndr*. 2020;29(2):133-42. PMID: 32507770 PMCID: PMC7338493 DOI: 10.7570/jomes20013
- Sharma AM, Bélanger A, Carson V, et al. Perceptions of barriers to effective obesity management in Canada: Results from the ACTION study. *Clin Obes*. 2019;9(5):e12329. PMID: 31294535 PMCID: PMC6771494 DOI: 10.1111/cob.12329
- Caterson ID, Alfadda AA, Auerbach P, et al. Gaps to bridge: Misalignment between perception, reality and actions in obesity. *Diabetes Obes Metab*. 2019;21(8):1914-24. PMID: 31032548 PMCID: PMC6767048 DOI: 10.1111/dom.13752
- Tham KW, Ahmed A, Boonyavarakul A, et al. ACTION APAC: Understanding perceptions, attitudes and behaviours in obesity and its management across South and Southeast Asia. *Clin Obes*. 2024; e12644. PMID: 38332544 DOI: 10.1111/cob.12644
- Lobstein T, Brinsden HMN. *World Obesity Atlas 2022*. London: Ludgate House; 2022. [https://www.worldobesityday.org/assets/downloads/World\\_Obesity\\_Atlas\\_2022\\_WEB.pdf](https://www.worldobesityday.org/assets/downloads/World_Obesity_Atlas_2022_WEB.pdf)
- Haam JH, Kim BT, Kim EM, et al. Diagnosis of obesity: 2022 update of Clinical Practice Guidelines for Obesity by the Korean Society for the Study of Obesity. *J Obes Metab Syndr*. 2023;32(2):121-9. PMID: 37386771 PMCID: PMC10327686 DOI: 10.7570/jomes23031
- Dicker D, Kornboim B, Bachrach R, Shehadeh N, Potesman-Yona S, Segal-Lieberman G. ACTION-IO as a platform to understand differences in perceptions, attitudes, and behaviors of people with obesity and physicians across countries - the Israeli experience. *Isr J Health Policy Res*. 2020;9(1):56. PMID: 33087177 PMCID: PMC7579877 DOI: 10.1186/s13584-020-00404-2
- Dhurandhar NV, Kyle T, Stevenin B, Tomaszewski K. Predictors of weight loss outcomes in obesity care: Results of the national ACTION study. *BMC Public Health*. 2019;19(1):1422. PMID: 31666040 PMCID: PMC6820914 DOI: 10.1186/s12889-019-7669-1
- Rubino F, Puhl RM, Cummings DE, et al. Joint international consensus statement for ending stigma of obesity. *Nat Med*. 2020;26(4):485-97. PMID: 32127716 PMCID: PMC7154011 DOI: 10.1038/s41591-020-0803-x
- Goff AJ, Lee Y, Tham KW. Weight bias and stigma in healthcare professionals: A narrative review with a Singapore lens. *Singapore Med J*. 2023;64(3):155-62. PMID: 36876621 PMCID: PMC10071861 DOI: 10.4103/singaporemedj.SMJ-2022-229
- Schmidt AM, Jubran M, Salivar EG, Brochu PM. Couples losing kinship: A systematic review of weight stigma in romantic relationships. *J Soc Issues*. 2022;79(1):196-231. DOI: 10.1111/josi.12542
- Capehorn MS, Hinchliffe N, Cook D, et al. Recommendations from a Working Group on Obesity Care Competencies for Healthcare Education in the UK: A report by the Steering Committee. *Adv Ther*. 2022;39(6):3019-30. PMID: 35451741 PMCID: PMC9027014 DOI: 10.1007/s12325-022-02108-2
- Westbury S, Oyebode O, van Rens T, Barber TM. Obesity stigma: Causes, consequences, and potential solutions. *Curr Obes Rep*. 2023;12(1):10-23. PMID: 36781624 PMCID: PMC9985585 DOI: 10.1007/s13679-023-00495-3

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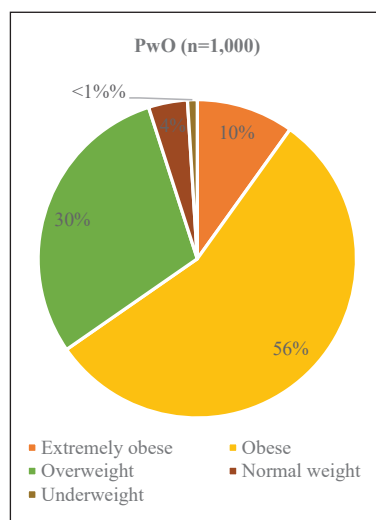
## SUPPLEMENTARY FIGURES



**Supplementary Figure 1.** Motivators of weight loss reported by PwO and HCPs.

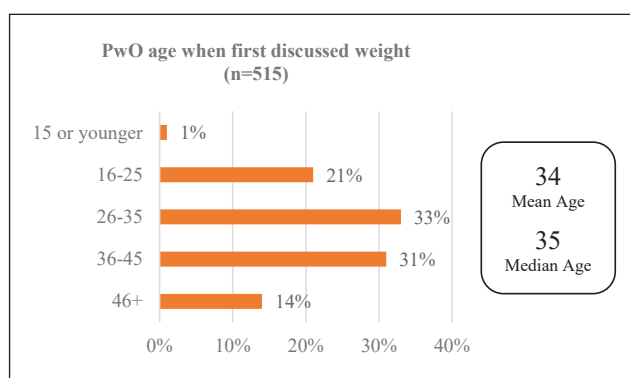
PwO and HCPs indicated their level of agreement (4 or 5) on a 5-point scale (1: Do not agree; 5: Completely agree)

HCPs, healthcare professionals; PwO, people with obesity



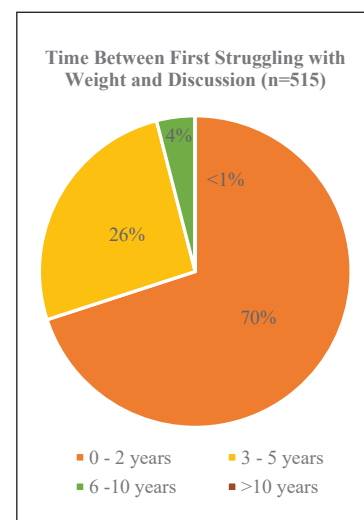
**Supplementary Figure 2.** PwO's perceptions of their weight.

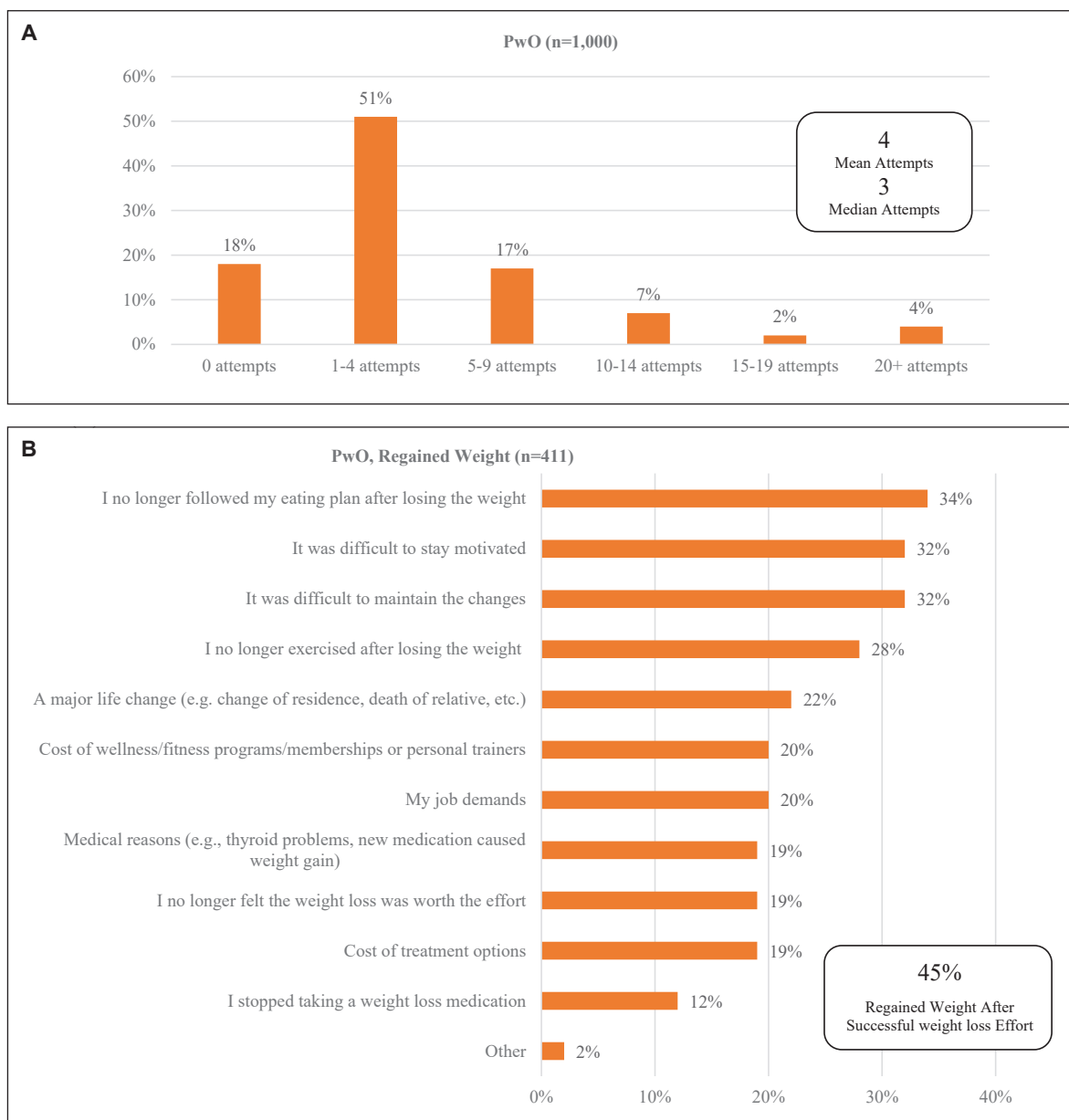
PwO, people with obesity



**Supplementary Figure 3.** Age at which PwO first struggled with weight and discussed their weight with their HCPs.

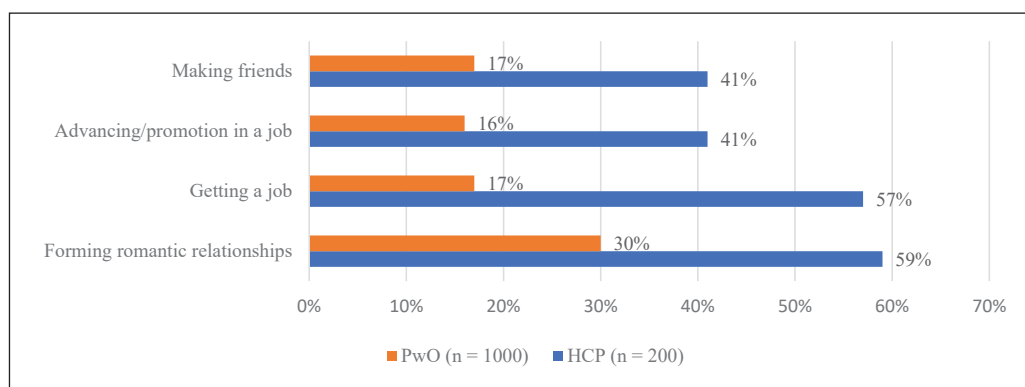
HCPs, healthcare professionals; PwO, people with obesity.





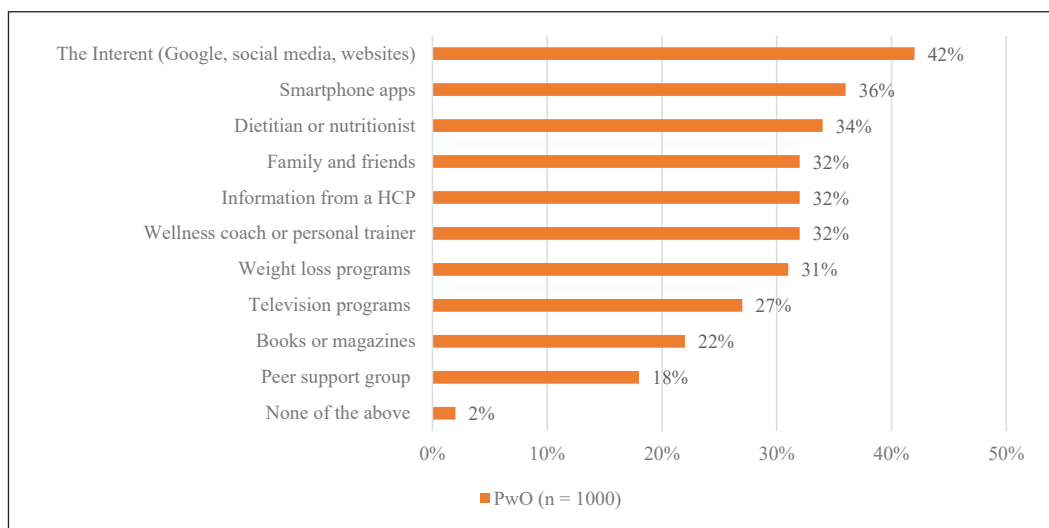
**Supplementary Figure 4.** Weight loss attempts and success rate. **(A)** PwO-reported weight loss attempts. **(B)** Reasons for weight regain, as reported by PwO.

PwO, people with obesity



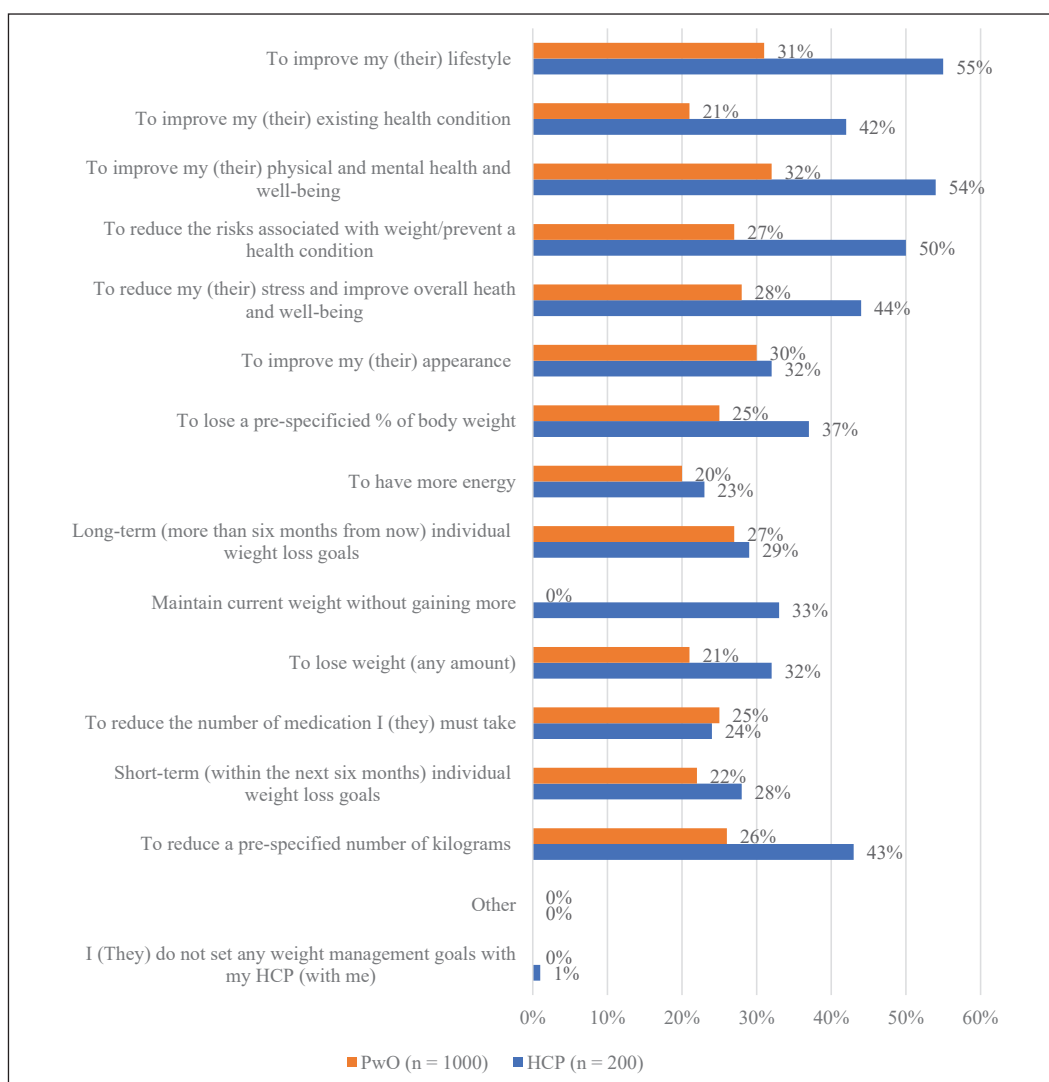
**Supplementary Figure 5.** PwO and HCP's perceptions of weight stigma and its effect in forming relationship and obtaining job.

HCP, healthcare professionals; PwO, people with obesity



**Supplementary Figure 6.** Sources of information used for managing weight.

HCP, healthcare professionals; PwO, people with obesity

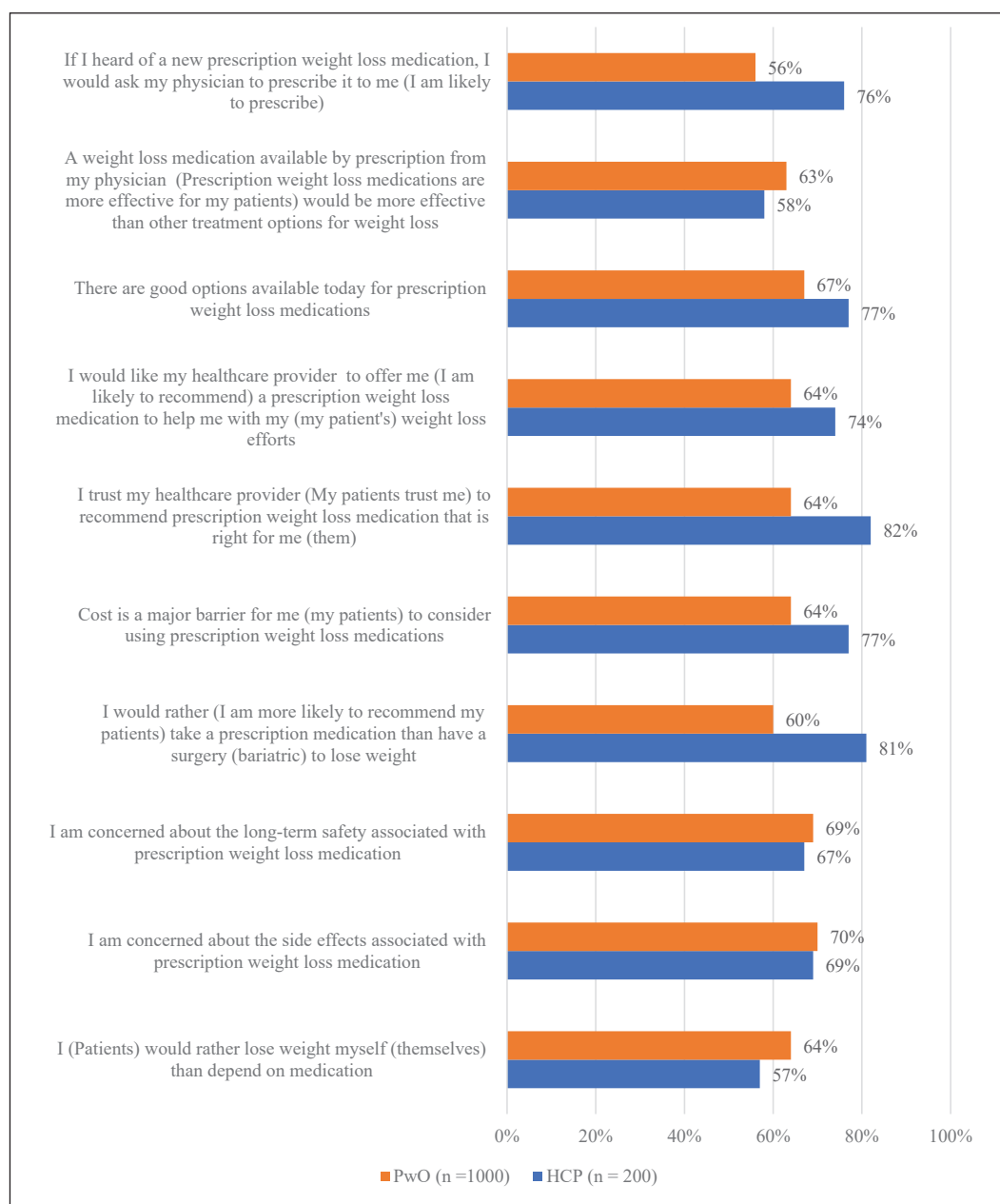


**Supplementary Figure 7.** Weight management goals reported by PwO and HCP.

PwO and HCPs indicated their level of agreement (4 or 5) on a 5-point scale (1: Do not agree; 5: Completely agree)

HCP, healthcare professionals; PwO, people with obesity





**Supplementary Figure 8.** Attitudes towards prescription weight loss medications.

HCP, healthcare professionals; PwO, people with obesity