

(7–13 years). Interviews were conducted with a broad range of program stakeholders, representative of geographical location, stakeholder role and variation in program implementation across the states. Forty-eight stakeholders were interviewed across 14 sites about their experiences in implementing Go4Fun or PEACH. The Consolidated Framework for Implementation Research (CFIR) was used to structure collection and analysis of data.

Findings will be reported against the CFIR constructs assessed identifying those constructs that strongly or weakly influenced implementation effectiveness between sites with un-sustained versus sustained program implementation effectiveness. Such learnings are paramount to guide future investment in the implementation and scale-up of evidence based strategies to address childhood obesity management.

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Invited talk: Exercise for managing obesity related chronic disease



Jeff Coombes

University of Queensland, Brisbane, Queensland, Australia

Regular exercise can assist in reducing body fat and protect against chronic diseases associated with obesity. High intensity interval training (HIIT) has become a popular time efficient approach to improve cardiorespiratory fitness and decrease the risk of cardio-metabolic disease. HIIT involves alternating short bursts of high intensity exercise with recovery periods or light exercise. Studies in obese individuals have shown that increasing the intensity of exercise amplifies the training stimulus and associated adaptations, such as $VO_{2\max}$, anaerobic threshold, stroke volume and exercise performance. This presentation will discuss the evidence for the use of exercise training, including HIIT, in the management of obesity related chronic disease. Practical approaches to incorporate exercise training such as HIIT with obese patients will also be provided.

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Invited talk: Levels of lifestyle management & how they impact on obesity management



Nic Kormas

Concord Hospital, Concord, NSW, Australia

'Lifestyle' is frequently used by patients to describe the aetiology of their obesity. Health professionals however, use 'lifestyle management' as a broad term to describe non pharmacological or non-surgical treatment of chronic diseases such as diabetes, hyperlipidaemia and obesity. It is an essential component of any weight management program and describes/includes interventions ranging from general education about diet, activity, exercise or behavioural strategies, to intensive specialist allied health involvement in all of these areas. Intensive lifestyle management invariably occurs as part of a multidisciplinary team-based model of care. Further intensity of lifestyle management can be achieved by assigning a patient case manager & by co-locating the multidisciplinary team & services they provide, including group education, support sessions, and supervised exercise. Intensive lifestyle management facilitates interventions needed to reduce the barriers (knowledge, physical and psychological) that prevent patients from achieving weight loss and maintenance of weight loss. This talk will not only review recently published lifestyle intervention studies such as the LOOK AHEAD Program & CROSSROADS but also the Australian experience with lifestyle initiatives such as GET HEALTHY, HEAL & Metabolic Rehabilitation Programs.

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Invited talk: Effective and equitable population obesity prevention – Why we need all hands on deck



Anna Peeters

Global Obesity Centre, Deakin University, Geelong, Australia

Recent years have seen increasing acceptance globally that we require a range of obesity prevention policies to be implemented across a number of settings and sectors in order to halt the growing obesity burden. This acceptance recognises the fact that there is a complex interaction between the many factors that influence an individual's

dietary intake and physical activity levels. I will review recent progress in the implementation of recommended national, state and local government policies for population obesity prevention. I will argue that to optimise population obesity prevention effectiveness requires a more explicit understanding of the different actors and policies, and how they may interact at the level of the population and the individual. I will also argue that we need a greater understanding of the equity impact of these policies. A priority moving forward should be better recording and communication of existing activities in order to more rapidly spread the uptake of the most effective and equitable policies globally and at scale.

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Invited talk: Critical windows in the early life origins of obesity and food preferences



Beverly Muhlhausler

University of Adelaide, Adelaide, SA, Australia

There is compelling evidence that exposure to an inappropriate nutritional environment before birth and/or in early infancy, whether it be a nutritional deficiency, nutritional excess or deficiencies of key macro or micronutrients, is associated with an increased risk of obesity and altered food preferences in the offspring. It is also clear that the consequences of this altered nutritional exposure is also dependent on the period of development during which this exposure occurs. Recent work from our group has highlighted the critical role of the suckling period for the programming of obesity and food preferences in the offspring, which opens up the potential for the negative effects of prenatal exposures to be mitigated by improved maternal nutrition during lactation. This presentation will focus on these findings and their potential implications, and describe the impact of maternal cafeteria diet on breast milk composition in our animal model.

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Invited talk: What is the evidence for effective obesity prevention strategies across childhood?



Kylie Hesketh

Deakin University, Burwood, VIC, Australia

The prevalence of overweight and obesity amongst children is high. Approximately one in five children commence school already above the healthy weight range, with these rates rising once children are at school. Thus there is much scope for prevention efforts.

Most childhood obesity prevention research has been conducted with school-aged children. Strategies have predominantly been delivered within the school setting. Overall these interventions show a small positive impact on child body mass index (BMI). Interventions involving both physical activity and diet strategies appear to be more effective than interventions focusing on a single behaviour.

While considerably less research has been conducted in the early childhood population, the impact of prevention strategies appear to be greater in this age group. Strategies in the early childhood population have been delivered through a range of settings including preschools, health care and family-based settings. Overall studies suggest a positive impact with some suggestion that family-based settings may hold greatest promise.

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Invited talk: Challenges of interventions in adolescents with obesity



Louise Baur

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One in four Australian adolescents is overweight or obese, and prevalence rates in this age group have continued to increase in recent years, especially in more socially disadvantaged groups. In addition, rates of severe or morbid obesity in adolescence have more than doubled in the past two decades. Obesity in adolescence is often complicated by psychosocial distress and associated with a range of other health problems.

For all these reasons, effective prevention and treatment of obesity in adolescence should be a