

Perceptions of barriers to effective obesity management in Canada: results from the ACTION Study

- David A. Macklin**
University of Toronto, Toronto, ON, Canada
- Arya M. Sharma**
University of Alberta, Edmonton, AB, Canada
- André Bélanger**
Le Groupe de Médecine Familiale Valcartier, Courcelette, QC, Canada
- Veronica Carson**
Novo Nordisk Canada Inc, Mississauga, ON, Canada
- Jodi Krahn**
Canadian Obesity Network, Niagara Region, ON, Canada

- Marie-France Langlois**
Division of Endocrinology, University of Sherbrooke, Sherbrooke, QC, Canada
- Diana Lawlor**
Obesity and Bariatric Surgery, Halifax, NS, Canada
- Suzanne Lepage**
Private Health Plan Strategist, Kitchener, ON, Canada
- Aiden Liu**
Novo Nordisk Canada Inc, Mississauga, ON, Canada
- Noel MacKay**
Cowan Insurance Group, Brantford, ON, Canada
- Arash Pakseresht**
Novo Nordisk Canada Inc, Mississauga, ON, Canada
- Sue D. Pedersen**
C-ENDO Diabetes & Endocrinology Clinic, Calgary, AB, Canada
- Ximena Ramos Salas**
Canadian Obesity Network, Edmonton, AB, Canada
- Michael Vallis**
Dalhousie University, Halifax, NS, Canada

Background and aims

- Obesity is a chronic disease that is often neither recognized nor optimally managed in clinical practice.¹⁻¹⁰
- Given the significant and growing impact of obesity in Canada and abroad,^{1,10-12} it is critical that any misperceptions and potential barriers to optimal obesity management are well understood. Such knowledge will facilitate novel interventions to overcome attitudinal and behavioural barriers to effective medical management.
- The 'Awareness, Care, and Treatment In Obesity MaNagement' (ACTION) study investigated perceptions, attitudes and barriers to weight management in people with obesity (PwO), healthcare providers (HCPs) and employers in Canada.

Methods

- Adult PwO (body mass index ≥ 30 kg/m², based on self-reported height/weight), HCPs (physicians and allied healthcare providers caring for PwO) and employers (≥ 20 employees; offering health insurance) completed online surveys between August 3 and October 11, 2017.
- PwO data were Random Iterative Method (RIM) weighted (balanced), for a distribution that reflected national demographics.
- The range of questions included in the survey is shown in **Box 1**.
- Respondents who completed the surveys were stratified into subgroups.

Box 1. Health-related questions included in the survey

- Impact of obesity on health and quality-of-life
- Difficulty of losing weight and maintaining weight loss
- Motivation to address obesity
- Perception of obesity as a medical issue
- Perceptions of existing support for PwO in losing weight
- Approaches to obesity management
- Perception of the role of diet and exercise in weight loss
- Occurrence of discussion about weight management between PwO and HCPs
- Perception of the effectiveness of workplace wellness programs

Results

- Survey respondents totalled 2,545.
- Demographics and characteristics are summarized in **Table 1**.

Table 1 Subject demographics and baseline characteristics.

	PwO (n=2,000)	HCPs (n=395)	Employers (n=150)
Mean age, years	50	n/a	39
Sex, %			
Male	53	59	45
Female	47	41	55
Regional distribution, %			
West	31	29	33
Ontario	39	51	40
Quebec	21	13	22
Rest of Canada	9	6	5
Ethnicity, %			
White (Caucasian)	90	-	-
First Nations or Indigenous to Canada	4	-	-
Black	3	-	-
Chinese	2	-	-
Other	5	-	-
Obesity class, %*			
Class I	55	-	-
Class II	25	-	-
Class III	20	-	-
Occupation, %			
Physician (M.D.)	-	87	-
Dietitian (R.D., P. Dt)	-	7	-
Registered Nurse (R.N.)	-	5	-
Nurse Practitioner (N.P.)	-	1	-
Specialty, %			
Family Practice	-	54	-
General Practice	-	17	-
Endocrinology	-	10	-
Internal Medicine	-	6	-
Bariatrics/Obesity Medicine	-	5	-
Cardiology	-	4	-
Gastroenterology	-	2	-
Bariatric Surgery	-	1	-
Obstetrics and Gynecology	-	1	-
Sector, %			
Private	-	-	61
Public	-	-	36
Non-profit	-	-	3
Full-time employees with health services benefits, %	-	-	85
Average cost per employee to provide health benefits in the most recent fiscal year, %†			
< \$Can1,000	-	-	12
\$Can1,001-1,500	-	-	10
\$Can1,501-2,000	-	-	24
\$Can2,001-2,500	-	-	23
\$Can2,501-3,000	-	-	15
> \$Can3,000	-	-	10
Don't know	-	-	6

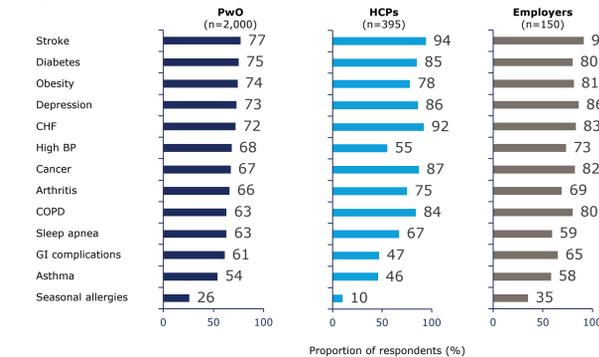
*Obesity classes were defined as having a self-reported body mass index 30-34.9, 35-39.9 and 40+ kg/m² for class I, II and III, respectively. †Responses were collected from employers with knowledge of their healthcare structure (total employers, n=144; small/medium, n=64; large, n=80). HCP, healthcare professional; n/a, not available; PwO, people with obesity.

Perception of obesity among PwO, HCPs & employers

- Most PwO (60%), HCPs (94%) and employers (71%) considered obesity a chronic medical condition.
- Respondents were asked: "Please indicate your agreement with the following statements regarding obesity and weight management: obesity is a chronic medical condition." (PwO and HCPs); and "Please indicate your agreement with the following statements: obesity is a chronic medical condition" (employers).

- A majority of PwO, HCPs and employers believed that obesity had a high or extreme impact on overall health (**Figure 1**).
- A high proportion (74%) of PwO believed that obesity had a high or extreme impact on overall health; the proportion was similar to that for stroke and diabetes (**Figure 1**).
- More PwO believed that obesity had a high or extreme impact on overall health than believed that cancer did (**Figure 1**).

Figure 1. Proportion of respondents believing that a given medical condition has a high/extreme impact on overall health.

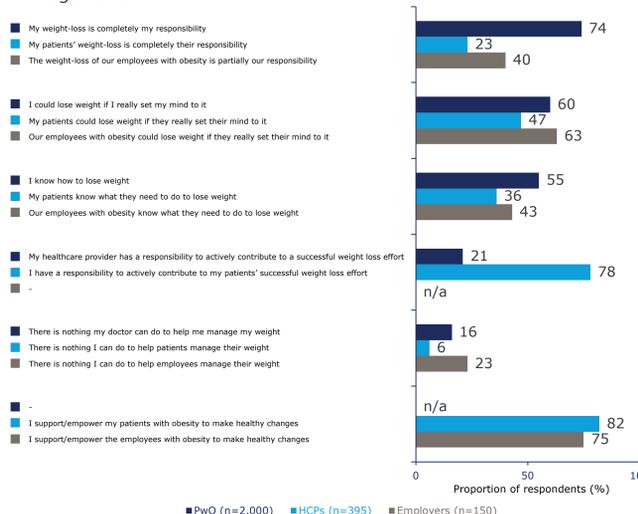


On a Likert scale of 1-5 where 5 represents an extreme impact, PwO, HCPs and employers were asked: "In general, how large of an impact do you believe the following health conditions have on a person's overall health?". BP, blood pressure; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disorder; GI, gastrointestinal; HCP, healthcare professional; PwO, people with obesity.

Attitudes towards weight management

- Most PwO believed that weight management was their responsibility (**Figure 2**).
- Despite most PwO considering obesity a chronic medical condition (>60%), few (21%) thought it was the responsibility of HCPs to help (**Figure 2**).
- In contrast, most HCPs (78%, **Figure 2**), and almost half of employers (44%), believed they had a responsibility to help PwO to manage weight.

Figure 2. Affirmative responses to statements regarding attitudes on weight management.



On a Likert scale of 1-5, where 5 indicates "completely agree", respondents were asked: "Please indicate how much you agree with each of the following..." (PwO); "Thinking of your patients in need of weight management as a whole, please indicate how much you agree with each of the following..." (HCP); "Please indicate how much you agree with each of the following..." (Employer). HCP, healthcare professional; n/a, not available; PwO, people with obesity.

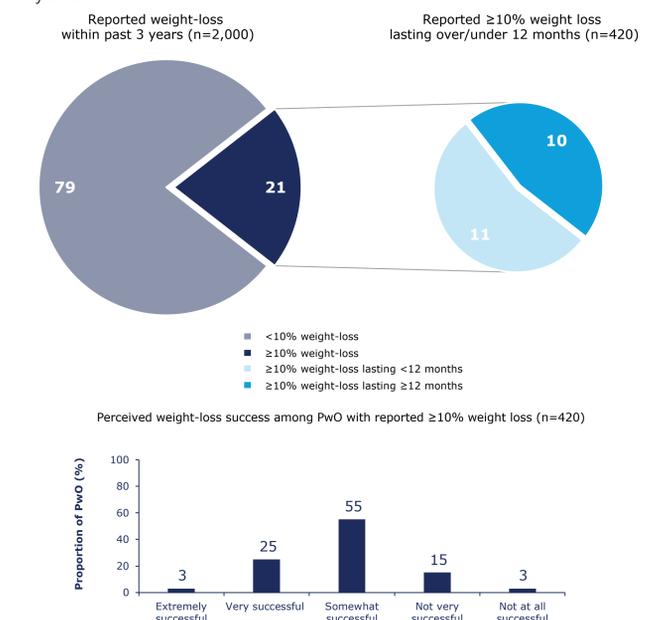
Approaches towards long-term weight management

- While many PwO (55%) reportedly knew how to manage their weight, only one in ten reported maintaining $\geq 10\%$ weight reduction for >1 year (**Figure 3**).
- Despite low success rates for weight maintenance, the most commonly reported effective long-term weight-loss methods tried/recommended by PwO/HCPs were 'improvements in eating habits' and 'being more active' (**Figure 4**).
- Less than half of HCPs said they recommended consulting a nutritionist/dietitian (34%) or bariatric surgeon (43%) and found it effective for long-term weight management; $\leq 6\%$ of PwO had tried these approaches and shared these beliefs (**Figure 4**).
- Few HCPs and very few PwO who had recommended or tried pharmacotherapy had found it effective for long-term weight management (**Figure 4**).
- Almost all (95%) of employers believed that wellness programs help with weight management versus 47% of PwO did.

Barriers to weight management

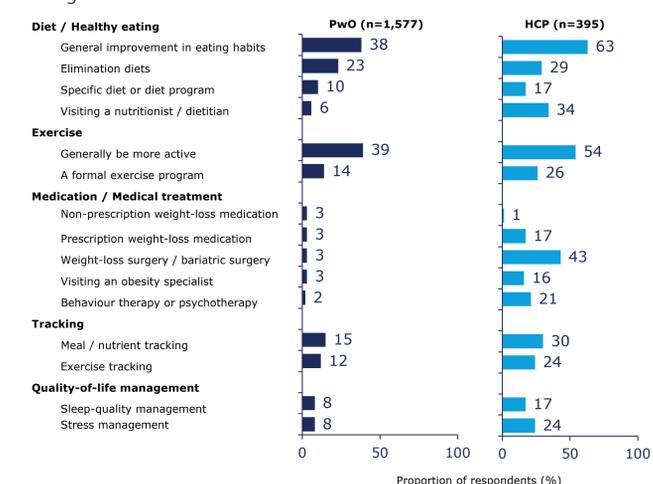
- Perceived barriers to weight management included:
 - Delayed discussion regarding weight issues between PwO and HCPs/employers.
 - Median age of PwO at the start of their struggle with excess weight: 28 years; median age of PwO when excess weight was first discussed with their HCPs: 39 years.
 - A need for more HCP education on obesity management.
 - Of a selection of education or training programs related to obesity and weight management, 58% of HCPs found "CME courses/education in the physiology of obesity and weight management" the most useful.
 - Limited understanding of the interest/motivations of PwO for weight management among HCPs (data not shown).
 - HCPs believed that PwO lacked motivation for losing weight, whereas PwO themselves responded otherwise.
 - PwO and HCPs reported very different perceptions of the quality and content of their interaction during obesity management discussions.
- Only 6% of HCPs believed current medical guidelines were effective for obesity management.

Figure 3. Proportion of PwO reporting weight loss success within the past 3 years.



Percent weight loss was calculated on the basis of PwO inputs of "What is the most you have weighed in the past 3 years?" and "What is your current weight?". If PwO indicated that their current weight was less than their maximum weight within the past 3 years, they were asked "For how long would you say you've been able to maintain your weight loss?" and "How successful do you feel you have been in losing weight?". PwO, people with obesity.

Figure 4. Proportion of respondents who believed that a given weight management method was effective.



PwO were asked: "Which of the following methods for managing your weight have you tried and found to be effective for long-term weight management? Please select all that apply"; HCPs were asked: "Thinking of the methods for weight management that you recommend, which of the following have you found to be most effective for long-term weight management? Please select all that apply". 1.8% of PwO and 6% of HCPs selected 'other'. HCP, healthcare professional; PwO, people with obesity.

References

- Canadian Medical Association. CMA recognizes obesity as a disease. 2015. Available from: <https://www.cma.ca/En/Pages/cma-recognizes-obesity-as-a-disease.aspx>. Accessed February 28, 2018.
- Janke EA et al. *Prim Health Care Res Dev* 2016;17(1):33-41.
- Greener J et al. *Soc Sci Med* 2010;70(7):1042-9.
- Kirk SF et al. *Qual Health Res* 2014;24(6):790-800.
- Sinclair J et al. *Can Fam Physician* 2008;54(3):404-12.
- Brauer PM et al. *Can J Diet Pract Res* 2012;73(3):122-7.
- Rueda-Clausen CF et al. *Clin Obes* 2014;4(1):39-44.
- Jay M et al. *BMC Health Serv Res* 2009;9(1):106.
- Fitzpatrick SL et al. *Am J Med* 2016;129(1):115.e1-7.
- Thomas SL et al. *Health Expect* 2008;11(4):321-30.
- Moyer VA et al. *Ann Intern Med* 2012;157(5):373-8.
- Kaplan LM et al. *Obesity (Silver Spring)* 2018;26(1):61-9.

Conclusions

- All groups acknowledged obesity as a chronic medical condition with significant impact on overall health.
- Despite most PwO considering obesity a chronic medical condition, many perceived it as their own responsibility and did not believe that the HCP's role is to help them.
- This disconnect between the perception that obesity is a significant medical condition and the belief of PwO that it is their responsibility to manage their own disease requires further research to understand how PwO conceptualize obesity as a medical condition.
- In contrast, HCPs and employers felt that they had a role to play in their patients'/employees' weight-loss success.
- Many PwO/HCPs had tried/recommended an eat-less-move-more approach and reported it to be effective for long-term weight management, but only one in ten PwO reported successful maintenance of weight loss.
- Findings from the ACTION Study in Canada highlight the communication gaps and misunderstanding between PwO and their HCPs and employers.



qrs.ly/pq6vlu3
Scan for more
Novo Nordisk
scientific materials