The Lancet Commission – Redefining how we define obesity

Implications for clinical practice: a physician's perspective

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[] I have the following potential conflict(s) of interest to report:

- ➤ Novo Nordisk
 - ➤ ACTION Teens Steering Committee honoraria, travel support
 - >Speaker fees
- >Lilly
 - ➤ Advisory Committee honoraria, travel support



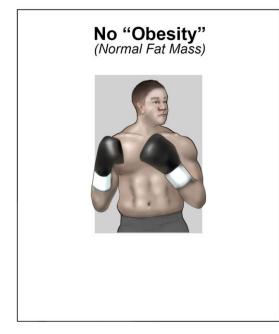
Implications for clinical assessment

Can I still use BMI to assess a person with obesity? Does it measure body fatness and risk?

Limitations of BMI-Based Definition of Obesity









- Yes, do measure BMI it is still a useful screening tool
- However, there are limitations to the <u>blanket</u> use of BMI to denote obesity
- → It is where assessment starts, not ends

Can I still use BMI to assess a person with obesity? Does it measure body fatness and risk?

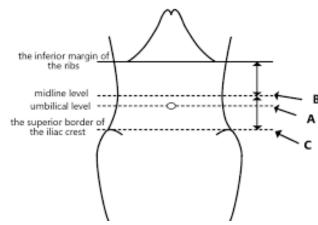
Supplement BMI with:

 An anthropometric measure of fat distribution eg waist, waist:height ratio

AND/OR

Where possible, a measure of body composition eg DXA

Where possible use validated methods and age-, gender- and ethnicity-appropriate cutoff points





Are there implications for other forms of assessment?

As always – history, examination & investigation are vital. The new Clinical Obesity criteria will clarify further.

What other health problems does your patient have?
What distinguishes the person who just has *high BMI* from the person with *clinical obesity*?



What are the different clinical approaches for these two people?

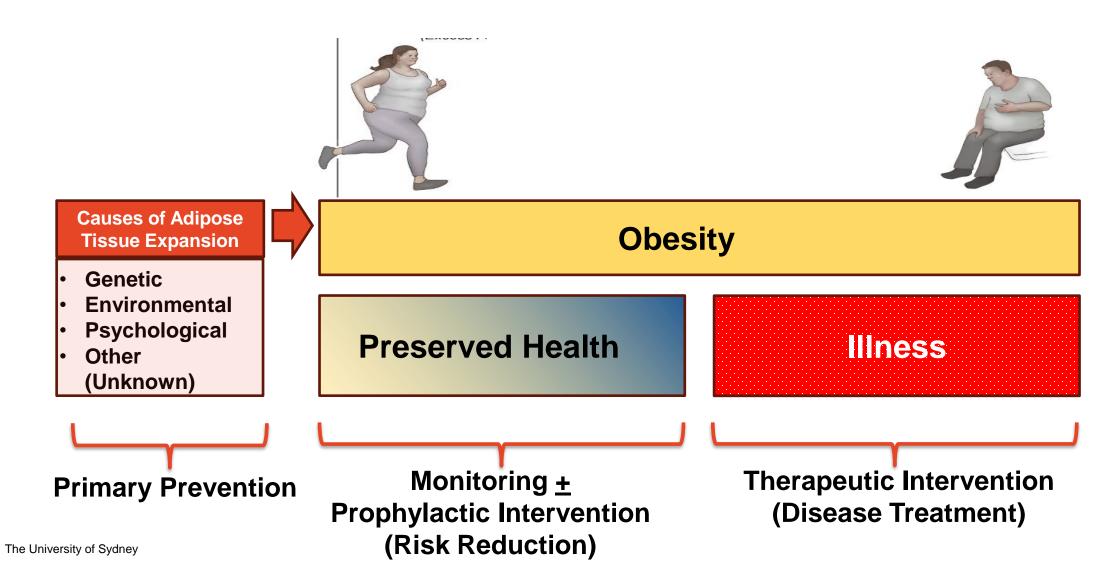
Excess body fat with no ongoing illness

Excess body fat with ongoing illness

Excess Adiposity Alterations of Alterations of Alterations of **End-Organ Pathophysiology** Cells & Tissue Organ Structure **Organ Function** Damage Minor or Absent Signs & Complications Clinical Alterations of Symptoms day-to-day (substantially preserved organ function) Manifestations activities Anthropometrics, Medical History, Review of Systems and Further Diagnostic Assessment as Needed Diagnosis

Implications for treatment?

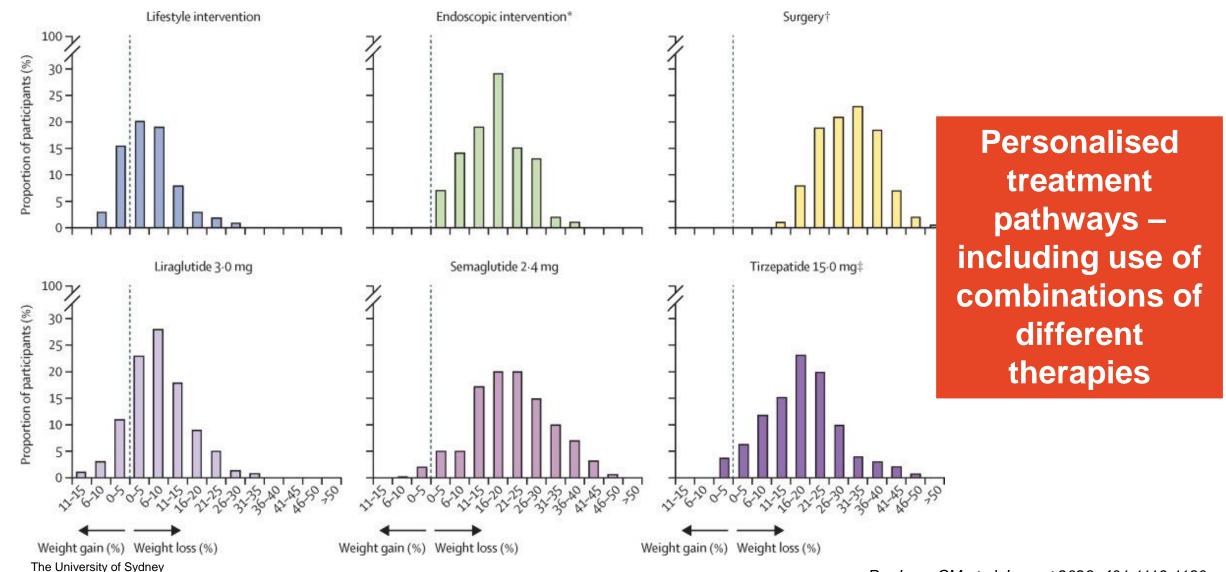
Scope of care in obesity: Primary prevention, risk reduction and disease treatment



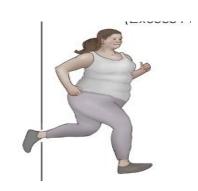
Those with obesity and ongoing illness

- Require timely access to comprehensive care and evidencebased treatments, and individualised decision-making
- Goals of therapy:
 - \rightarrow improvement or remission of clinical manifestations of obesity
 - \rightarrow prevention of progression to further complications or endorgan damage
- Different clinical manifestations of obesity may require different intensities of treatment and/ or weight reduction
- Clinical care has a corrective intent

Treatment options: Different mean weight loss at 12 months with different types of obesity treatment

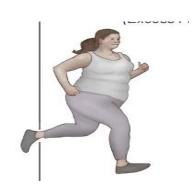


Those with high BMI but no, or minimal, associated health problems



- Have a variable level of health risk but with substantially preserved health at present
- Such people require individual risk/benefit assessment based upon:
 - Severity of excess or abnormal adiposity
 - Presence/ absence of other risk factors and co-existing diseases or disorders that will benefit from specific treatment
- Clinical care aims at risk reduction

Those with high BMI but no, or minimal, associated health problems



- In those with low risk for health problems
 - → Health counselling, reassurance may be sufficient
- In those with higher risk
 - → Other interventions may be warranted eg MAY benefit from pharmacotherapy or even surgery
 - ightarrow Generally requires less urgency and intensity of care than in those with clinical obesity

Some adolescent case examples

14 year old boy, BMI 39.9 kg/m², waist:height ratio 0.70 - Case 1

- Maori ethnic origin
- Strong family history of obesity & T2DM
- No evidence as yet! of cardiometabolic risk, OSA
- Good mental health, no experience of bullying
- Loves rugby training and games.
 Wants to "keep up with my mates" on the rugby field but knows he is not fit enough

Treatment approach

- Engagement of young person & family with multidisciplinary team
- Exercise scientist assessment gym & training plan given; liaised with coach
- Frequent dietetic review with the aim of helping him to be "match fit" and also decrease longer-term risk of T2DM
 - Opted for an intermittent energy restriction plan

A risk reduction approach

14 year old boy, BMI 39.9 kg/m², waist:height ratio 0.70 - Case 2

- Anglo-Australian ethnic origin
- Strong family history of T2DM & obesity (mother - sleeve gx)
- OSA: CPAP variably adherent
- Some depression, bullying at school, some school refusal
- Immersed in screens and gaming
- Acanthosis nigricans, abnormal LFTs, dyslipidaemia, no diabetes (as yet), c/o joint pains
- Limping

Treatment approach

- Engagement of young person & family with multidisciplinary team
- SCFE diagnosed orthopaedic Sx, with rehab to increase mobility
- Clinical psychology review/ support for depression
- School liaison; clinical teams liaison
- Frequent dietetic review
- Commenced on semaglutide (off-label, provided by hospital)
- May be a candidate for MBS in the future

A corrective approach

Redefining treatment outcomes in obesity

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Causes of adipose tissue expansion

Genetic
Environmental
Psychological
Other
(Unknown)

Causes of adipose tissue expansion

Obesity

Risk to health

Prevention of excess adiposity

Weight loss

Improvement / Remission of clinical manifestations

Illness

Prevention complications/ End-organ damage

Summary

Summary

- People with confirmed excess obesity should be assessed for health problems to rule out clinical obesity
- Goals of treatment improvement or remission of the clinical manifestations of obesity and prevention of progression to further complications
- Intervention principles require an individual risk/benefit
 assessment; should aim to improve clinical manifestations of
 obesity and quality of life, or reduce risk of disease progression/
 mortality

Thank you!