

Community Programs

Final Report: Executive Summary. December 2010.

Concern over the prevalence of overweight and obesity in children has resulted in the emergence of community-based obesity prevention initiatives. SA Health funded the *eat well be active* Community Programs (*ewba*) as a demonstration project of such an approach.

The aim of *ewba* was to contribute to the healthy weight of children and young people (0-18 years) in two geographically defined communities. The metropolitan suburb of Morphett Vale and the rural city of Murray Bridge were selected for a community development approach to promote healthy eating (HE) and physical activity (PA) in multiple settings, using a range of strategies.

A comprehensive evaluation, including a mix of quantitative and qualitative methods, was used to measure processes, impacts and outcomes. As part of the quantitative evaluation, a quasi-experimental design involving repeat (2006 & 2009) cross-sectional data collection of intervention (INT) and comparison (COMP) sites was conducted. The key findings from both quantitative and qualitative data sources were:

EARLY CHILDHOOD

Marked improvements were observed in **preschool children's weight status** in the *ewba* sites. The prevalence of overweight and obesity reduced significantly (sig) by -6.3% in INT compared to -3.7% in COMP.

Surveys of early childhood settings revealed the following improvements in INT vs COMP in the following environments:

POLICY

- Higher uptake of HE policy was reported and more policy items met completely in preschools
- Higher uptake of PA policy was reported and more policy items met completely in Long Day Care (LDC) centres and preschools
- Improved space/equipment for active play in Family Day Care (FDC) and preschools
- Greater number of breastfeeding friendly environments in LDCs and preschools

FINANCIAL

- Greater use of fruit & vegetables for fundraising in LDCs and preschools

SOCIOCULTURAL

- Greater child food preparation in LDCs
- More links to others re HE and PA in LDCs
- Approaches to promote PA were maintained
- Improved attitudes to HE and PA
- Higher uptake of HE professional development

Interviews with INT early childhood stakeholders emphasised the significant uptake of a range of strategies in *ewba* sites and engagement in 'holistic' approaches. Examples were given where HE and PA were embedded into daily practice and impacted the physical environment. Sites had effective reach to children and parents through frequent contact, communications and provision of resources and programs. Stakeholders and parents reported that families had become accustomed to the new policies and practices. Directors and workers were confident role-models and advocates for HE and PA. Local networks had been established through the *ewba* local action group, which facilitated relevant action in sites and maintained motivation.

PRIMARY SCHOOL

The prevalence of overweight and obesity (in 10 to 12 year olds) reduced in both INT and COMP (not significant, NS). **Waist circumference and waist z-score** decreased more in INT than COMP, although this difference was not significant. As waist girth is a strong predictor of cardio-metabolic health, the larger reduction in INT sites underscores the important public health impact of *ewba*. Larger improvements were observed among those most overweight (those with higher BMI and waist z-scores) in *ewba* INT sites.

As reported, **supportive school environment** for PA increased sig. in INT, compared to a decrease in COMP. This was reported particularly by girls.

Very few changes were observed in student behaviours, attitudes and knowledge, which is likely due to lack of sensitivity in measurement methods. However, energy expenditure decreased significantly in COMP boys vs. no significant change in INT boys, indicating maintenance in *ewba* sites.

Among **TEACHERS**, improvements (sig. unless stated otherwise) in INT vs COMP were:

STUDENT EXPOSURE/CLASS ENVIRONMENT:

- Exposure to fruit & veg (e.g. fruit, veg & water breaks; fruit & veg cooking/tasting)
- Encouragement of water bottles in class
- Exposure to PA (curriculum, PA during class and homework, etc.) (NS)

TEACHER SKILLS AND KNOWLEDGE:

- Teacher skills in HE AND in PA (e.g. expertise)
- HE & PA Professional development (2006–09)
- Teacher knowledge of PA and HE recommendations for children's health

Among **PARENTS** of primary school students, improvements in INT vs. COMP included:

HOME ENVIRONMENT/ FOOD AVAILABILITY:

- More rules around HE (approaching sig.)
- Less availability of sweetened drinks (approaching sig.) and non-core foods (NS)
- Positive attitudes to HE (NS)
- Number of TV sets at home (NS)

CHILD BEHAVIOUR


- Reported intake of at least 3 or more serves of vegetables each day
- Reported child PA after school (NS)

PARENT KNOWLEDGE

- Increased knowledge of veg intake recommendations per day for children

Findings from **PRINCIPALS, CANTEENS & OUT-OF-SCHOOL HOURS CARE (OSCH)** also indicate a clear shift in practices in INT vs. COMP:

- More HE and PA policies and they were more comprehensive
- Healthier food supply in canteens (more 'green' foods as top-sellers)
- Unhealthy foods used less in fundraising
- Improved access to drinking water
- Vending machines removed sooner
- Uptake of fruit, veg and water breaks in class occurred sooner
- More communication with parents regarding HE and PA
- Improvement in OSCH directors' attitudes to HE and PA; and knowledge of PA and HE recommendations for child health
- Increase in OSCH staff HE and PA professional development uptake

 **YOUTH AND HIGH SCHOOL**

Interviews with high school stakeholders highlighted some positive changes in student role-modelling; school-based promotions and in

canteens' healthy food provision. Students demonstrated improved knowledge of, and interest in, promoting HE and PA to their peers and making visible changes to the school environment. Youth centres had shown substantial interest and commitment to up-skilling their workers, role modelling and developing healthy food policies.

 **THE ewba APPROACH – LEARNINGS**

Extensive knowledge was gained about community based obesity prevention initiatives in practice through analysis of the *ewba* approach. Practice learnings are grouped under six key themes; **Supportive Public – Policy Context** (e.g. how to work in a complex policy/program environment); **Organisational context** (e.g. working effectively within host organisations); **Community capacity building** (e.g. lessons for engaging dynamic and heterogeneous communities); **Partnerships; Practitioner skills and knowledge**; and **Evaluation**.

 **CONCLUSIONS**

The improvements in preschool children's weight status, together with the positive environment changes and increased stakeholder capacity, underscore the impact of *ewba* upon young children and families.

Collectively, the findings from the primary school setting, including waist changes, are of great importance, particularly given the key roles that teachers and the school environment play in children's knowledge, attitudes and behaviours. In addition, key improvements in children's home environments are important given the impact of parents and home in children's food and activity. The excellent uptake of *ewba* peer-leadership programs in high schools and the early achievements in youth centres are noteworthy and may confer benefits for young people also.

ewba has successfully demonstrated and evaluated a multi-strategy, multi-setting community development approach to childhood obesity prevention. Dissemination of *ewba* outcomes, key processes and implications for practice, will support the ongoing work and add to the evidence base of community based obesity prevention initiatives both in SA and nationally.

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