Developing a new treatment approach to binge eating and weight management

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www.nhsggc.org.uk/gcwms

Health and Social Care Information Centre,
The Times, 21st February 2013
Glasgow Drivers

1 in 4 Obese
2008, Route Map

£175 mill (2%)
2007/2008

£49.9 billion
2050
Foresight, 2008

Clear Pathway
To establish a weight management pathway of care, from prevention through to the management of morbid obesity, which is evidence based and equitable across NHS GGC Board

- offer consistent treatment approaches
- optimise current resources
- provide a clear referral route
- ensure the appropriate use of drugs and surgical interventions

A healthier weight through lasting lifestyle changes
The Evidence Base

SIGN: 08, 1996
SIGN: 115, 2010
Management of Obesity

NICE Clinical Guideline 43, 2006

Review of Bariatric Surgical Services in Scotland 2005

The Scottish Government
GCWMS Whole System Approach

- **BMI Range**
  - >35 or >30 with comorbidities
  - 25-35
  - 18.5-24.9

- **Surgery**
- **GCWMS**
- **Local authority, Commercial sector, Voluntary sector**
- **Prevention approaches using population based strategies & resources**
Aims of Integrated Psychology Service

• **Improve treatment outcomes** *(adherence to diet & activity changes required for weight management)*

• **To alleviate psychological distress interfering with obesity treatment** *(e.g. disordered eating; low self esteem; body image distress)*

• **Improve delivery of healthcare** *(reduce inappropriate uptake of treatment e.g. re-route clients to appropriate services; consider ‘readiness to change’)*

• **Lead, train & support other health professionals** *(in the use of psychological approaches)*

Glasgow & Clyde Weight Management Service
Developing a new treatment approach to binge eating and weight management

GCWMS
Disordered Eating Group
Binge Eating Disorder DSM-IV

• Recurrent episodes of binge eating

• Binge eating episode:
  ➢ Eating in a discrete period of time an amount of food that is definitely larger than most people would eat in a similar period of time in similar circumstances
  ➢ A sense of lack of control over eating during the episode

• The binge eating episodes are associated with at least three of the following:
  • Eating more rapidly than normal
  • Eating until feeling uncomfortably full
  • Eating large amounts of food when not physically hungry
  • Eating alone because of being embarrassed by how much one is eating
  • Feeling disgusted with oneself, depressed, or guilty after overeating.

• Marked distress regarding binge eating

• The binge eating occurs, on average at least 2 days a week for six months.

• The binge eating is not associated with regular use of inappropriate compensatory behaviours and does not occur exclusively during the course of anorexia nervosa or bulimia nervosa.
Binge Eating Disorder

• Frequent weight fluctuations

• Childhood weight gain

• Higher levels of psychological co-morbidity compared to those without BED

• Female

• BMI $>40$ Kg/m$^2$  
  
Yanovski, 1993, Friedman & Brownell, 2002

A healthier weight through lasting lifestyle changes
Prevalence of BED

• General population: 3%  
  (Hudson et al 2007)

• Obese population: 10%
• Treatment seeking obese population: 30%  
  (Blaine & Rodman, 2007)

• Half of outpatient diagnoses  
  (Fairburn et al, 2009)
Clinical Experience

- Other individuals present with sub-clinical disordered eating requiring psychological intervention:
  - compulsive eating
  - using food as an emotional coping strategy
  - dysfunctional eating patterns
Weight Loss Interventions & BED

• Matched study meta-analysis, obese patients with BED lost 2% of body weight compared with 11% in non-BED participants
  (Blaine and Rodman, 2007)

• Presence of disordered eating may reduce motivation and adherence to treatment
  (Hainer et al., 2005)
• Systematic review of 7 RCTs comparing individual and group interventions in patients with BED, found CBT was effective in reducing binge eating and improving abstinence, but does not lead to weight loss.

  (Brownley, 2007, Wilson, 2010)

• The effectiveness of CBT in reducing binge frequency but without influencing weight loss was also confirmed in an RCT with two years follow up.

  (Devlin et al., 2005)
BED and Mood

- Increased levels of depression are seen in adults with severe obesity (BMI > 40kg/m$^2$) and obese adults with BED.
  
  (Onyike et al, 2003)

- Increased rates of anxiety and lower levels of self esteem are also observed in obese adults with BED compared to non bingeing obese adults.
  
  (Jirik-Bibb and Geliebter, 2003)

- In addition to the above BED is also associated with guilt and shame.
  
  (APA, 2000)
Predictors of Outcome

• Baseline high level of negative affect lead to less weight loss.

• Increased severity of disordered eating is observed in people with higher negative affect and increased psychiatric co-morbidities.

• Lifetime history of depression predicted less remission from binge eating behaviours.

(Wilson et al, 2010)
Psychological Treatment

- Guided Self Help
- CBT-E Fairburn, 2008, 2009
- Interpersonal Therapy
  Wilson et al, 2010
- Mindfulness
- Compassion Focussed Therapy

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DEG Model

• Integrate CBT for BED within an evidence based, multi component lifestyle intervention program.

• Address disordered eating and encourage weight loss and weight maintenance.

• Beneficial & supportive for clients

• Research in this area limited

A healthier weight through lasting lifestyle changes
DEG Structure

• 11 sessions
• 2 hours per session
• Fortnightly
• Delivered by a clinical psychologist and assistant
• Successful pilot study N=10

www.nhsggc.org.uk/gcwms
DEG Overview

CBT Model
Psychoeducation re dieting
Taking control of eating
Self Monitoring
Motivation
Goal setting
Regular eating
Cravings

Changing habits
Problem Solving
Mindful Eating
Emotional Eating
Body Image
Self Esteem
Being assertive
Relapse prevention

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Measures

- **Questionnaire on Eating and Weight Patterns-Revised**
  - Presence & Frequency of binge eating
  - Control over eating
  - Eating related distress
  - Body shape and weight concerns

- Psychometrically sound
- Categorical data

- **Hospital Anxiety and Depression Scale**
  - Widely used self rating scale
  - Psychometrically sound

Spitzer, Yanovski & Marcus, 1994
Zigmond & Snaith, 1983
Outcomes
## Demographics

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<th>mean</th>
<th>sd</th>
<th>median</th>
<th>range</th>
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<td>121.68</td>
<td>23.19</td>
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<td>82.40-208</td>
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Change in BED

McNemar: $x^2 = 17.93$, df=1, $p<0.001$, N=58
Change in Binge Frequency

Stopped
Reduced
Stable
Increased

N = 62
# Eating Related Distress

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<td>Mean (SD)</td>
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<td>Distress</td>
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<td>4.17 (0.82)</td>
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<tr>
<td>Control</td>
<td>47</td>
<td>4.23 (0.81)</td>
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<tr>
<td>Body Image</td>
<td>56</td>
<td>3.50 (0.76)</td>
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# HADS Scores Pre and Post Intervention

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<th>median</th>
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<td>pre*</td>
<td>post*</td>
<td>change</td>
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<tr>
<td>Anxiety</td>
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<td>13</td>
<td>10</td>
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<td>1, 2.50</td>
<td>&lt;0.001</td>
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<td></td>
<td></td>
<td>(3-21)</td>
<td>(2-20)</td>
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<tr>
<td>Depression</td>
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<td>7</td>
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<td>(1-19)</td>
<td>(0-18)</td>
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<td>3.50</td>
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Statistics for completers who had baseline values (per protocol analysis)

* Median (Range)
## Change in Weight

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<td><strong>Mean</strong></td>
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<tr>
<td><strong>Median</strong></td>
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<td><strong>Std. Deviation</strong></td>
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<td><strong>Percentiles</strong></td>
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<tr>
<td>25</td>
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<tr>
<td>50</td>
<td>2.20</td>
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Glasgow & Clyde Weight Management Service

- 2006/7: 1 in 3
- 2012: 1 in 2
- vs 2006/7: 1 in 4
Summary

• Successful BED treatment

• Improvements in mood, self esteem, body image

• Successful weight loss

• Efficient

• Initial Follow Up
  • Retaining clients through the next step of the program
  • ‘Catching up’ with standard group outcomes
  • Indicates this group are ready to focus on weight loss

www.nhsggc.org.uk/gcwms
Glasgow & Clyde Weight Management Service

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Glasgow & Clyde Weight Management Service
Background Information


www.nhsggc.co.uk/gcwms
References


