GPs at the Deep End

Pioneer Scheme Day-release programme

Wednesday 7th March 2018

Horselethill Road, Glasgow

Adult obesity in the Deep End

With Dr David Blane

IN ATTENDANCE

David Blane; Fellows Lisa Robins, Katie Fleming, Noy Basu; David McMahon; Laura Johnston

Epidemiology

Obesity is an increasing problem in the population with Scotland seeing a higher prevalence than the rest of the UK. Obesity is seen at higher rates in more deprived populations in both men and women. Children are twice as likely to be obese in the most deprived areas. The higher the BMI, the higher the risk of mortality. There are other medical conditions associated with raised BMI as the following table shows.

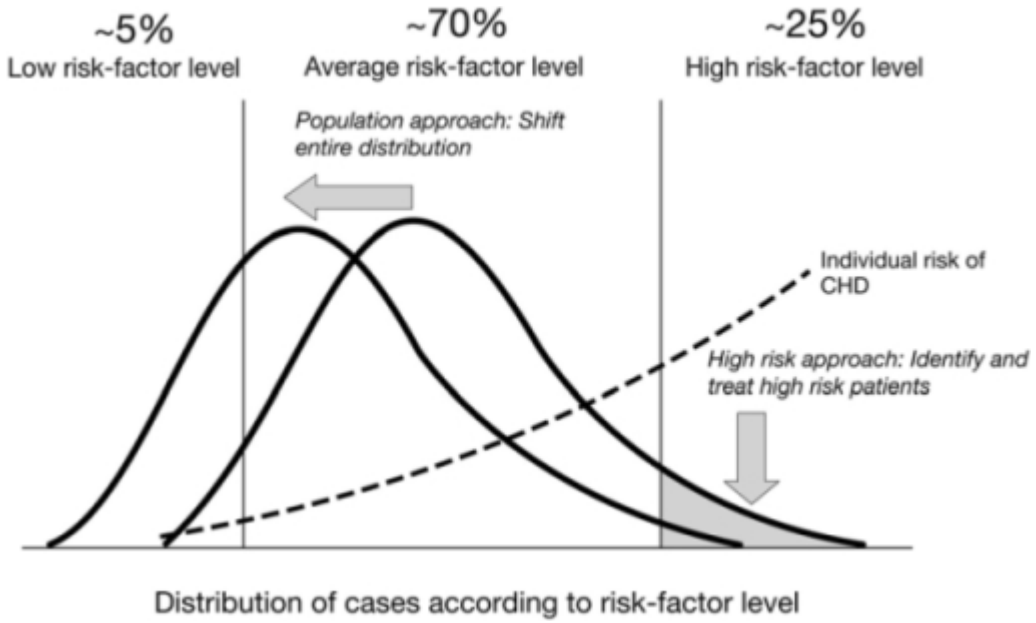
Greatly increased risk (relative risk>3) • Diabetes • Hypertension • Dyslipidaemia • Breathlessness • Sleep apnoea • Gallbladder disease
Moderately increased risk (relative risk 2-3) • Coronary heart disease or heart failure • OA (knees) • Gout and hyperuricaemia • Complications of pregnancy (ie pre-eclampisa)
Increased risk (relative risk 1-2) • Cancer (although cervical, uterine and kidney cancer have higher rates) • Impaired fertility/PCOS • Low back pain • Increased anaesthetic risk • Foetal defects arising from maternal obesity

The highest correlation is with T2DM, the average BMI at diagnosis is 31.8 and 33.7 in men and women respectively. T2DM prevalence in Scotland has increased year on year with over 250,000 people living with this condition in 2012, up from just over 100,000 in 2001.

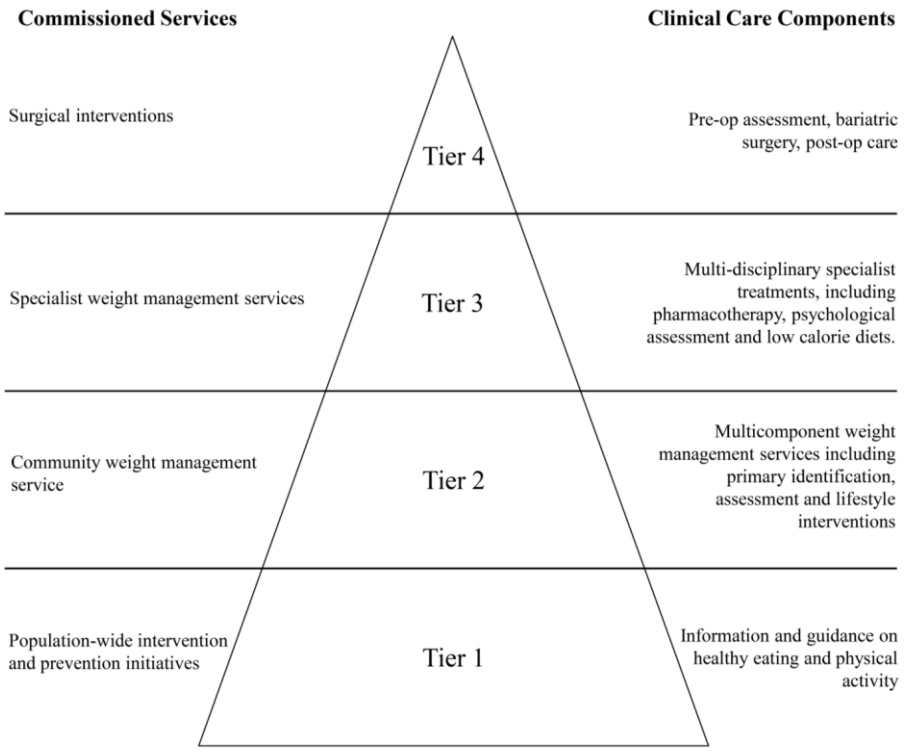
The estimated cost of obesity to NHS Scotland was £175million in 2007-8 around 2% of the total NHS budget. Employment rates in those with a BMI >30 are 25% lower. 4% of incapacity benefits are directly related to obesity and there is a 51% increased sickness absence rate in those with a BMI >30. The cost of obesity to the NHS is estimated to be £0.5 billion with the cost to Scottish society estimated to be around £3billion by 2030.

Obesity treatment and prevention

As with other risk factors for non-communicable disease (e.g. smoking, alcohol, blood pressure), it is more effective to use a population approach than a 'high risk' approach. In practice, however, a combination of both approaches is used.



At present the treatment of obesity is managed on a 4 tier approach.



Weight management interventions include diet, physical activity and behaviour change:

- Diet: 600 kcal deficit; higher protein/lower carb = better adherence (NEJM 2010)
- Physical activity: 45-60 mins moderate intensity/day equating to ~2000kcal/week
- Behaviour change: self monitoring; stimulus control; goal setting; relapse prevention

Current SIGN guidelines 115 state:

- Weight loss should be based on the individuals co-morbidities and risks rather than weight alone
- Tier 2 services
    - Patients with BMI 25-35 obesity related co-morbidities are less likely to be present
    - 5-10% weight loss (approx 5-10kg) is required for CVD and metabolic risk reduction
- Tier 3/4 services
    - Patients with BMI >35 are more likely to have obesity related co-morbidities
    - Weight loss interventions should be targeted to improving these co-morbidities
    - In many individuals a >15-20% weight loss (will always be >10kg) will be required to obtain a sustained improvement in co-morbidity

Greater Glasgow and Clyde Weight Management Services (GCWMS)

Set up in 2004, the GCWMS has undergone considerable re-structuring in recent years, with changes in service delivery (Weight Watchers now used for Tier 2) and eligibility criteria. The reforms were influenced by a national drive to increase the number of bariatric surgeries performed in each Health Board, and to rationalise the referral pathways to bariatric surgery.

Community Weight Management (Tier 2) – for lower BMI/less complex

- Weight Watchers (WW)
    - 12 week free membership of WW
    - 16 week free online access to WW tools
- Patient responsibilities
    - Attend 12/16 WW meetings
    - Stay for meetings
    - Follow plan
- Successful patient eligible for further 12 week block
    - Attend 12/16 sessions
    - Lose ≥5kg

Specialist GCWMS (Tier 3) – for higher BMI/more complex

- Patients with higher BMIs and more complex co-morbidities
- GCWMS helps patients:
    - Set realistic weight loss goals
    - Maintain weight over time
    - Address psychological and physical barriers
- Additional interventions considered where appropriate
    - Specialised liquid diet
    - Medication
    - Surgery

Patients are now able to refer themselves to GCWMS by calling 0141 2113379 (Mon-Fri between 8am-4pm) however there are different criteria for self-referral and practitioner referral.

Primary Care Referral Criteria	
BMI	**+one or more of following criteria**
≥25 (22.5)*	IFG/IGT/High risk of T2DM T2DM
≥30 (27.5)*	T1DM T2DM Existing CVD Mobility issues Weight loss required pre-surgery
≥40	No co-morbidity required
≥180kg	No co-morbidity required
Self Referral Criteria	
BMI	**+one or more of following criteria**
≥25 (22.5)*	T2DM
≥30 (27.5)*	Any diabetes CVD Stroke
Secondary Care Referral Criteria	
BMI	**+one or more of following criteria**
≥30 (27.5)*	Sleep apnoea NAFLD Psoriasis Renal CKD4+ Hypertension

*Patients with South Asian/Chinese/Middle Eastern ethnicity have a lower BMI threshold

Problems with GCWMS

The service has historically had a low referral and poor attendance rate. In Scotland services are currently under-resourced, under-evaluated, patchy and communicate poorly with primary care. A study was done of the GCWMS in 2008/9 which showed that of the 6505 patients referred into the service, 5637 were eligible, 3460 opted in, 1916 attended the first session and only 1322 completed >4 sessions giving a completion rate of 36% with only 26% of those who started losing ≥5kg. The service is being under utilised by patients who are diabetic also. There are approx 52,000 patients in GG&C with T2DM, 86% are overweight and 54% are obese. Only 11% of patients referred to GCWMS had diabetes and 20% of those who attended one session were diabetic. Therefore 98% of patients in GG&C with T2DM are either not being referred or not choosing to attend the service.

Why is referral and attendance rate so low?

There is no “one-size fits all” approach to treating people with obesity. The population is heterogeneous and covers many diverse groups for example:

- Heavy drinking males
- Young healthy females
- Affluent healthy elderly
- Physically sick but happy elderly
- Unhappy and anxious middle aged

- Poorest health
- TOFI – thin on the outside fat on the inside
- MHO – metabolically health obesity

Services must be acceptable to this diverse population of potential users.

Qualitative research has identified patient and practitioner barriers to accessing GCWMS:

- Patients
    - Location of classes
    - Timing of classes
    - Lack of awareness of referral
    - Delay between referral-assessment-classes
    - Lack of cultural awareness
- Practitioners
    - Lack of awareness of nearest centre
    - Lack of confidence in service
    - Lack of knowledge of what service involves
    - Opt-in process felt to be a barrier
    - PNs better places to discuss weight than GPs

Suggestions for change to improve services include: more flexible hours, better advertising of the service, grouping patients according to weight, more culturally sensitive materials, e.g. recipes for different ethnic groups, and ongoing support, e.g. drop in clinics.

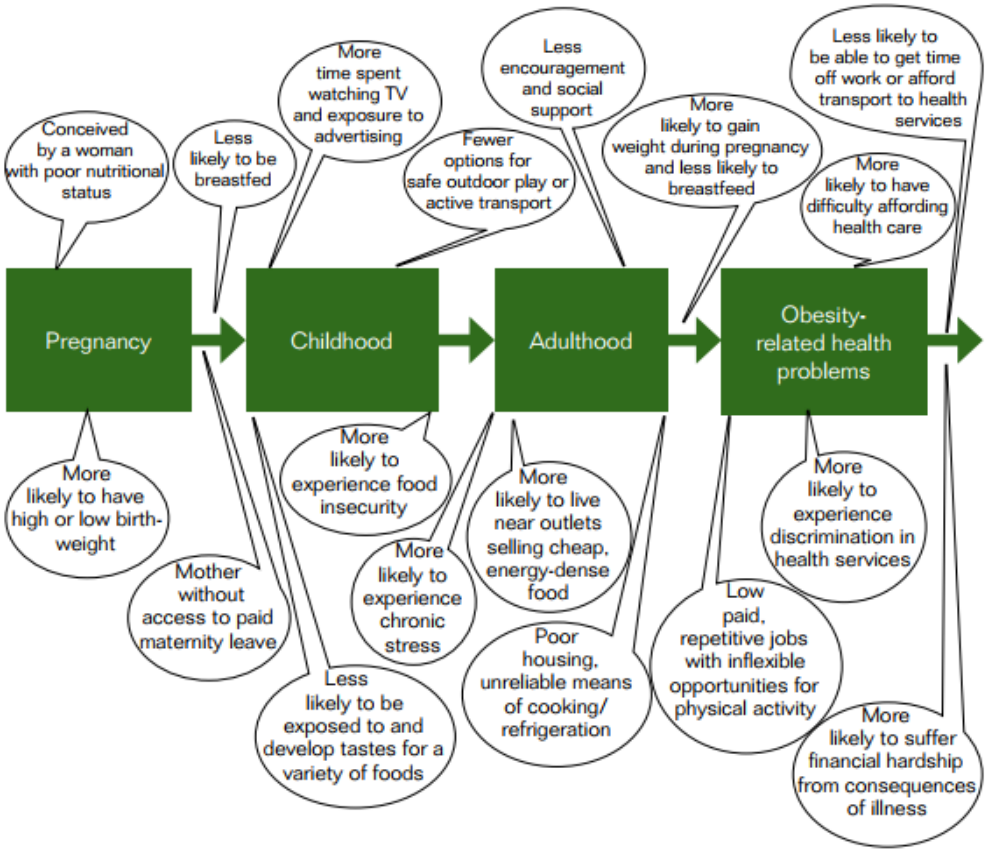
GPs at times feel that PNs are better placed to discuss weight. RCGP has provided a document for GPs with ten top tips for raising the subject of weight that can be found here.

Obesity in the Deep End

The relationship between obesity and socioeconomic circumstances is complex, with different influences at the indvidual, community and societal levels.

- Individual level (Education, Employment and Income)
    - Influence access to health information and the ability to act on it
    - Direct access to healthier food options and less food insecurity
    - Access to aids and opportunities for physical activity
    - Locus of control and fatalism
    - More reason to focus on the present in decision making
- Community level
    - Poorer access (real or perceived) to recreational facilities
    - Higher density of fast food outlets
    - Influence of social networks:
        - Soical support
        - Social capital
        - Social selection
- Societal level
    - Advertising of high fat, salt and sugar (HFSS) foods
    - Build environment
    - Weight stigma and discrimination
    - Access to NHS weight management services

Similarly, there are different exposures, strengths and vulnerabilities at different stages in the life course, as illustrated in the figure below, from a WHO report.



Government Policy to Tackle Obesity in Scotland

In 2017 the Scottish Government produced a policy document called 'Improving Scotland's Health, A Healthier Future – Action and Ambitions on Diet, Activity and Healthy Weight'

The Diet and Obesity strategy takes an ambitious population approach to obesity, proposing:

- Action on price promotions of junk food
- Action on junk food advertising
- Action on food purchases for consumption outside the home
- Investment to support people with T2DM to lose weight
- Preventative services including information, advice and support for children and families on healthy eating
- Practical support for small and medium sized food manufacturers to reformulate and develop healthier products
- Opportunities for people to be more active
- Working with the public sector and a wide range of partners to support local improvement work on diet and weight

There is a strong emphasis on the early years and on making changes to the so-called "obesogenic environment". The strategy has cross-party support, but will require multi-sectoral collaboration (including local and national government, industry, third sector, individuals) to fulfil its ambitions. It is important that the strategy's impact on health inequalities is monitored too.