Effectiveness of Multidisciplinary Outpatient Approach in the Management of Paediatric Obesity  
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Background
- A meta-analysis of 39 studies using multicomponent lifestyle interventions compared to standard, minimal or no treatment identified a mean difference in BMI z-score of -0.12 (95% CI -0.17 to -0.06) at 6 months1
- A minimum BMI-SDS reduction of 0.25 or greater improves metabolic health in overweight children2
- We share our experience at a multidisciplinary Tier 3 paediatric obesity clinic

Materials and methods
- Retrospective case record review of new patients seen on two or more occasions in a tier 3 obesity clinic from October 2017 to September 2018.
- The tier 3 set-up included a specialist nurse, paediatric psychologist and social worker in addition to medical staff and dietitian

Total no of new patients seen in one year = 44
No of cases selected = 26 (seen on two or more occasions)
M:F = 16:10, Mean age of presentation 11yrs (4-16 yrs)

First clinical visit
Clinical history, examination, investigations, BMI SDS, risk factors assessment

Detailed Assessment by extended team
Dietary, Behavioural, Biopsychosocial

- Issues addressed directly by the extended team
- Emphasis on family education regarding diet, physical activity and lifestyle choices
- Simple, achievable and sustainable lifestyle changes and targets suggested
- Targets gradually revised until they became a part of daily lifestyle.
- No one member of the team leads, all contribute equally, but with each family one or two members may become predominant

Subsequent clinical visits (mean follow up interval= 6 months)
Clinical review, BMI SDS

Results
- The mean BMI SDS on follow-up was 3.14, showing a 0.27 reduction (95% CI -0.478 to -0.064) (Fig2)
- Follow up BMI SDS dropped in 20 children (77%), remained the same in one (4%) and increased in five children (19%) (Fig 1)

Conclusions
- Extra personnel enabling a whole-systems approach to weight management with realistic goal setting achieved a mean BMI SDS improvement of -0.27 at six months, improving on a recent meta-analysis of trials (-0.12)
- Continuing efforts and further innovative strategies need to be identified to further improve and maintain the outcomes

References