



The One Billion

Time to Accelerate Policy Change in Obesity

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Time to act

Globally, obesity has almost tripled since 1975,¹ and in 2030, it is estimated that over 1.12 billion people worldwide will be living with the disease.² What was once considered to be a health issue faced by higher-income countries has become a worldwide issue transcending borders and socio-economic statuses, with obesity-related ill-health accounting for over 5.0 million deaths globally.³

Far from being a straightforward isolated health issue, obesity negatively impacts quality of life, professional opportunities, increases risk of comorbidities and decreases life expectancy.^{4,5}

Beyond the problems obesity can pose to individuals, it is also having an exponentially growing impact on wider society. Healthcare costs and productivity loss associated with overweight and obesity are set to cost the global economy 3% of GDP by 2060, with the rise in costs especially predicted to affect upper middle income countries as well as higher income countries.⁶

Health systems are seeing the profound economic impact obesity is having due to the rise of patients requiring treatment and support for comorbidities including diabetes, cancer and cardiovascular disease.⁷ Against this already challenging backdrop, the COVID-19 pandemic further highlighted obesity as a health inequality, a key risk factor for poorer health outcomes and a disease urgently requiring new approaches to ensure we are prepared for pandemics and health challenges to come.⁸

Globally, governments have recognised obesity as a key challenge⁹ and have attempted to slow the prevalence of obesity by introducing a range of obesity strategies aimed at preventing new cases. However, as the numbers show, none have yet successfully delivered adequate solutions. Until very recently, the main view on obesity has been that it is a lifestyle disease which can be managed and prevented through the provision of interventions to enable the general population to make healthier choices.^{9,10} This approach has largely ignored the range of complex causes and physiological biomarkers which define the disease and its progression.¹¹⁻¹⁴

The over-simplified understanding of obesity has hindered the global policy response and if we neglect to close the gaps in our understanding of obesity and take evidence-based and innovative action, we will continue to deliver inadequate strategies and fail the hundreds of millions of people living with obesity now, as well as generations to come.⁹

Decision makers must now realise that obesity is an urgent challenge that requires a new approach rooted in science and evidence.

The time to act is now.

Key Facts About Obesity



Obesity-related ill health accounts for over 5.0 million deaths globally⁶



Obesity is one of the leading causes of death and disability worldwide¹⁵



Obesity may cut healthy life years in adults by up to 19 years¹⁶

By approaching obesity in the same way as other non-communicable diseases (NCDs), we could prevent numerous medical complications, including 80% of type 2 diabetes^{15,17}

Prevalence of adults living with obesity¹⁸

Ranking (% obesity by country)

Country	Adults Male	Adults Female
United States	36.47%	38.16%
Turkey	25.29%	40.71%
Canada	30.47%	30.44%
Australia	30.57%	29.51%
United Kingdom	27.88%	29.71%
South Africa	15.98%	40.99%
Germany	25.04%	21.33%
Brazil	19.24%	26.44%
Malaysia	13.44%	18.64%
Pakistan	6.26%	11.75%

Understanding obesity as a chronic relapsing disease

Obesity is a chronic relapsing disease¹⁹, which is influenced by physiological, environmental, psychological, genetic and socioeconomic factors.¹¹⁻¹⁴ The way in which obesity is managed therefore must go beyond a focus on weight and look at the underlying causes and triggers for progression.^{5,20}

A prevalent misconception is that obesity is about weight and that people without excess weight do not have obesity. Excess weight, primarily distributed as central or visceral fat, is associated with abnormal adipose tissue distribution and function which causes atherosclerotic, metabolic and mechanical changes.²¹ This leads to deteriorating health, meeting the criteria for obesity.²¹

While it is possible for people in general to lose weight through calorie restriction and exercise, the biological/physiological factors that are at play in people living with obesity actively work against remission.^{22,23} As the human body responds to reductions in body fat as a threat to survival, people with obesity are fighting against not only physical, psychological and



environmental challenges, but more importantly an evolved biological response to fat loss which increases hunger and energy efficiency and therefore increases risk of relapse.²³

Common myths and misconceptions about obesity

“Obesity equals visible excess weight”

Obesity should be defined and sub-categorised by looking at biomarkers, pre-disposition to weight gain, body composition and other factors like metabolism, body and organ health.

“BMI is an accurate diagnostic tool for obesity”

Collection of data for diagnosis needs to go beyond visible signs of obesity i.e., excess weight and consider body composition and physical or physiological biomarkers to diagnose and assess the severity of obesity.⁵ Measurement criteria frameworks such as the Edmonton Obesity Staging System are a superior and comprehensive alternative which go above and beyond BMI and take into account biological mechanisms underlying both the onset of obesity and disease progression.¹⁹

“Obesity is primarily caused by a lack of physical activity or by unhealthy dietary habits and is a lifestyle disease”

Obesity is a chronic relapsing disease caused by biological factors (onset) and exacerbated by physiological, environmental, psychological and behavioural factors (progression).¹⁹ Weight gain in people with obesity can be triggered by a multitude of factors such as insufficient sleep, psychological stress, endocrine disruptors, medications and hormonal imbalances.^{19,24}

“Everyone can lose weight with enough willpower”

Obesity is a chronic relapsing disease rooted in biological/physiological factors which actively works against weight loss.^{19,23} There are also various medical conditions (hypothyroidism, polycystic ovary syndrome, depression) that increase risk of weight gain and actively work against weight loss.²⁴ Once a person is living with obesity, weight loss and maintenance of weight loss requires a range of interventions for it to be successful – willpower is not enough.²⁵

The impact of the current understanding and political approach to obesity

The impact on people living with obesity

Stigma and misconceptions surrounding obesity are prevalent in the media, popular culture and scientific literature with 72% of images in media representing people with obesity as lazy, unhealthy and unmotivated, perpetuating the misunderstanding that obesity is about weight.^{26,27} At the root of the stigma is the belief that obesity is purely a matter of personal responsibility.²⁰ This belief remains strong among the public and is even observed among healthcare professionals (HCPs) who have been identified as the second most frequent source of weight stigma and discrimination after family members.²⁷

Obesity puts people at risk for numerous medical complications including heart disease, diabetes, depressive disorders and anxiety.¹⁷ This is further exacerbated by experiences of stigma which are associated with greater psychological distress and with developing more severe obesity.²⁷ In fact, the stigma and discrimination sometimes faced in healthcare settings puts people living with visible signs of obesity at risk of developing more severe complications as many

delay visits to their HCPs.²⁷ As an example, compared to women with a lower BMI, women with a high BMI are more likely to delay clinical breast examinations, gynaecological examinations and pap smears.²⁸ In addition, when they do decide to seek help, people living with visible signs of obesity are at greater risk of having their symptoms of other diseases dismissed as a result of their weight.¹⁹ This leads to many being recommended to lose weight as a treatment plan, resulting in delayed diagnosis of severe conditions and in some cases a lower chance of survival.^{29,30}

In addition to poorer health outcomes, obesity has also been shown to have a significant negative impact on quality of life and socio-economic status.^{4,5,31} From an early age, people with obesity are impacted by the misconceptions surrounding obesity.²⁰ Children with visible signs of obesity are three times more likely to be bullied by peers and students.³¹ These challenges for children with obesity can lead to lower class participation and reduced educational performance, which, in turn, negatively impacts their learning, education opportunities and future job prospects.³¹ These challenges continue into later life where people with visible signs of obesity experience a lower work-related quality of life than people with a healthy weight due to hiring discrimination and lower pay.^{32,33}

These consequences, faced in wider society and day-to-day interactions can cause a perpetual cycle of mood disturbance, which makes it difficult for people living with obesity to manage their disease and puts them at risk of exacerbating their symptoms.³⁴

The impact on our global economy

Based on current trends, by 2060 the large majority of countries are projected to experience pre-obesity (overweight) and obesity prevalence levels above 70% of their populations.⁶

In a report published in 2022, RTI International and the World Obesity Federation have estimated the likely economic impact of pre-obesity (overweight) and obesity over the next 40 years across 161 countries (covering around 97% of the world's population)⁶ and found that:

- The global cost of treating ill-health caused by obesity is predicted to rise to over US \$3 trillion by 2030 and more than US \$18 trillion by 2060⁶
- By 2060, the estimated costs of overweight are expected to rise significantly, ranging from over 2% of GDP in African countries to over 4% of GDP in the Americas and over 5% of GDP in countries of the Middle East (EMR)⁶
- Across the 161 countries, the economic costs of overweight and obesity are projected to exceed 3% of world GDP in 2060⁶

Countries with economic costs of overweight and obesity projected to exceed US \$100 billion in 2026⁶

Country	2060 US\$	2060 %GDP
China	\$10,108bn	3.06%
United States	\$2,622bn	4.62%
India	\$839bn	2.47%
Korea, Rep.	\$411bn	3.41%
Indonesia	\$394bn	4.70%
Germany	\$251bn	3.52%
Brazil	\$218bn	4.66%
Japan	\$198bn	2.18%
Thailand	\$181bn	6.36%
United Arab Emirates	\$179bn	11.04%
Canada	\$162bn	3.74%
United Kingdom	\$162bn	2.41%
Australia	\$158bn	3.49%
Saudi Arabia	\$150bn	5.62%
Mexico	\$139bn	5.01%
France	\$133bn	2.39%
Turkey	\$133bn	3.18%
Russian Federation	\$128bn	4.57%
Malaysia	\$105bn	3.98%
Vietnam	\$103bn	2.81%

Beyond anticipated healthcare costs, unforeseen health crises may be exacerbated by high existing rates of obesity and common comorbidities. We saw this during the COVID-19 pandemic where people living with overweight or obesity were at greater risk of more severe outcomes when contracting the virus. This meant that during the first wave in Europe, 76% of the costs of secondary care for COVID-19 patients were related to treating people living with overweight and obesity.³⁵

The economic impact of obesity is not limited to healthcare costs alone. Indirect costs of obesity include premature mortality, disability and loss of economic productivity which accounts for over half of the total economic impact of obesity.³⁶

A significant part of the economic impact of obesity is linked to reduced labour force productivity and reduced human capital.³¹ Individuals with chronic diseases are more likely to be unemployed and miss days off work and when they are at work, are less likely to be able to be as productive as their co-workers who do not have a chronic disease.³¹ Specifically for obesity, an analysis conducted across 52 countries by the OECD, showed that a high BMI reduces the workforce by about 54 million people per year: 28 million due to reduced employment and 8 million to absenteeism.³¹

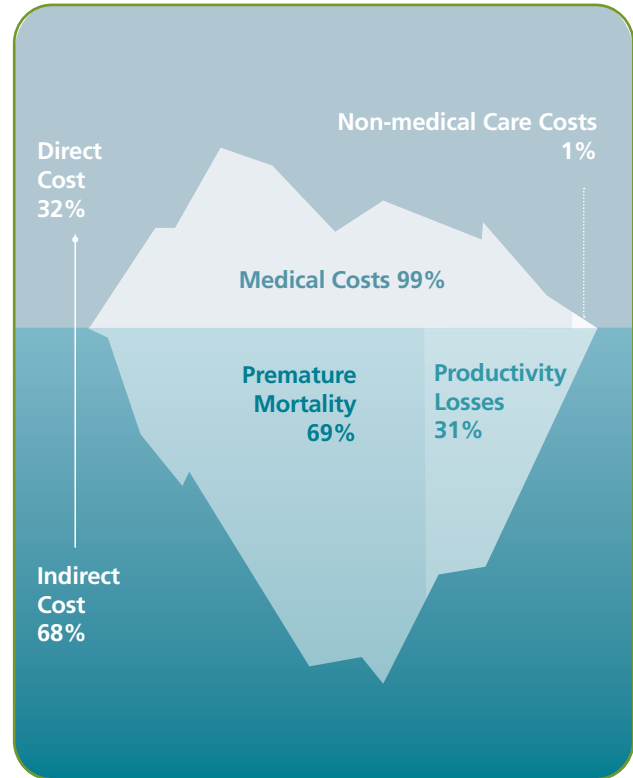


Figure 1: Breakdown of the economic costs of obesity used for the current prediction of the economic costs of overweight and obesity (2019 data).⁶

Existing barriers to progress

Historically, different versions of the same strategy have been used in the political response to obesity. These strategies have looked to enable people to make healthier choices either through environmental interventions such as sugar taxes, advertising bans and food incentives, or lifestyle interventions such as exercise programs and short-term dietary counsel.⁵ However, these strategies have been ineffective in reducing the prevalence of obesity.⁵

To truly create an environment which enables people at risk of obesity to prevent and manage their chronic disease, reduce the impact of obesity on healthcare systems and improve resilience to disease outbreaks, we must address all barriers preventing effective support and management of obesity.

Weight bias, stigma and discrimination

Bias, stigma and discrimination have been identified as some of the major barriers to progress in obesity management.^{9,27} A 2018 survey of European General Practitioners (GPs) conducted by the European Association for the Study of Obesity (EASO) revealed that over a third of GPs felt their colleagues were biased against people living with visible signs of obesity and 55% said that biases and misconceptions around obesity are common among practitioners.³⁷ Another study done in the US showed that one in two physicians regard patients with visible signs of obesity as ‘awkward, unattractive, ugly and non-compliant’.³⁸

“The main challenge for obesity in my country is the stigmatisation. Everybody knows it, everybody sees it, but we need to work harder so that society understands it’s not a lifestyle issue.”

Melanie Bahlke - Patient from Germany

Weight bias amongst HCPs is impairing the care of people living with visible signs of with obesity for a number of reasons. Their prejudice is preventing them from having an emotional rapport with their patients, which, in turn, results in a lack of diagnosis, provision of support and effective weight management intervention.^{20,39} In addition, HCPs' behaviour and wider societal stigma prevents people living with visible signs of obesity from seeking help.^{9,27,39}

Research gaps

A recent research gap analysis conducted by the EASO highlighted that there is a lack of accurate data on obesity.³⁷ This is linked to the fact that most of the research does not engage with the science of obesity as the chronic disease that it is. There is an emphasis on the primary prevention of obesity in isolation, which neglects the necessary holistic approach. This trickles down to the way in which major research is conducted and results in factually incorrect data being disseminated within the academic and medical spheres.⁴⁰

Historically, BMI has been used to measure obesity at a population level and in studies.^{41,42} This means that most of the data available for obesity only applies to the patient population who are living with visible signs of obesity, and not those who are in remission. The focus on BMI therefore means research is not engaging fully with all stages of the disease continuum, which should be split into separate areas of focus so that a deeper understanding can be gained.⁴⁰

It is imperative that these research gaps are bridged to ensure data on obesity is accurate and enables key stakeholders to better direct resources and create policies that benefit people living with obesity across the disease continuum.

A review of existing strategies in line with the scientific evidence as well as the procurement of further research is needed so that obesity strategies can be better informed and tailored to the different root causes and disease profiles of obesity.

“When reflecting the science of obesity, firstly policymakers throughout the system need to have a better understanding on what obesity is. Obesity is not being addressed as a policy-prioritised non-communicable disease.”
Jacqueline Bowman-Busato, Policy Lead, EASO

Ways of diagnosing

Although there is a growing recognition and understanding of obesity as a chronic relapsing disease amongst clinicians, there is still a lack of education and information provided on obesity as a non-communicable disease (NCD).^{20,37,43} Many HCPs are ill-equipped to effectively communicate with patients and provide appropriate diagnoses. This is partly due to limited training. 43% of GPs in Europe receive none or less than four hours of training on obesity during their entire education, which typically takes around ten years.³⁷ This has relegated obesity to a secondary position in HCP education, despite it being linked to numerous medical conditions.¹⁷

There is a significant delay between people with obesity starting to struggle with their weight and having their first weight management conversation with an HCP.⁴⁴ The ACTION IO study found that only 39% of people with visible signs of obesity who had discussed their weight with their HCP had a follow up appointment scheduled, with referrals to specialists also being made infrequently.⁴⁴ When these important patient-HCP discussions do not take place, opportunities to explore a holistic approach are missed.



The most frequent methods for managing weight discussed between people living with visible signs of obesity and HCPs were general improvements in eating habits and general increases in physical activity level, with specific diet or exercise programmes, tracking, weight loss medications and bariatric surgery were less likely to have been discussed.⁴⁴

The BMI assessment tool is often used by physicians as a diagnostic tool vs a screening tool, which raises concern as BMI does not provide strong enough information about how a patient's weight is actually impacting their health.⁴⁵ It is a common scale used to calculate someone's height and weight ratio, although it does not accurately show someone's level of body fat.⁴² There are other factors which need to be considered for diagnosis, such as biological mechanisms to ensure patients receive individualised diagnosis which will improve their health.⁴⁰

We must drive more understanding and ensure optimised, evidence-based processes for diagnosis and beyond are adopted.

"I'm extremely hopeful about where we are right now. I think we are at this point in time where in the next couple of years we are going to see massive change when it comes to improving access to obesity care."

Joe Nadglowski, Patient from US

Lack of funding

Obesity is a gateway disease to a number of NCDs and currently a large proportion of healthcare funding is directed towards treating these complications such as type 2 diabetes, cardiovascular disease and cancers, all of which require a substantial level of care and medication.³¹ These complications have a tremendous impact on healthcare systems worldwide.³¹

The COVID-19 pandemic taught us the cost of being ill-prepared, but we are still missing significant uplift in political and philanthropic funding to deliver holistic strategies across our communities, healthcare systems and other relevant systems which are specifically targeted at obesity and that go beyond primary prevention.⁴⁶

Failure to adequately resource the obesity response now is a false economy: the OECD predicts that between

2020 and 2050, treating the consequences of obesity and overweight will on average require 8.4% of an OECD country's entire health budget.³¹

Tackling barriers to progress

Obesity is not a new health issue and many strategies exist, however, an optimised approach is urgently required. If the current trend continues, obesity and the substantial economic costs associated with it, will continue to rise and present an ever-increasing challenge to healthcare systems and societies.²

Securing prioritisation of obesity as a chronic disease

The World Health Organization classified obesity as a disease in 1948 and updated its definition as a chronic disease, with the European Union following suit in 2021.^{1,47} While scientific evidence confirms obesity is a chronic relapsing disease, to date the majority of national strategies, roadmaps and policy frameworks have mainly focused on obesity as a risk factor for other NCDs, such as diabetes, cancer and cardiovascular diseases, or nutrition and physical exercise as a key solution to prevent obesity.^{20,23} As a result, most NCD frameworks do not include or address obesity as an NCD, which results in a minority of people with obesity being diagnosed and fewer still having access to holistic and long-term support.²⁰

To ensure obesity is included and afforded the same level of urgency and resources as other NCDs, national stakeholders must advocate for the governmental and health system inclusion and prioritisation of obesity as a NCD in expanded NCD policy frameworks to secure the delivery of national plans, which enable the early diagnosis, treatment and long-term management of obesity.

Building health literacy

Current clinical practice and government policy have long been influenced by the predominant notion that obesity is all about weight and driven by individual behaviour.^{5,20,48} This understanding of obesity has had a significant impact on the frameworks and initiatives currently in place to manage obesity, which mainly focus on public health interventions enabling people to make healthier choices in respect to diet and



exercise.²³ This is despite scientific evidence and expert advice which recommends that a holistic, integrated approach is required to tackle the complex factors associated with obesity.¹⁹

Building public and political awareness of the complexities of obesity along the life course is key to combatting discrimination and misinformation and enabling more informed decision making on how to overcome current challenges and ensure people living with obesity have the support to manage their disease.⁵

There is a need to ensure the definition of obesity being a chronic relapsing disease as a gateway to other NCDs such as diabetes, cardiovascular diseases, and cancer is understood and accepted by the general public, policymakers and decision makers in order to inform meaningful and scientifically accurate interventions for people living with obesity.^{5,20}

Collaborations with media, thought leaders and creatives should be prioritised to strengthen the obesity community's capacity to tell the right stories and to do so powerfully and persuasively. With accurate messaging and people living with obesity at the centre of the narrative, government funding should also be provided to support the reframing of obesity and promoting disease awareness to relevant stakeholders.

Optimising prevention strategies^{5,48}

Aside from interventions in childhood obesity, many of the traditional and current programmes aiming to prevent obesity are lifestyle interventions which promote health and wellbeing and deliver improved population health in general, rather than prevent obesity. It is crucial that the difference between the benefits of broader health promotion and targeted obesity prevention is understood, thereby shifting

the mindset of those working in all relevant sectors including government, public health, education, primary and secondary care.

Obesity is a disease area where prevention efforts frequently lack the necessary evidence base, targeting or measurement to have a significant impact on people living with obesity. Diet is sometimes treated as the only root of obesity when biology, genetic risk, healthcare access, life events, marketing, mental health, sleep and stigma all have a bearing on obesity management. To support obesity prevention efforts, we also need national monitoring of obesity prevalence, monitoring of obesity drivers (such as inadequate access to healthy food or healthcare), and monitoring the impact of policies as they evolve (particularly in the wake of the pandemic). More evidence is required so that prevention efforts can be better informed and tailored to the different root causes and disease profiles of obesity in a whole-systems approach.

In tandem with gathering more evidence so that primary prevention efforts can go beyond the benefits of general health promotion, we also need to improve and upscale the use of secondary prevention to monitor the progression of obesity and affiliated chronic illnesses.⁴⁹ Once a person has obesity there are still many opportunities to prevent progression or relapse of the disease as well as related complications. Currently many opportunities are being missed, but more frequent and sophisticated monitoring of obesity indicators in patients should be used for effective and targeted prevention of disease progression and related complications.

Improving services

Poor knowledge among HCPs, poor patient-HCP communication and limited adoption of screening are just some of the components which affect obesity management.^{4,39} Many people living with obesity experience stigma and discrimination within healthcare settings, or services which are ill-equipped to accommodate their needs.²⁰

Using opportunities to educate HCPs on obesity, both those currently in practice as well as the HCPs of the future, will make a significant impact. But there are also many other ways that services for people living with obesity can be improved:

- Clear frameworks should be established for what success in services looks like
- Innovation within existing services and improved communication between different providers is essential to provide care for people living with obesity
- Mechanisms must be in place to ensure input at all stages of service development for people living with obesity
- A range of data must be collected, including metrics of success which go beyond weight loss alone

Summary of insights

The increase in the prevalence of obesity will continue to rise and pose a significant barrier to the health of global citizens and our wider economy, unless a truly collaborative multi-stakeholder approach is acted upon.

To date, preventative efforts to address the rising number of people living with obesity worldwide have often focussed on strategies promoting healthy choices, and less so on addressing obesity as a chronic relapsing disease. To minimise the social and economic impact of obesity, policies need to be established that focus on tackling all causes of obesity, whether they are physiological, environmental, behavioural or psychological.

More evidence is required so that obesity strategies can be better informed and tailored to the different root causes and disease profiles. In tandem with this, more frequent and sophisticated monitoring of indicators of obesity in patients should be used for the effective and targeted prevention of progression and relapse of obesity at an individual level.

Many people living with obesity experience stigma and discrimination within healthcare settings or services which are ill-equipped to accommodate their needs.

More general public and political awareness of the complexities of obesity will help combat this and enable more informed decision making for governments.

The number of people living with obesity is increasing across the world and the impact on healthcare systems is growing exponentially. Given the response to obesity has proven to be insufficient for the challenges we face, a full evaluation of existing strategies is needed, supported by initiating research that can form the strategies for the future.

For years there has been no denying the escalating impact obesity is having. What is now increasingly clear is that we lack tried-and-tested methods of addressing this issue and that only new and holistic approaches can hope to make a positive difference.

For this goal to be realised, the time to act is now.

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