









Reducing Weight Bias in Obesity Management, Practice and Policy

Heary Cⁱ, Ryan Lⁱⁱ, Birney Sⁱⁱⁱ, Arthurs N^{iv}, O'Connell J^v. Chapter adapted from: Kirk SFL, Ramos Salas X, Alberga A, Russell-Mayhew S. Canadian Adult Obesity Clinical Practice Guidelines: Reducing Weight Bias in Obesity Management, Practice and Policy (version 1, 2020). Available from: https://obesitycanada.ca/guidelines/weightbias ©2020 Obesity Canada

- i) Senior Lecturer in Psychology, University of Galway
- ii) PhD Candidate, School of Psychology, University of Galway
- iii) Patient Representative ASOI / Executive Director ICPO, Dublin
- Registered Dietitian / Obesity Research and Care Group, School of Physiotherapy,
 Royal College of Surgeons in Ireland University of Medicine and Health Sciences, Dublin / ASOI
- v) Consultant Endocrinologist, Level 3 and 4 Obesity Services, St Columcille's and St Vincent's University Hospitals, Dublin / ASOI

Cite this Chapter

ASOI Adult Obesity Clinical Practice Guideline adaptation (ASOI version 1, 2022) by: Heary C, Ryan L, Birney S, Arthurs N, O'Connell J. Chapter adapted from: Kirk SFL, Ramos Salas X, Alberga A, Russell-Mayhew S. Available from:

https://asoi.info/guidelines/weightbias Accessed [date].

KEY MESSAGES FOR HEALTHCARE POLICY MAKERS



- Policy makers developing obesity policies should assess and reflect on their own attitudes and beliefs related to obesity¹.
- Public health policy makers should avoid using stigmatising language and images. It is well established that shaming does not change behaviours. In fact, shaming can increase the likelihood of individuals pursuing unhealthy behaviours and has no place in an evidencebased approach to obesity management^{2, 3}.
- Avoid making assumptions in population health policies that healthy behaviours will or should result in weight change. Weight is not a behaviour and should not be a target for behaviour change. Avoid evaluating healthy eating and physical activity policies, programmes,

and campaigns in terms of population-level weight or body mass index outcomes. Instead, emphasise health and quality of life for people of all sizes. As weight bias contributes to health and social inequalities, advocate for and support people living with obesity. This includes supporting policy action to prevent weight bias and weight-based discrimination²⁻⁸.

Policy makers should know that most people living
with obesity have experienced weight bias or some
form of weight-based discrimination. Public health
policy makers should consider weight bias and obesity
stigma as added burdens on population health outcomes
and develop interventions to address them. To avoid
compounding the problem, we encourage policy makers to
do no harm, to develop people-centred policies that move
beyond personal responsibility, recognise the complexity of
obesity, and promote health, dignity and respect, regardless
of body weight or shape.

KEY MESSAGES FOR HEALTHCARE PROFESSIONALS



- Weight stigma amongst healthcare professionals (HCPs) can lead to non-supportive, judgemental encounters with individuals affected by obesity and this may discourage these individuals from seeking help, and the care that they are entitled to and require.
- Weight stigma in healthcare can result in delayed diagnosis, the development and increased severity of obesity complications, reduced treatment efficacy and reduced quality of life for individuals with obesity.
- HCPs should ensure their clinical environment is accessible, safe and respectful for all patients
- regardless of their weight or size. They should make efforts to improve health and quality of life rather than solely focusing on weight loss. HCPs should ask permission before weighing someone, and never weigh people in front of others. Weighing scales should be placed in private areas. HCPs should consider how their office physical space accommodates people of all sizes and ensure they have properly sized equipment (e.g., blood pressure cuffs, gowns, chairs, beds) ready in clinical rooms prior to patients arriving.
- Weight bias impacts morbidity and mortality. It follows that advocacy and support for people living with obesity is a part of the HCP duty of care. This includes action to create supportive healthcare environments and policies for people of all sizes⁸.

RECOMMENDATIONS



- 1. Healthcare professionals (HCPs) should assess their own attitudes and beliefs regarding obesity and consider how their attitudes and beliefs may influence care delivery (Level 1a, Grade A)¹.
- 2. HCPs should recognise that internalised weight bias (bias towards oneself) in people living with obesity can affect behavioural and health outcomes (Level 2a, Grade B)⁹⁻¹².
- 3. HCPs should avoid using judgemental words (Level 1a, Grade A)², images (Level 2b, Grade B)² and practices (Level 2a, Grade B)¹³ when working with patients living with obesity.

- 4. We recommend that HCPs avoid making assumptions that an ailment or complaint a patient presents with is related to their body weight (Level 3, Grade C)^{13,14}.
- 5. We recommend that all professional health disciplines include training on weight bias, stigma, and discrimination in their curricula (Level 4, Grade D, consensus).
- 6. We recommend that formal teaching on the uncontrollable and non-modifiable causes of obesity, and the management of obesity as a chronic disease, should be incorporated into training programmes for healthcare professionals (adapted from Primary Care recommendations, Level 1, Grade A).

KEY MESSAGES FOR PEOPLE LIVING WITH OBESITY



- Weight bias affects the quality of healthcare for individuals with obesity. For example, weight bias may negatively affect healthcare professionals' (HCPs) attitudes and behaviours towards individuals living with obesity^{8,13}.
- Experience of weight bias harms your health and wellbeing. Experiencing unequal treatment because of your size or weight, for example, is not acceptable. Talk to your healthcare professional about your experiences with weight bias. By sharing these experiences, you can support action to stop weight-based discrimination¹⁵⁻¹⁷. Talking to your HCP about your experiences with weight bias will help stop weight-based discrimination directed towards you, and others. The Irish Coalition for People living with

Obesity (ICPO) have template letters that patients can use to send to HCPs explaining how experiencing weight bias has made them feel. They can be contacted at icpobesity.org for further details¹⁵⁻¹⁷.

- Talk to your HCP about addressing internalised weight bias. Bias can unconsciously impact your choices and your health. Self-stigma and self-blame can be addressed through behavioural interventions, consistent with the principles of cognitive therapy and acceptance and commitment therapy^{9,18-22} (see Chapter 10 Effective Psychological and Behavioural Interventions in Obesity Management chapter for more information on these therapies).
- Try focusing on improving healthy habits and quality of life rather than weight loss. Weight is not a behaviour and should not be a target for behaviour change^{23, 24}.

Introduction

People living with obesity frequently experience weight bias, stigma and discrimination. This chapter provides an overview of these constructs and illustrates how they influence obesity development, diagnosis, management, and prevention, by drawing on the best available evidence and the experience of those living with obesity.

The Model of Care for the Management of Overweight and Obesity in Ireland (launched in 2021)²⁵ recognises that weight stigma can have a profound effect on how care is delivered and experienced. A key principle for the National Clinical Programme for Obesity is that weight-based stigma and obesity discrimination will not be tolerated in the Irish healthcare system. The aim is that the management of overweight and obesity will be underpinned by respectful, non-judgemental, and non-stigmatising care.

While we recognise that there is a relative paucity of high-quality evidence on weight bias, stigma and discrimination in this area, the patients and clinicians working on these guidelines feel it is important to highlight this issue. For questions related to lived experience of obesity and of clinical care, qualitative methods are the appropriate research approach. Quantitative research can be useful for examining issues such as the prevalence of weight bias, the factors associated with weight bias and the outcomes associated with interventions designed to address weight bias. It is our hope that work in this area will continue, and richer information will be available for future guidelines.

To support standard practice within chronic disease management, we use people-first language throughout this chapter. For more information, refer to https://eurobesity.org/peoplefirst/people-first-2/and https://cdn.easo.org/wp-content/uploads/2020/07/31073423/Obesity-Language-Matters-_FINAL.pdf.

Given the limited evidence in the published literature, this chapter includes recommendations where sufficient evidence is available, alongside key messages for healthcare professionals (HCPs), policy makers and patients where evidence is limited.

What do we mean by the terms weight bias, stigma, and discrimination?

The terms weight bias, stigma and discrimination are often used interchangeably, but more accurately reflect a continuum, with weight bias describing the negative weight-related attitudes, beliefs, assumptions, and judgements in society that are held about people living in large bodies. Weight bias can be expressed in explicit, implicit, and internalised forms. Explicit weight bias is defined as having overtly negative attitudes towards people with obesity. Examples of explicit weight bias include assumptions that people living with obesity are lazy, unmotivated, lacking self-discipline or willpower and non-compliant with medical treatment. Implicit weight bias is having unconscious negative attitudes towards people in large bodies. That is, implicit weight-biased attitudes are not acknowledged by those holding them but can nevertheless shape the way that people view and treat individuals

living with obesity.

Internalised weight bias, or self-directed bias, is the extent to which individuals living with obesity endorse negative weightbiased beliefs about themselves. Internalised weight bias is already prevalent within the general population (44%) and individuals living with obesity are more likely to endorse such beliefs (52%)²⁶. People who have high weight-bias internalisation tend to believe that they deserve the negative attitudes or negative treatment they receive. This is exemplified by strongly supporting statements such as, "I am less attractive than most other people because of my weight", or "I feel anxious about being overweight because of what people might think of me". Few studies have explored the relationship between obesity management and weight bias. In recent years, research has shown strong associations between internalised weight bias and mental health outcomes²⁷⁻³⁰. Internalised weight bias has been shown to have a negative impact on outcomes that have conventionally been associated with the management of obesity. For example, weight-bias internalisation has been associated with exercise avoidance and binge eating^{11,20,31-41}.

Weight or obesity¹ stigma (we use the term "weight stigma" here, but the term "obesity stigma" is also often used in the literature) represents the manifestation of weight bias through harmful social stereotypes that are associated with people living with obesity. An example of weight or obesity stigma in the healthcare system is if HCPs believe that individuals with obesity are non-compliant with medical advice or treatment, and hence assume that obesitymanagement strategies will not work. The existence of weight bias and stigma can, in turn, lead to weight discrimination, which is the unjust treatment of individuals because of their weight⁴². Examples of unjust and inequitable treatment include but are not limited to HCPs spending less time, having more insensitive or rushed communications or establishing less emotional rapport with patients living with obesity. In extreme cases, weight-based discrimination can lead to patients being denied treatment or avoiding seeking help from the healthcare system⁴³⁻⁴⁷.

How prevalent are weight bias, stigma, and discrimination?

Weight bias and stigma are pervasive internationally. Approximately 40% of adults report a history of experiencing some form of weight bias or stigma⁴. Weight bias has been documented among parents and families⁴⁸, pre-adolescents and adolescent peers⁴⁹, teachers⁵⁰, employers and human resource professionals⁵¹, HCPs⁴⁹ and even among individuals with obesity themselves⁵².

The body of work that has been conducted in Ireland is relatively small. However, qualitative research conducted on the experience of adults living with obesity has revealed the experience of weight bias and stigma across both primary and secondary healthcare contexts in Ireland⁵³. A fear of being labelled and a perception of stigma has also been reported to affect parents' decisions to take part in a community-based childhood weight-management programme⁵⁴. Further work in an Irish context includes an empirical analysis of

social media posts on an Irish message board which highlighted the pervasive nature of weight stigma⁵⁵.

Internationally, weight bias is prevalent among the general population, and has been found to be significantly greater than two other targets of bias that are common in modern society: homosexuality and Muslim faith⁵⁶. There is extensive literature documenting weight bias and stigma across a range of HCPs, including physicians, nurses, dietitians, physiotherapists, psychologists and healthcare trainees^{38,57}. Weight bias has also been investigated among pre-service health promotion students⁵⁸. Little research has explored weight stigma amongst HCPs in an Irish context, with the exception of work by O'Donoghue et al. on physiotherapy students in Ireland⁵⁹.

Weight discrimination manifests across multiple settings as noted above, the consequences of which are far reaching, as explained in the following section. Based on international literature, weight/height discrimination has been found to have significantly increased between 1995–1996 and 2004–2006, from 7% to 12%⁴. The prevalence of weight discrimination has increased by 66% over the past decade, and is comparable to rates of racial discrimination, especially amongst women^{4,7}. The prevalence of perceived weight discrimination across life domains, such as employment, schools, healthcare and interpersonal relationships, ranges from 19% among individuals with body mass indexes (BMIs) between 30–35 kg/m², to 42% among individuals with BMIs > 35 kg/m² ⁶⁰.

What are the consequences of weight bias, stigma and discrimination?

There is a school of thought, including among some clinicians, that stigmatising people with excess weight, adopting a blunt approach, and using more direct language, is required to encourage people to lose weight. Scientific evidence does not support this view. Weight stigma, by definition, is a negative emotional experience, and research demonstrates a broad range of adverse biochemical, psychological, and behavioural consequences. Recent evidence indicates that weight stigma contributes to weight gain and weight regain⁶¹. One proposed model describes a vicious cycle, where weight stigma begets further weight gain through maladaptive coping strategies, such as increased eating, avoidance of physical activity and other biobehavioural mechanisms⁶².

Weight-bias internalisation (WBI) is particularly damaging to health. A systematic review of 74 studies showed strong negative relationships between WBI and mental health outcomes²⁷. There has been less research and inconsistent findings in the areas of WBI and physical health, but the same systematic review identified studies showing significant negative associations between WBI and higher weight, reduced motivation to engage in physical activity, cardiometabolic risk factors, eating behaviours and other health behaviours.

The following sections will describe how weight bias, stigma and discrimination can affect a person's mental and physical health, lead

to avoidance of preventive healthcare, hinder obesity management efforts and increase overall morbidity and mortality.

Mental health consequences

It is well established that being a target for weight bias, stigma and discrimination is associated with negative mental health outcomes. Individuals living with obesity may face negative mental health impacts because of their weight status, across multiple levels of their environment, including individual, interpersonal, community and healthcare environments⁶³.

Global measures of mental health indicate that experiences of weight bias are associated with psychological distress in both treatment-seeking and community samples⁶⁴. Psychosocial correlates of weight bias include anxiety, perceived stress, medication non-adherence, antisocial behaviour, substance use and maladaptive coping strategies⁶⁴. Weight bias is also associated with greater body image disturbance, including body dissatisfaction and shame⁶⁵. In treatment-seeking adults with obesity, more internalised weight bias was associated with a stronger negative impact on body image⁶⁵.

Depression is associated with weight gain, and individuals with obesity are at greater risk of depression, particularly those with BMI > 35 kg/m² ⁶⁶. Emerging evidence suggests that perceived weight discrimination may be an explanation for this relationship, with particular evidence for middle-aged and older adults^{60,66,67}. In a treatment-seeking sample of 255 individuals with binge eating disorder, weight-bias internalisation was associated with poorer overall mental health scores, and depressive symptoms mediated this relationship²⁰.

There is some evidence that internalised weight bias mediates the relationship between weight or obesity stigma experiences and negative psychological outcomes⁶⁴. Weight-bias internalisation may be associated with even poorer mental health outcomes than the perceived experience of weight bias⁹. In other words, believing oneself to be deserving of weight or obesity stigma may lead to worse psychological outcomes than the actual stigmatising encounter itself⁹.

Experiences of stigma significantly and independently predict psychological concerns in obesity- treatment-seeking individuals after controlling for BMI. Stigmatising experiences, not only body weight, contribute to adverse mental health consequences in people living with obesity. A nationally representative study of US adults, demonstrated that individuals who perceived they had experienced weight stigma were almost 2.5 times more likely to experience mood or anxiety disorders than those who did not, even when accounting for standard risk factors for mental illness and measured BMI⁶⁸.

Stigma and discrimination are also seen as chronic stress conditions attributed to the additional stress that individuals from stigmatised groups are exposed to daily as a result of their position in society⁶. Chronic stress has a significant impact on mental health and

discrimination-specific stressors should be considered in intervention approaches⁶⁹.

Physical health consequences

Like other forms of discrimination, including racism, weight discrimination is associated with increased risk for morbidity⁷⁰.

There are physiological mechanisms that may contribute to this increased risk to physical health, such as increased chronic stress, which can increase cortisol levels, and oxidative stress independent of adiposity level^{16,71}. A study of treatment-seeking individuals with obesity found that WBI was associated with higher risk of meeting criteria for metabolic syndrome⁷². A systematic review of 33 studies found that weight stigma was positively associated with obesity, diabetes risk, cortisol level, oxidative stress level, C-reactive protein level, eating disturbances, depression, anxiety and body image dissatisfaction⁷³.

Eating is a common comfort-seeking behavioural response to stress, and in this context weight stigma is the stressor. Studies have demonstrated increased eating, decreased self-regulation and avoidance of exercise in participants experiencing weight stigma^{61,74}. Adults who internalise weight bias are more likely to have symptoms of disordered eating, such as binge eating²⁷. An Irish study of the lived experience of people with obesity identified commonly reported escalation of unhealthy behaviours following stigmatisation by a HCP⁵³. Rather than motivating individuals to lose weight, weight discrimination is associated with increased risk for obesity¹⁵.

One longitudinal study has also shown that perceiving weight discrimination is associated with a 60% increase in mortality risk⁷⁵. Indeed, the effect of weight-based discrimination was comparable to other established risk factors, such as smoking history and disease burden. It is not clear how weight discrimination contributes to mortality. Some theories link experiences of weight discrimination to behavioural risk factors, such as sedentary lifestyles and increased food consumption as coping mechanisms⁷⁵.

Distress over obesity is heightened when people perceive themselves to have poorer health because of obesity-related conditions, such as chronic pain, osteoarthritis and cardiovascular disease⁷⁶.

Population and public health consequences

Weight bias is reportedly pervasive across society, in educational settings, in the workplace, interpersonal relationships and, most poignantly, in healthcare settings^{8,75,77-81}. A fundamental driver of weight bias is a lack of public understanding of the complex interplay of factors that contribute to obesity. When the science about the complexity of obesity is not communicated to the public, it can lead to an oversimplification of obesity and negatively influence cultural beliefs that moralise obesity as a personal failure^{82,83}. For example, public health strategies that focus on obesity as an issue of unhealthy lifestyle choices, and ignore the biological, genetic,

environmental, and societal contributors of obesity, can contribute to a lack of public understanding of the disease. This lack of understanding, in turn, can lead to people experiencing weight bias and stigma.

This can lead to inaccurate social narratives that obesity is a self-inflicted choice which places the burden of responsibility on the person living with obesity. A recent Irish study exploring patient beliefs regarding obesity as a disease found that despite recognition of the complex interplay of factors that influence obesity, both patients and practitioners determined lifestyle factors as being the most beneficial approach to treatment. Patients believed that willpower was the discriminating factor in treatment efficacy and that the patient, and not their HCP, were responsible for health outcomes. This demonstrated a clear discrepancy in acknowledging the disease status of obesity but not treating it as a disease — a deleterious trajectory that presents a potential barrier to both the prescription and uptake of more effective treatments to improve health outcomes⁸²⁻⁸⁴.

To reduce the stigmatisation of obesity, public health research has identified a need to:

- Change the public health obesity narrative to align with and reflect contemporary scientific and medical understanding of obesity as a chronic disease; and
- Develop comprehensive obesity strategies in collaboration with people living with obesity that reflect the patient experience in all considerations related to obesity research, obesity policy and obesity healthcare planning^{25,82,85,86}

Weight stigma has an independent impact on population health inequalities⁶. As such, weight bias and obesity stigma should be considered as key social determinants of health^{8,87}. In Ireland, 60% of the adult population has a BMI > 25 kg/m2 with higher prevalence rates reported in marginalised populations and those most affected by socio-economic disparities²⁵. Yet, the focus for intervention tends to be supporting individuals to make healthier choices rather than to improving the environment in which they live. There are 7.9% of the adult population in Ireland over the age of 50 that meet the criteria to avail of bariatric surgery. The current provision of surgery is mediated by a systemic two-tiered delivery of care where the current capacity to deliver these services publicly is 0.1%88. The Model of Care for the Management of Overweight and Obesity calls for and outlines structural changes in service delivery necessary to facilitate a need for equitable and timely access to healthcare across primary, secondary and tertiary healthcare settings to improve the provision of care for overweight and obesity^{8,25,87,88}.

International studies have also explored how weight bias may reveal itself through public health campaigns⁵. Public health strategies that target people with overweight and obesity, emphasising the duty and responsibility of individuals to make healthy choices can end up blaming or punishing those who make unhealthy or contested choices⁸⁹. Individuals with obesity perceive obesity public health

messages as overly simplistic, disempowering, and stigmatising^{2,90}. They do not acknowledge the environmental and biological determinants of overweight and obesity that are beyond individual control. Public health campaigns that promote negative attitudes and stereotypes towards people with obesity, stigmatise youth with obesity or blame parents of children with overweight / obesity are not only ineffective in motivating behaviour change but also end up labelling and stigmatising individuals and families further.

Two critical analyses of Canadian obesity prevention policies highlight how a focus on individual behaviours, rather than a population approach that addresses social determinants of health, can contribute to weight bias and stigma. The first, by Ramos Salas et al., identified five prevailing narratives that may contribute to weight bias:

- 1. Childhood obesity threatens the health of future generations and must be prevented;
- 2. Obesity can be prevented solely through healthy eating and physical activity;
- 3. Obesity is an individual behaviour problem;
- 4. Achieving a healthy body weight should be a population health target; and
- Obesity is risk factor for other chronic diseases and not a disease in itself⁸⁵.

The second analysis, by Alberga *et al.*, noted that a Canadian federal report on obesity used aggressive framing and disrespectful terminology with a strong focus on individual behaviours⁹¹. The authors stated that this may be contributing to weight stigma and recommended that future Canadian policies, reports and campaigns address fundamental social determinants of health^{85,91}.

A critical analysis of the recommendations arising from Ireland's Report of the National Taskforce on Obesity (2005) also highlighted a strong focus on individual actions⁹². The authors argue that "non-responses to individualistic strategies based on epidemiological evidence are seen as a failure to comply, resulting in victim blaming"⁹³. Further analysis of Irish childhood obesity discourse and, in particular, reports arising from the national longitudinal study Growing Up in Ireland, found that in addition to the attribution of responsibility being on the individual or where childhood obesity is concerned, the parent, there remains an emphasis on quantifiable indicators of health with a distinct absence of focus on the structural and societal changes necessary to see real change⁹⁴.

Consequences to engagement in primary healthcare

Weight bias in healthcare settings can reduce the quality of care for patients living with obesity⁹¹. Research has shown that experiencing stigma in healthcare contributes to poor health outcomes and the

maintenance of obesity via cognitive, emotional, physiological, and behavioural pathways that are activated in response to stigma^{91,95,96}. It is established through consistent evidence across several studies that HCPs endorse weight bias and stigma about patients living with obesity^{38,49,58,59}. These findings are supported by a recent Irish study investigating the prevalence of obesity bias in entry-level physiotherapists where 74% of the sample held negative attribution beliefs around the controllability and causality of obesity; 54% felt that obesity was refractory and not worthwhile to treat, 29% reported having a negative attitude towards people living with obesity and 35% felt unequipped to manage obesity in a clinical setting⁵⁹.

There is also strong evidence that patients with obesity perceive biased treatment in healthcare and, for some patients, these perceptions may influence engagement in primary healthcare services⁹⁷. Patients have reported patronising and disrespectful treatment from primary care HCPs, as well as poor communication and blaming most health issues on excess weight⁹¹. A qualitative exploration of patients' experiences of obesity bias and stigma within Irish healthcare settings found that the use of derogatory verbal and non-verbal communication where micro-expressions of "disgust and contempt" and the use of "accusatory and judgemental comments" were a common theme found within patient — HCP interactions. Additional findings support previous research where patients reported that the focus of care is centred primarily on weight with little support offered for non-weightrelated concerns. Drawn together these experiences cumulate in patients expecting the delivery of differential healthcare treatment — this in turn has a direct impact on healthcare utilisation and in effect negatively influences patient health outcomes 13,53,82,83,91.

Furthermore, there is substantial documented data that weight bias may negatively affect HCPs' obesity management practices8. For example, existing evidence suggests that HCPs may be spending inadequate time with patients with obesity^{98,99}. Patients commonly report receiving unsolicited advice to lose weight and a lack of equipment (e.g., gowns and exam tables too small to be functional)100-103 in clinical settings that fail to accommodate for overweight and obesity⁵³ cumulatively leading to patients feeling embarrassed about being weighed 100,104. Patients who experience weight bias and stigma^{98,99} in healthcare settings may delay or forgo essential preventive care, like breast, cervical and colorectal cancer screening, for fear of receiving disrespectful treatment and negative attitudes from HCPs^{5,8,12,43,47,100}. They may also engage in "doctor shopping" to find a more respectful HCP^{18,105,106}. This evidence suggests that patients with obesity are vulnerable to weight bias in healthcare settings, which may impact morbidity^{100,104} and mortality. Additionally, stigma experienced in primary care is reportedly a barrier to the consideration and uptake of alternative interventions outside of lifestyle changes that may be more appropriate to the patient's needs, such as medication¹⁰⁰⁻¹⁰³ and bariatric surgery^{84,88}. Contrary to popular belief, weight bias, stigma and discrimination do not encourage positive behaviour change, as noted in the above sections on the physical and mental health consequences of these issues.

Chapter 18 focuses on Obesity during Preconception, Pregnancy and Postpartum. An ominous theme that emerges across this literature is the prevalence of depersonalised care driven by the medicalisation of higher body weight in pregnancy. Women report not receiving their preferred treatment as medical decisions were based on the "certainty" of complications occurring due to higher weight¹⁰⁷. Feelings of blame are heavily represented in the literature where women are exposed to concrete warnings of gestational diabetes, preeclampsia, fetal macrosomia and being told that they are placing their fetus at risk due to their weight¹⁰⁸. Fertility treatment-seeking patients report a lack of referral to services that support fertility with BMI given as the reason for irregularities in menstrual cycles or an inability to conceive 109. The enforcement of weight loss before sanctioning fertility treatment situates blame on the patient and is reflective of weight bias where medical decisions are based on stereotypes and assumptions and not determined by the patients' history^{109,110}.

How do we reduce weight bias, stigma, and discrimination in healthcare settings?

International organisations, such as the American Academy of Pediatrics and the British Psychological Society¹¹¹, in addition to the Health Service Executive in Ireland²⁵ have published policy statements with recommendations for HCPs to reduce weight stigma in clinical practice. The 2020 international consensus statement for ending the stigma of obesity seeks to address the gap between popular narratives around obesity and current scientific understanding on the complexity of contributory factors involved^{111,112}.

The Association for the Study of Obesity on the Island of Ireland (ASOI) is the Irish representative body of the European Association for the Study of Obesity (EASO) and the World Obesity Federation, and works with patient and public representatives in addressing issues related to obesity stigma, bias and discrimination¹¹³. The Irish Coalition for People living with Obesity (ICPO) provides education, support and enhances awareness of relevant issues for those living with overweight and obesity.

Key to reducing weight bias, stigma and discrimination in healthcare settings is for HCPs to be aware of their own attitudes and behaviours towards individuals living with obesity (both implicit and explicit). As noted above, HCPs providing support for obesity management should acknowledge that weight bias is prevalent among HCPs, and that they are not immune to it themselves. HCPs also need to be aware of their own past experiences of unsuitable treatment attempts in patients with obesity and how this can influence their beliefs and outward behaviours¹¹⁴. They should be willing to reflect on if/how weight bias affects their own attitudes and behaviours towards patients who are living with obesity. This can be achieved by completing a self-assessment tool, such as the Implicit Association Test, for weight bias¹¹⁵.

Given that weight bias is established early, usually before health professionals start their professional training, there is a need for systematic education on weight bias and stigma in all health professional training programmes. All professional health disciplines should therefore include weight-bias sensitivity training in their curricula to lessen weight bias and stigma and enhance care for those with obesity. Individuals with obesity who can provide a personal narrative and first-hand experience of weight bias and stigma within healthcare should be involved in co-designing this formal obesity curriculum¹¹⁶, to help reduce such negative encounters and overall enhance obesity management and the treatment of those living with obesity⁵³. An Obesity Stigma Education Committee has been established in Ireland. The objective of this committee is to provide training on obesity bias and stigma, with a specific focus on entry-level healthcare professional education. For more information contact info@asoi.info.

Because internalised weight bias can have negative impacts on health-related outcomes, it is also important that health professionals assess their patients for internalised weight bias. This can be accomplished through sensitive questioning/dialogue/ motivational interviewing (e.g., "Can you share with me if or how your weight affects your perception of yourself"?)¹¹¹. Coping strategies to address internalised weight bias should be incorporated into behavioural interventions, consistent with the principles of cognitive behavioural therapy and acceptance and commitment therapy. (See Chapter 10 Effective Psychological and Behavioural Interventions in Obesity Management for more information on these therapies.)

Reviews of weight-bias-reduction interventions have shown that one approach is not sufficient to reduce weight bias among HCPs^{1,77,80}. These reviews highlight the importance of moving beyond awareness and information provision, to raising skills and competencies in health professionals and advocating change in social norms and ideologies about body weight. A systematic review of 17 weight-bias-reduction interventions among health student trainees and practicing health professionals identified four key components to help decrease weight bias among health professionals:

- 1. Present facts about uncontrollable and non-modifiable causes of obesity (i.e., genetics, biology, environment, socio-cultural influences and social determinants of health);
- 2. Provide positive contact with people living with obesity to evoke empathy (i.e., include the patient voice);
- 3. Include empathic obesity experts as peer-modelling HCPs; and
- 4. Repeat exposure to people living with obesity over the long term⁸⁰.

Promising strategies to reduce stigma in the healthcare setting include:

 Improving the attitudes of HCPs about patients with obesity and/or reducing the likelihood that negative attitudes influence the behaviour of HCPs;

- Altering the clinic environment or procedures to create a setting where patients with obesity feel accepted and less threatened (there is a helpful Equipment and Environmental Checklist provided by the Alberta Bariatric Resource Team: https://www.albertahealthservices.ca/assets/info/hp/phc/if-hpphc-obesity-ee-checklist.pdf); and
- 3. Empowering patients to cope with stigmatising situations and attain high-quality healthcare¹¹⁷.

It is also recommended that HCPs first consider the individual's reasons for attending the appointment and address any concerns that the person may have before approaching any conversation about weight¹¹⁴. Individuals who seem reluctant to discuss weight need to feel understood and to experience a compassionate, non-judgemental approach from their HCPs. HCPs need to be appropriately equipped and trained to broach the topics of previous attempts of addressing weight and any prior stigmatising or unpleasant experiences with HCP and to develop a supportive caring environment¹¹⁴.

Gaps in our knowledge: questions for future research

This chapter outlines the evidence for significant negative physical, psychological and social consequences of weight bias. There is an urgent need to adopt evidence-based approaches to weight-bias reduction, particularly given the damaging effects of internalised weight bias. For example, individuals with higher internalised weight bias report less weight loss, lower physical activity levels, higher caloric intake, greater disordered eating behaviours³⁶ and even greater cardiometabolic risk⁷². There is a need for more research to better understand, and more effectively assess and reduce internalised weight bias. Behaviour support interventions may fail to maximise their potential benefits by ignoring internalised weight bias. Internalised weight bias is therefore an important consideration for weight management and obesity-treatment approaches. HCPs are advised to address internalised weight bias within any obesitymanagement strategy (i.e., self-compassion as a resource¹⁹, inducing empathy and influencing controllability attributions 1 and careful and considered use of language and terminology)¹⁸.

A great deal more research is needed to understand the impact of weight bias, stigma and discrimination on care for people with obesity. There is a need for more research, beyond convenience or treatment-seeking groups, towards replication with more generalisable populations. There is also a need to consider how the experience of living with obesity interacts with other marginalised identities. Further work is required on how race, gender and class may intersect with weight status. Himmelstein et al. argue that understanding how multiple identities interact and combine to enhance or reduce health risks is an understudied area in weight-stigma research¹¹⁸.

The development and testing of novel interventions are also needed, to reduce weight bias, or its impact on behaviour, in medical trainees, practicing physicians, other health professionals and other staff members of health organisations. Further work is required using well-designed trials, with a focus on the long-term effectiveness of weight-bias-reduction strategies.

Moving forward, continued inclusion of the voices and experiences of those living with obesity is required to enhance compassionate and supportive healthcare policies and practices. Work is underway on a systematic review led by a team of researchers in Ireland on the lived experience of people with obesity⁸⁶. The development of collaborative approaches with people with lived experience to inform obesity-related policies and standards of care is critically important.

In light of the Covid-19 pandemic, there is also a need to investigate its impact on internalised weight bias and, consequently, mental health in people with obesity, as it is likely to bear long-lasting consequences.

There are significant gaps in our knowledge on the prevalence of weight stigma within Irish society and the barriers and challenges people living with obesity experience across multiple settings and sectors. A further requirement in the Irish context is a critical review on the framing of public health policies and their potential to exacerbate weight bias.

The Reducing Weight Bias in Obesity Management, Practice and Policy chapter is adapted from the Canadian Adult Obesity Clinical Practice Guidelines (the "Guidelines"), which Obesity Canada owns and from whom we have a license. ASOI adapted the Guidelines having regard for any relevant context affecting the Island of Ireland using the ADAPTE Tool.

ASOI acknowledges that Obesity Canada and the authors of the Guidelines have not reviewed the Reducing Weight Bias in Obesity Management, Practice and Policy chapter and bear no responsibility for changes made to such Guidelines, or how the adapted Guidelines chapter is presented or disseminated. As Obesity Canada and the authors of the original Guidelines chapter have not reviewed the Reducing Weight Bias in Obesity Management, Practice and Policy chapter, such parties, according to their policy, disclaim any association with such adapted Materials. The original Guidelines may be viewed in English at: www.obesitycanada.ca/guidelines.

Correspondence:

info@asoi.info

References

- Lee M, Ata RN, Brannick MT. Malleability of weight-biased attitudes and beliefs: a meta-analysis of weight bias reduction interventions. Body Image 2014; 11(3): 251-9.
- Puhl R, Luedicke J, Lee Peterson J. Public reactions to obesity-related health campaigns: a randomized controlled trial. Am J Prev Med 2013; 45(1): 36-48.
- Shentow-Bewsh R, Keating L, Mills JS. Effects of anti-obesity messages on women's body image and eating behaviour. Eat Behav 2016; 20: 48-56.
- Andreyeva T, Puhl RM, Brownell KD. Changes in perceived weight discrimination among Americans, 1995-1996 through 2004-2006. Obesity (Silver Spring) 2008; 16(5): 1129-34.
- Puhl R, Peterson JL, Luedicke J. Fighting obesity or obese persons? Public perceptions of obesity-related health messages. Int J Obes (Lond) 2013; 37(6): 774-82.
- Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. Am J Public Health 2013; 103(5): 813-21.
- Puhl RM, Andreyeva T, Brownell KD. Perceptions of weight discrimination: prevalence and comparison to race and gender discrimination in America. Int J Obes (Lond) 2008: 32(6): 992-1000.
- Puhl RM, Heuer CA. The stigma of obesity: a review and update. Obesity (Silver Spring) 2009; 17(5): 941-64.
- Pearl RL, Puhl RM. The distinct effects of internalizing weight bias: An experimental study. Body Image 2016; 17: 38-42.
- Murakami JM, Latner JD. Weight acceptance versus body dissatisfaction: Effects on stigma, perceived self-esteem, and perceived psychopathology. Eat Behav 2015; 19: 163-7.
- Mensinger JL, Calogero RM, Tylka TL. Internalized weight stigma moderates eating behavior outcomes in women with high BMI participating in a healthy living program. Appetite 2016; 102: 32-43.
- 12. Olson CL, Schumaker HD, Yawn BP. Overweight women delay medical care. Arch Fam Med 1994; 3(10): 888-92.
- Alberga AS, Edache IY, Forhan M, Russell-Mayhew S. Weight bias and health care utilization: a scoping review. Prim Health Care Res Dev 2019; 20: e116.
- Kirk SF, Price SL, Penney TL, et al. Blame, Shame, and Lack of Support: A Multilevel Study on Obesity Management. Qual Health Res 2014; 24(6): 790-800.
- Sutin AR, Terracciano A. Perceived weight discrimination and obesity. PLoS One 2013; 8(7): e70048.
- Himmelstein MS, Incollingo Belsky AC, Tomiyama AJ. The weight of stigma: cortisol reactivity to manipulated weight stigma. Obesity (Silver Spring) 2015; 23(2): 368-74
- 17. Farhangi MA, Emam-Alizadeh M, Hamedi F, Jahangiry L. Weight self-stigma and its association with quality of life and psychological distress among overweight and obese women. Eat Weight Disord 2017; 22(3): 451-6.
- Puhl R, Peterson JL, Luedicke J. Motivating or stigmatizing? Public perceptions of weight-related language used by health providers. Int J Obes (Lond) 2013; 37(4): 612-9.
- Hilbert A, Braehler E, Haeuser W, Zenger M. Weight bias internalization, core self-evaluation, and health in overweight and obese persons. Obesity (Silver Spring) 2014; 22(1): 79-85.
- Pearl RL, White MA, Grilo CM. Weight bias internalization, depression, and self-reported health among overweight binge eating disorder patients. Obesity (Silver Spring) 2014; 22(5): E142-8.
- Carels RA, Young KM, Wott CB, et al. Internalized weight stigma and its ideological correlates among weight loss treatment seeking adults. Eat Weight Disord 2009; 14(2-3): e92-7.
- Westermann S, Rief W, Euteneuer F, Kohlmann S. Social exclusion and shame in obesity. Eat Behav 2015; 17: 74-6.
- Hilbert A, Braehler E, Schmidt R, Lowe B, Hauser W, Zenger M. Self-Compassion as a Resource in the Self-Stigma Process of Overweight and Obese Individuals. Obes Facts 2015; 8(5): 293-301.

- 24. Himmelstein MS, Puhl RM, Quinn DM. Weight stigma and health: The mediating role of coping responses. Health Psychol 2018; 37(2): 139-47.
- Health Service Executive (HSE). Model of Care for the Management of Overweight and Obesity. Dublin: Royal College of Physicians in Ireland, 2021.
- Puhl RM, Himmelstein MS, Quinn DM. Internalizing Weight Stigma: Prevalence and Sociodemographic Considerations in US Adults. Obesity (Silver Spring) 2018: 26(1): 167-75.
- Pearl RL, Puhl RM. Weight bias internalization and health: a systematic review.
 Obes Rev 2018; 19(8): 1141-63.
- 28. Lillis J, Thomas JG, Levin ME, Wing RR. Self-stigma and weight loss: The impact of fear of being stigmatized. J Health Psychol 2017; 25(7): 922-30.
- Pearl RL, Wadden TA, Chao AM, et al. Weight Bias Internalization and Long-Term Weight Loss in Patients With Obesity. Ann Behav Med 2019; 53(8): 782-7.
- Olson KL, Lillis J, Graham Thomas J, Wing RR. Prospective Evaluation of Internalized Weight Bias and Weight Change Among Successful Weight-Loss Maintainers. Obesity (Silver Spring) 2018; 26(12): 1888-92.
- 31. Puhl RM, Moss-Racusin CA, Schwartz MB. Internalization of weight bias: Implications for binge eating and emotional well-being. Obesity (Silver Spring) 2007; 15(1): 19-23.
- 32. Schmalz DL, Colistra CM. Obesity Stigma as a Barrier to Healthy Eating Behavior. Topics in Clinical Nutrition 2016; 31(1): 86-94.
- Almeida L, Savoy S, Boxer P. The role of weight stigmatization in cumulative risk for binge eating. J Clin Psychol 2011; 67(3): 278-92.
- 34. Schvey NA, Puhl RM, Brownell KD. The impact of weight stigma on caloric consumption. Obesity (Silver Spring) 2011; 19(10): 1957-62.
- 35. Pearl RL, Dovidio JF, Puhl RM, Brownell KD. Exposure to Weight-Stigmatizing Media: Effects on Exercise Intentions, Motivation, and Behavior. J Health Commun 2015; 20(9): 1004-13.
- 36. Nolan LJ, Eshleman A. Paved with good intentions: Paradoxical eating responses to weight stigma. Appetite 2016; 102: 15-24.
- Vartanian LR, Novak SA. Internalized societal attitudes moderate the impact of weight stigma on avoidance of exercise. Obesity (Silver Spring) 2011; 19(4): 757-62.
- 38. Pearl RL. Weight Bias and Stigma. Public Health Implications and Structural Solutions. Social Issues and Policy Review 2018; 12: 146-82.
- 39. Ashmore JA, Friedman KE, Reichmann SK, Musante GJ. Weight-based stigmatization, psychological distress, & binge eating behavior among obese treatment-seeking adults. Eating Behavior 2008; 9(2): 203-9.
- Pearl RL, Puhl RM, Dovidio JF. Differential effects of weight bias experiences and internalization on exercise among women with overweight and obesity. J Health Psychol 2015; 20(12): 1626-32.
- 41. Vartanian LR, Shaprow JG. Effects of weight stigma on exercise motivation and behavior: a preliminary investigation among college-aged females. J Health Psychol 2008; 13(1): 131-8.
- 42. Puhl RM, Latner JD, O'Brien KS, Luedicke J, Danielsdottir S, Salas XR. Potential Policies and Laws to Prohibit Weight Discrimination: Public Views from 4 Countries. Milbank Q 2015; 93(4): 691-731.
- Drury CA, Louis M. Exploring the association between body weight, stigma of obesity, and health care avoidance. J Am Acad Nurse Pract 2002; 14(12): 554-61
- 44. Gudzune KA, Bennett WL, Cooper LA, Bleich SN. Patients who feel judged about their weight have lower trust in their primary care providers. Patient Educ Couns 2014; 97(1): 128-31.
- 45. Gudzune KA, Beach MC, Roter DL, Cooper LA. Physicians build less rapport with obese patients. Obesity (Silver Spring) 2013; 21(10): 2146-52.
- 46. Aldrich T, Hackley B. The impact of obesity on gynecologic cancer screening: an integrative literature review. J Midwifery Womens Health 2010; 55(4): 344-56.
- Russell N, & Carryer, J. Living large: the experiences of large-bodied women when accessing general practice services. J Prim Health Care 2013: 199-205.

- Puhl RM, Moss-Racusin CA, Schwartz MB, Brownell KD. Weight stigmatization and bias reduction: perspectives of overweight and obese adults. Health Educ Res 2008; 23(2): 347-58.
- 49. Teachman BA, Brownell KD. Implicit anti-fat bias among health professionals: is anyone immune? Int J Obes Relat Metab Disord 2001; 25(10): 1525-31.
- Cameron E. Challenging "size matters" messages: An exploration of the experiences of critical obesity scholars in higher education. Canadian Journal of Higher Education 2016; 46(2): 111-26.
- Rudolph CW, Wells CL, Weller MD, Baltes BB. A meta-analysis of empirical studies of weight-based bias in the workplace. Journal of Vocational Behavior 2009; 74(1): 1-10.
- Ratcliffe D, Ellison N. Obesity and internalized weight stigma: a formulation model for an emerging psychological problem. Behav Cogn Psychother 2015; 43(2): 239-52.
- O'Donoghue G, Cunningham C, King M, O'Keefe C, Rofaeil A, McMahon S. A qualitative exploration of obesity bias and stigma in Irish healthcare; the patients' voice. PLoS One 2021; 16(11): e0260075.
- Kelleher E, McHugh SM, Harrington JM, Perry IJ, Shiely F. Understanding engagement in a family-focused, multicomponent, childhood weight management programme delivered in the community setting. Public Health Nutrition 2019; 22(8): 1471-82.
- de Brún A, McCarthy M, McKenzie K, McGloin A. "Fat is your fault".
 Gatekeepers to health, attributions of responsibility and the portrayal of gender in the Irish media representation of obesity. Appetite 2013; 62: 17-26.
- Latner JD, O'Brien KS, Durso LE, Brinkman LA, MacDonald T. Weighing obesity stigma: the relative strength of different forms of bias. Int J Obes (Lond) 2008; 32(7): 1145-52.
- Lawrence BJ, Kerr D, Pollard CM, et al. Weight bias among health care professionals: A systematic review and meta-analysis. Obesity (Silver Spring) 2021; 29: 1802-12.
- O'Brien KS, Puhl RM, Latner JD, Mir AS, Hunter JA. Reducing anti-fat prejudice in preservice health students: a randomized trial. Obesity (Silver Spring) 2010; 18(11): 2138-44.
- O'Donoghue G, McMahon S, Holt A, Nedai M, Nybo T, Peiris CL. Obesity bias and stigma, attitudes and beliefs among entry-level physiotherapy students in the Republic of Ireland: a cross sectional study. Physiotherapy 2021; 112: 55-63.
- Spahlholz J, Baer N, Konig HH, Riedel-Heller SG, Luck-Sikorski C. Obesity and discrimination - a systematic review and meta-analysis of observational studies. Obes Rev 2016; 17(1): 43-55.
- Tomiyama AJ, Carr D, Granberg EM, et al. How and why weight stigma drives the obesity 'epidemic' and harms health. BMC Med 2018; 16(1): 123.
- Tomiyama AJ. Weight stigma is stressful. A review of evidence for the Cyclic Obesity/Weight-Based Stigma model. Appetite 2014; 82: 8-15.
- Rand K, Vallis M, Aston M, et al. "It is not the diet; it is the mental part we need help with." A multilevel analysis of psychological, emotional, and social wellbeing in obesity. Int J Qual Stud Health Well-being 2017; 12(1): 1306421.
- Papadopoulos S, Brennan L. Correlates of weight stigma in adults with overweight and obesity: A systematic literature review. Obesity (Silver Spring) 2015; 23(9): 1743-60.
- Friedman KE, Reichmann SK, Costanzo PR, Zelli A, Ashmore JA, Musante GJ. Weight stigmatization and ideological beliefs: relation to psychological functioning in obese adults. Obes Res 2005; 13(5): 907-16.
- Robinson E, Sutin A, Daly M. Perceived weight discrimination mediates the prospective relation between obesity and depressive symptoms in U.S. and U.K. adults. Health Psychol 2017; 36(2): 112-21.
- Jackson SE, Beeken RJ, Wardle J. Obesity, perceived weight discrimination, and psychological well-being in older adults in England. Obesity (Silver Spring) 2015; 23(5): 1105-11.
- Hatzenbuehler ML, Keyes KM, Hasin DS. Associations between perceived weight discrimination and the prevalence of psychiatric disorders in the general population. Obesity (Silver Spring) 2009; 17(11): 2033-9.
- Sikorski C, Luppa M, Luck T, Riedel-Heller SG. Weight stigma "gets under the skin"-evidence for an adapted psychological mediation framework: a systematic review. Obesity (Silver Spring) 2015; 23(2): 266-76.

- Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. Health Serv Res 2019; 54(2): 1374-88.
- Tomiyama AJ, Epel ES, McClatchey TM, et al. Associations of weight stigma with cortisol and oxidative stress independent of adiposity. Health Psychol 2014; 33(8): 862-7.
- 72. Pearl RL, Wadden TA, Hopkins CM, et al. Association between weight bias internalization and metabolic syndrome among treatment-seeking individuals with obesity. Obesity (Silver Spring) 2017; 25(2): 317-22.
- Wu YK, Berry DC. Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: A systematic review. J Adv Nurs 2018; 74(5): 1030-42.
- Lessard LM, Puhl RM, Himmelstein MS, Pearl RL, Foster GD. Eating and Exercise-Related Correlates of Weight Stigma: A Multinational Investigation. Obesity (Silver Spring) 2021; 29(6): 966-70.
- Sutin AR, Stephan Y, Terracciano A. Weight Discrimination and Risk of Mortality. Psychol Sci 2015; 26(11): 1803-11.
- Taylor VH, Forhan M, Vigod SN, McIntyre RS, Morrison KM. The impact of obesity on quality of life. Best Pract Res Clin Endocrinol Metab 2013; 27(2): 139-46.
- Danielsdottir S, O'Brien KS, Ciao A. Anti-fat prejudice reduction: a review of published studies. Obes Facts 2010; 3(1): 47-58.
- Boyd MA. Living with overweight. Perspect Psychiatr Care 1989; 25(3-4): 48-52.
- Gortmaker SL, Must A, Perrin JM, Sobol AM, Dietz WH. Social and economic consequences of overweight in adolescence and young adulthood. N Engl J Med 1993; 329(14): 1008-12.
- 80. Alberga AS, Pickering BJ, Alix Hayden K, et al. Weight bias reduction in health professionals: a systematic review. Clin Obes 2016; 6(3): 175-88.
- 81. Puhl RM, Wall MM, Chen C, Bryn Austin S, Eisenberg ME, Neumark-Sztainer D. Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: A 15-year longitudinal study. Prev Med 2017; 100: 173-9.
- 82. Grannell A, Fallon F, Al-Najim W, le Roux C. Obesity and responsibility: Is it time to rethink agency? Obesity Reviews 2021; 22(8): e13270.
- 83. Grannell A, Fallon F, Pournaras D, le Roux CW. Exploring patient beliefs and perceptions regarding obesity as a disease, obesity causation and treatment. Ir J Med Sci 2021; 190(1): 163-8.
- Grannell A, le Roux CW, McGillicuddy D. "I am terrified of something happening to me" The lived experience of people with obesity during the COVID-19 pandemic. Clin Obes 2020: 10(6): e12406.
- Salas XR, Forhan M, Caulfield T, Sharma AM, Raine K. A critical analysis of obesity prevention policies and strategies. Can J Public Health 2017; 108(5-6): e598-e608.
- 86. Farrell E, Hollmann E, le Roux CW, Bustillo M, Nadglowski J, McGillicuddy D. The lived experience of patients with obesity: A systematic review and qualitative synthesis. Obesity Reviews 2021; 22(12): e13334.
- 87. Phelan JC, Lucas JW, Ridgeway CL, Taylor CJ. Stigma, status, and population health. Soc Sci Med 2014; 103: 15-23.
- 88. O'Neill KN, Finucane FM, le Roux CW, Fitzgerald AP, Kearney PM. Unmet need for bariatric surgery. Surg Obes Relat Dis 2017; 13(6): 1052-6.
- Fry CL. Critical questions we should ask in a changing Australian preventative health landscape: Competing interests, intervention limits and permissible health identities. Health Promot J Austr 2010; 21(3): 170-5.
- Thompson L, Kumar A. Responses to health promotion campaigns: resistance, denial and othering. Critical Public Health 2011; 21(1): 105-17.
- Alberga AS, McLaren L, Russell-Mayhew S, von Ranson KM. Canadian Senate Report on Obesity: Focusing on Individual Behaviours versus Social Determinants of Health May Promote Weight Stigma. J Obes 2018; 2018: 8645694.
- 92. Department of Health and Children (DOHC). Obesity: the policy challenges: the report of the National Taskforce on Obesity 2005. Dublin: DOHC, 2005.
- Share M, Strain M. Making schools and young people responsible: a critical analysis of Ireland's obesity strategy. Health Soc Care Community 2008; 16(3): 234-43.

- 94. Share M, Share P. Reframing health and health policy in Ireland: A governmental analysis. Manchester: Manchester University Press; 2017.
- Sarwer DB, Heinberg LJ. A Review of the Psychosocial Aspects of Clinically Severe Obesity and Bariatric Surgery. American Psychologist 2020; 75(2): 252-64
- Gerend MA, Sutin AR, Terracciano A, Maner JK. The role of psychological attribution in responses to weight stigma. Obes Sci Pract 2020; 6(5): 473-83.
- Mensinger JL, Tylka TL, Calamari ME. Mechanisms underlying weight status and healthcare avoidance in women: A study of weight stigma, body-related shame and guilt, and healthcare stress. Body Image 2018; 25: 139-47.
- 98. Hebl MR, Xu J. Weighing the care: physicians' reactions to the size of a patient. Int J Obes Relat Metab Disord 2001; 25(8): 1246-52.
- 99. Bertakis KD, Azari R. The impact of obesity on primary care visits. Obes Res 2005; 13(9): 1615-23.
- Amy NK, Aalborg A, Lyons P, Keranen L. Barriers to routine gynecological cancer screening for White and African-American obese women. Int J Obes (Lond) 2006; 30(1): 147-55.
- 101. Pryor W. The health care disadvantages of being obese. NSW Public Health Bulletin 2002; 13(7): 163-5.
- 102. Kaminsky J, Gadaleta D. A study of discrimination within the medical community as viewed by obese patients. Obes Surg 2002; 12(1): 14-8.
- 103. Merrill E, Grassley J. Women's stories of their experiences as overweight patients. J Adv Nurs 2008; 64(2): 139-46.
- 104. Forhan M, Risdon C, Solomon P. Contributors to patient engagement in primary health care: perceptions of patients with obesity. Prim Health Care Res Dev 2013; 14(4): 367-72.
- 105. Hansson LM, Rasmussen F. Association between perceived health care stigmatization and BMI change. Obes Facts 2014; 7(3): 211-20.
- 106. Gudzune KA, Bleich SN, Richards TM, Weiner JP, Hodges K, Clark JM. Doctor shopping by overweight and obese patients is associated with increased healthcare utilization. Obesity (Silver Spring) 2013; 21(7): 1328-34.
- 107. Lindhardt CL, Rubak S, Mogensen O, Lamont RF, Joergensen JS. The experience of pregnant women with a body mass index >30 kg/m² of their encounters with healthcare professionals. Acta Obstet Gynecol Scand 2013; 92(9): 1101-7.
- 108. Knight-Agarwal CR, Williams LT, Davis D, et al. The perspectives of obese women receiving antenatal care: A qualitative study of women's experiences. Women Birth 2016: 29(2): 189-95.
- LaMarre A, Rice C, Cook K, Friedman M. Fat Reproductive Justice: Navigating the Boundaries of Reproductive Health Care. Journal of Social Issues 2020; 76(2): 338-62.
- 110. DeJoy SB, Bittner K, Mandel D. A Qualitative Study of the Maternity Care Experiences of Women with Obesity: "More than Just a Number on the Scale". J Midwifery Womens Health 2016; 61(2): 217-23.
- 111. The British Psychological Society. Psychological perspectives on obesity: Addressing policy, practice and research priorities. Leicester; 2019.
- 112. Rubino F, Puhl RM, Cummings DE, et al. Joint international consensus statement for ending stigma of obesity. Nature Medicine 2020; 26(4): 485-97.
- 113. The Association for the Study of Obesity on the Island of Ireland (ASOI). About the ASOI. 2021. https://asoi.info/about-us/ (accessed 29 March 2022).
- 114. O'Shea D, Kahan S, Lennon L, Breen C. Correction to: Practical Approaches to Treating Obesity: Patient and Healthcare Professional Perspectives. Adv Ther 2021; 38(7): 4151.
- 115. Project Implicit. 2011. https://implicit.harvard.edu/implicit/selectatest.html (accessed 25 January 2022).
- 116. Brand G, Sheers C, Wise S, et al. A research approach for co-designing education with healthcare consumers. Medical Education 2021; 55(5): 574-81.
- 117. Phelan SM, Burgess DJ, Yeazel MW, Hellerstedt WL, Griffin JM, van Ryn M. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. Obes Rev 2015; 16(4): 319-26.
- 118. Himmelstein MS, Puhl RM, Quinn DM. Intersectionality: An Understudied Framework for Addressing Weight Stigma. Am J Prev Med 2017; 53(4): 421-31.