

Childhood Obesity and the Built Environment

Is there a relationship between the built environment and child obesity?

Sally Leach



Sallysherman14@hotmail.com



INTRODUCTION

Childhood obesity epidemics are influenced by multiple factors. While energy in-balance is a key driver there are several other factors that also play an important role and need to be considered. Despite a clear recognition of this among health professionals, progress so far in tackling this huge global public health concern has remained slow and inconsistent. This research looked specifically at the built environment as a driver an area which is currently under researched.

AIM

To critically review the research underpinning the built environment and the impact it has on childhood obesity.

OBJECTIVES

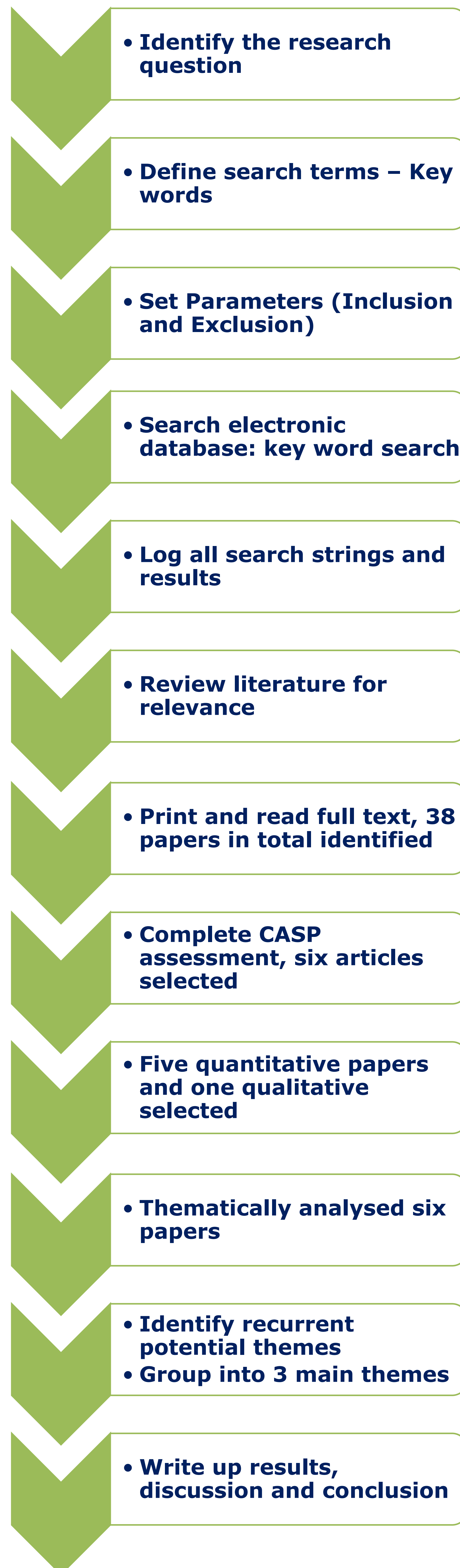
- To systematically source all relevant literature from 2006 onwards using electronic databases.
- To review and analyse the effects the built environment has on childhood obesity interventions.
- To understand if a focus on the built environment when creating childhood obesity interventions make them more or less successful.

RESULTS

- 6 papers were identified and included in the final analysis, only one of which considered the built environment as a contributing factor to the success of childhood obesity interventions.
- Very limited amount of evidence based research regarding the built environment and the impact it has on childhood obesity interventions.
- Three themes identified:
 - (1)Neighbourhood walkability
 - (2)Safety
 - (3)Density of convenience stores/supermarkets.
- Definite connection between built environment and child obesity.

METHODS

The systematic process of searching for, and filtering literature is demonstrated in the flow chart below.



DISCUSSION

- Urbanisation of the built environment limits physical exercise in that children are restricted in their ability to walk or access green space. Rural environments was also found to have a negative impact on the weight status of children due to limited access to organised physical activities and longer commutes.
- Built environment characteristics like levels of crime can negatively impact health, particularly with regard to weight.
- The perception of how 'safe' the environment in which a child lives is associated with different levels of BMI.
- Parents appear to have socially constructed a world that perceived to be a dangerous place for children inhabit alone.
- Increased access to media in everyday lives has contributed to some parents perception of danger and risk e.g. from 'strangers danger', or from traffic, thus preventing their children from engaging in physical activity from playing outside.

CONCLUSION

It would appear there is a lack of evidence surrounding the built environment and child obesity, and more research is needed. Although this review looked specifically at the built environment, it also highlighted that the clustering of built environments into towns and cities has an indirect impact of rural environments. E.g. rural living children with long commutes are unlikely to engage in physical activities. There is also a presumption that because children live in the country with access to open space, they don't need specific play areas. This results in resources not being spent on improving the outside areas to encourage children to get active. Importantly the research highlighted the impact of safety; actual and perceived, is needed. It was found that high levels of crime in some areas mean children are less likely to access green space or play outside reducing the amount of physical activity they achieve each day, thus increasing their chances of being overweight. It could also be conjectured that another contributing factor to reduced amount of childhood physical activity is the way that parents have socially constructed a world where that is perceived as dangerous to unsupervised children.