T2:PS:59

Getting the balance right – a pragmatic community intervention programme for overweight/obese children in Gateshead.

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Aims: In Gateshead, a quarter of 10-11-year olds are overweight or obese. Getting the Balance Right is a holistic intervention aimed at tackling this problem in school aged children, specifically, aiming to improve Body Mass Index (BMI) in children completing the pathway of care for a twelve month period.

Methods: After inter-disciplinary consultation, between health, social services and leisure services locally, a pathway of care was developed to identify and assess children who were overweight or obese. Personalised programmes of nutritional and behavioural advice and physical activity were offered to children and families. School health advisors or dieticians did initial assessments; paediatricians reviewed children thought to have underlying medical conditions and all children received coaching by a trained leisure worker. All data are quoted as means. BMI adult equivalent (Adeq) and BMI standard deviation scores (SDSs) are given.

Results: Over 30 months, 231 children with a BMI_Adeq of 28.9±5.8 and BMI_SDS of 3.0±0.7 entered the programme. One hundred and seventy-five (11.4±3.3 years, 59% female and 78% obese) attended four dietician appointment over 6.6±3.1 months and BMI_Adeq decreased by 0.9±1.7 and BMI_SDS by 0.14±0.25 (both p<0.0001). A significant decrease in BMI was maintained and 20 children, who still had not been discharged from dietician review, attended their ninth appointment at 14.9±3.6 months, when BMI_Adeq had decreased by 1.8±3.1 and BMI_SDS by 0.27±0.44 (p<0.01).

Conclusion: Our pragmatic intervention was a partnership between the PCT, Hospital Foundation Trust and the council. It has uniquely produced a sustained and significant improvement in BMI in a large cohort. The results compare favourably with other shorter, smaller-scale interventions and other community projects. Our approach could be used in other areas as a strategy to combat the rise in childhood-obesity.

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Obesity and chronic kidney disease incidence in adult women: Tehran Lipid and Glucose Study

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Background: Epidemiological data comparing different aspects of obesity in predicting CKD in a cohort are limited.

Objective: We examined the association between BMI and CKD incidence and compared it with other anthropometrical measurements to define best predictor of CKD in women.

Methods: In this population-based cohort study, a representative sample of 2498 women, older than 18 years of age, free of CKD at baseline, were followed for 3.5 years. We estimated GFR by using the abbreviated equation from the Modification of Diet in Renal Disease Study and defined CKD as GFR less than 60 mL/min/1.73m2. Multivariate logistic regression was used to examine the relation between the baseline anthropometrical measures and CKD incidence.

Results: Mean BMI of our participants at baseline was 27±5kg/m2. After 3.5 years CKD developed in 148 (5.5%) of participants. Higher baseline BMI was associated consistently with increased incidence of CKD. The incidence of CKD in normal BMI (≤25), overweight (25.1to 30) and obese (≥31.1 kg/m²), were 3.2±1.8, and 10.8±%respectively. The crude ORs for having CKD across normal, overweight and obese women categories were 1.00 (reference),2.67 (1.71-4.17) and 3.66 (2.34-5.78), respectively, (p for trend<0.01). After adjustment for age, smoking, baseline blood pressure, baseline diabetes, change in BMI, waist and WHR, the odds ratios for CKD incidence were 1.00 (reference), 1.68 (0.95-2.96) and 1.75 (0.86-3.57), respectively; (P for trend<0.05). Waist and WHR were excluded from the model. Similar results were noted after exclusion of participants with baseline diabetes mellitus.

Conclusion: BMI but not waist and WHR, is an independent, strong, and potentially modifiable risk factor for CKD in women. Weight loss might represent a novel intervention to reduce risk of CKD development and progression.

T2:PS:62

A randomized controlled trial on the effect of dietary advice on gestational weight gain in obese pregnant women: preliminary results

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Maternal obesity is a major risk factor for obstetric complications including gestational diabetes, hypertensive complications and operative delivery. Excessive gestational weight gain (GWG) further increases these risks. The optimal follow-up to reduce GWG in these patients is not known. We therefore randomised obese pregnant women (age 29 ± 4 years; BMI: 33.5 ± 4.01 g/m2) in 2 intervention groups: one group receiving nutritional advice through a purpose-designed brochure (A) and one group additionally receiving active lifestyle education (B). The hypothesis is that nutritional advice through a brochure or active education results in reduced GWG. Nutritional habits were evaluated every trimester by means of three 7-day food records and compared with a control group (C).

Preliminary results in obtained in 99 obese pregnant women demonstrate that dietary habits at the start of the study did not reach recommended values, but were comparable between the groups. After the intervention, total energy intake was lower in groups A and B than in the controls (p=0.033). This effect was mainly due to a decreased fat intake in the 2 intervention groups versus control group (p=0.008). There were no significant differences in mean (SD) GWG between the three groups (11±7 vs 10±6 vs 10±7 kg). Birth weight of the babies was comparable. These preliminary results show that nutritional advice improves dietary habits of obese women (reduced energy and fat intake), but had no significant effect on GWG or birth weight.