



Effectiveness of Multidisciplinary Outpatient Approach in the Management of Paediatric Obesity

Ruma Deshpande¹, Shelley Easter¹, Claire Semple¹, Melanie Wenn¹, Sarah Luther¹, Rhian Augustus¹, Julian Hamilton-Shield^{2,1}, Dinesh Giri¹

¹Department of Paediatric Endocrinology, Bristol Royal Hospital for Children, Bristol, United Kingdom ²Bristol NIHR Biomedical Research Unit (Nutrition theme), University of Bristol, Bristol, United Kingdom

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

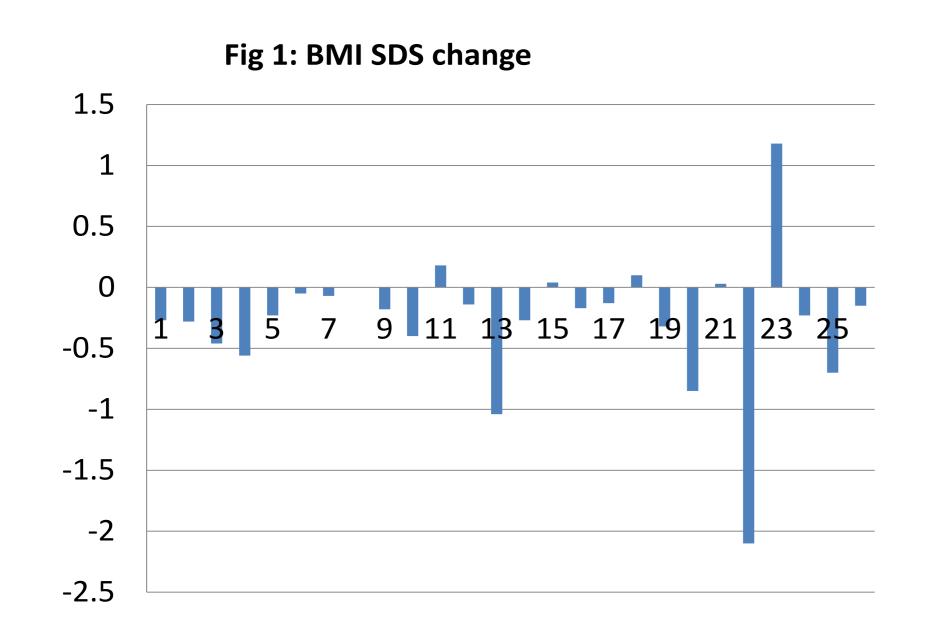
Dietary, Behavioural, Biopsychosocial

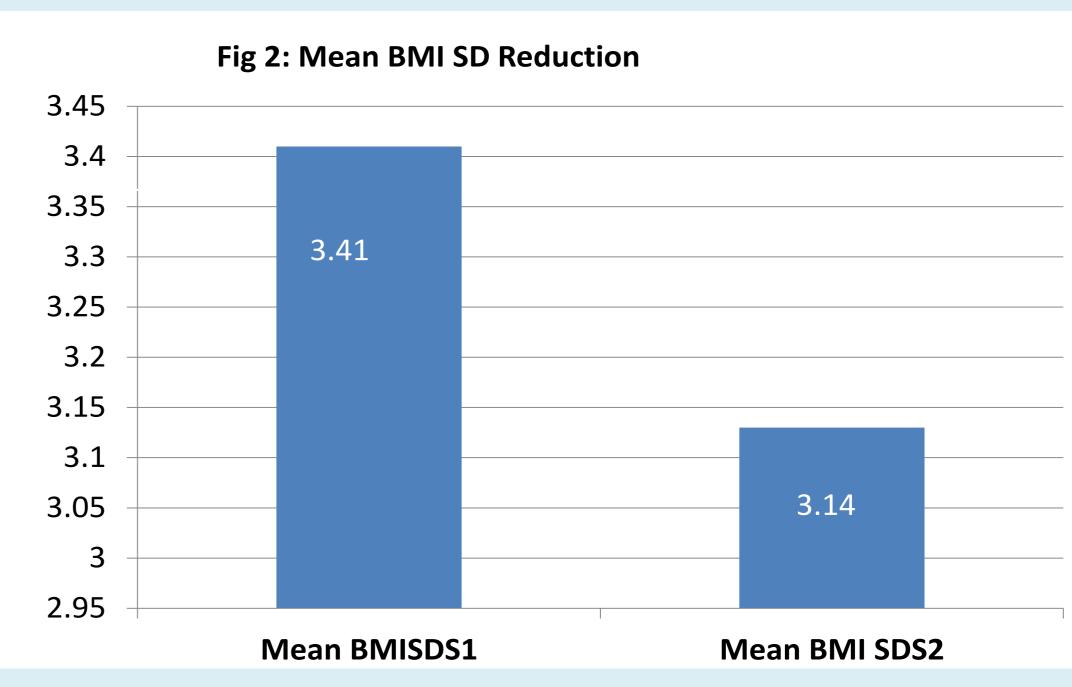
- Issues addressed directly by the extended team
- Emphasis on family education regarding diet, physical activity and lifestyle choices
- Simple, achievable and sustainable lifestyle changes and targets suggested
- Targets gradually revised until they became a part of daily lifestyle.
- No one member 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

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- 2. Ford A.L., Hunt L.P., Cooper A., Shield J.P. What reduction in BMI-SDS is required in obese adolescents to improve body composition and cardiometabolic health? Arch. Dis. Child. 2010;95:256–261







