Community-level interventions to address obesity: Considerations for European policymakers

“Obesity prevention interventions should be supported by policies at all levels of government – national, regional and local. It is important to recognise that actions need not be separate. Different levels of government may wish to work together and local initiatives can and should be in-line with the national and regional policies that support them.” WHO, 2012

The present briefing has been written to support policymakers, civil society organisations (CSOs) and other stakeholders regarding the development of community-level interventions in Europe. It supplements the evidence available on existing interventions and necessary considerations provided by systematic reviews, cost studies, case studies and other resources and guidelines that have been compiled in the World Obesity Federation’s policy dossier, available here: a webinar hosted by World Obesity held on December 11, 2019; and other guidelines and reports that have been published on the topic. It presents a summary of the evidence highlighting necessary steps and considerations to ensure the development of effective and sustainable interventions, as well as showcasing some case studies from Europe. More can be found at https://www.worldobesity.org/resources/policy-dossiers/pd-4

INTRODUCTION

Globally, overweight and obesity has increased children and adults alike. Indeed, the global burden of non-communicable diseases (NCDs), including obesity, is high both from a societal and financial perspective. While poor diet has been identified as one of the leading causes of morbidity and mortality worldwide, it is recognised that obesity is the result of biological, behavioural, social, commercial, environmental, cultural, economic determinants and the complex interactions between them (Figure 1).

As such, multi-sectoral and multi-level policy frameworks, strategies and community-based interventions are a vital and comprehensive component to prevent and address obesity. According to the ‘Urban Health Equity Assessment and Response Tool’ (Urban HEART), obesity prevalence is one indicator of social and human development. Well planned cities have an important role to play in addressing unhealthy diets, physical inactivity, obesity, NCDs and climate change.
Given the role our surrounding environments have on our health, interventions that promote the creation of a healthier environment for its population should be a priority. Particularly, these interventions could be extremely beneficial in addressing childhood obesity as it is recognised that children have little to no control over the environmental factors that affect obesity.

COMMUNITY-LEVEL INTERVENTIONS

Widening the scope of obesity-related interventions has been identified as “an important strategy for achieving population-level change in risk factors and health.” Addressing the role of different environmental factors on the prevention of obesity allows us to shift away from the individual and consider external factors that impact our health. Community interventions include any programme that requires community engagement or participation. Community engagement has been defined as “involving communities in decision-making and in the planning, design, governance and delivery of services.” While the extent of how much a community is involved in the elaboration of an intervention varies (Figure 2), there is a growing assumption that the direct involvement of communities can have the influence to “bring a wider range of services together even including, schools and local businesses” which then allows to develop tailored interventions to respond to the needs of the community.
These interventions take place at national or sub-national levels and are focused on policies and actions ranging from citywide interventions to those within smaller institutions such as neighbourhoods, schools, churches, worksites or other organisations. Placing health at the centre of urban planning and policies should therefore be a priority: decisions about urban design; food production; water; energy; housing; transport and parking; parks and open spaces; social services; and healthcare will profoundly affect the health, wellbeing and safety of populations.

As highlighted by Merzel and D’Afflitti, “the rationale for community-based health promotion is the notion that individuals cannot be considered separately from their social milieu and context, and that programs incorporating multiple interventions extending beyond the individual level have the potential to be more successful in changing behaviours.” Based on this, King et al highlighted a number of best practice to consider when developing community-based obesity prevention interventions (Figure 3).
For instance, improving transport and urban design and decisions in land-use can influence the convenience, attractiveness and safety of walking and cycling, and could help reduce sedentary behaviours and promote increased levels of physical activity. In addition, personal behaviours and dietary patterns are heavily influenced by obesogenic environments. There is a strong relationship between food purchasing, diets and urban food environment characteristics such as availability and accessibility. For instance, urban planning should include regulations to restrict unhealthy products and advertising around schools as part of a comprehensive programme to tackle obesity.

Figure 3. Best practice principles for community-based obesity prevention.

Source: King et al. (2010)

URBANISATION, THE GLOBAL TREND

Given the rise in urbanisation, cities are increasingly gaining attention as a community setting for obesity prevention interventions. Today, cities contain more than half of the world’s population and in the European Union countries, around 75% of the population live in urban areas. City interventions offer an opportunity to reach a large proportion of people. As a response to this phenomenon, WHO established the Healthy Cities Network, a “global movement working to put health high on the social, economic and political agenda of city governments.” Now in place for 30 years, the project aims to “raise awareness on where and how health is created and to influence agencies other than those traditionally responsible for health in developing strategies which together create a supportive environment for health.” The Healthy Cities Network allowed health to obtain a place on the political agenda and it is now considered an integral part when developing public policies.

In addition, UNICEF and UN-Habitat launched the Child Friendly Cities Initiative (CFCI) that supports municipal governments in realising the rights of children at the local level using the UN Convention on the Rights of Child as its foundation. A child-friendly city (CFC) is a town, community or any system of local governance committed to improving the lives of children. Nowadays, the CFCI reaches up to 30 million children in 38 countries worldwide, among those 17
European Countries. For example, in Germany, CFCI was created in 2012 through an agreement between the National Committee and a local NGO. It is unique because it is run by and independent association. Initially developed as a pilot project in six cities, it has now expanded to a further six. This network is an opportunity for the local groups to learn from other cities of how they are implementing the CFCI. Additionally, at the beginning of the Germany initiatives, two adolescents were assigned to the expert commission by five municipalities.

COST/COST-EFFECTIVENESS OF COMMUNITY-LEVEL INTERVENTIONS

Given the environmental, health and social challenges we are faced with today, it is essential to consider all these aspects when assessing the effectiveness of an intervention. Consequently, today we should focus on identifying “policies and practices that contribute to a triple win in terms of improvement to health, equity and environmental sustainability, by creating conditions that enable people to adopt more sustainable behaviours in ways of living, moving and consuming.”

For instance, effective policies and programmes encouraging cycling can simultaneously improve population health and the environment. It would also contribute to reducing the burden of NCDs and help long-term economic sustainability of the health systems. Cross-sectoral collaboration could improve data availability for future research and to estimate health benefits and economic impact of increased proportions of active commuting by walking and cycling by using the Health Economic Assessment Tool (HEAT), which shows annual reductions of deaths and disability-adjusted life years (DALYs) of cycling interventions. In the UK, a cycling town programme was estimated to provide US$5.2 m of benefits per year. In addition, the economic modelling from the Cycling Cities project suggested that for every £1 spent there was a return of between £2.6-3.50.

RECOMMENDATIONS

Based on the evidence from systematic reviews, cost studies, case studies, government guidelines and recommendations, and current and past projects presented in the dossier, the following considerations have been identified to support the successful implementation of community-level obesity interventions:

1. Undertake a situation analysis of the current health situation: Identify the specific strengths, weaknesses, opportunities and threats, including their root causes and effects to provide an evidence-informed basis for responding to the health needs of the population. This should include the health statistics, local policies, laws and relevant academic research.

2. Consider budget: Before deciding the scope of an intervention, consider the available financial and human resources. Ideally budgetary allocation should be prioritised for prevention, control and research for obesity and NCDs. Plan clear and adequate budget allocations for each of the envisioned outputs and activities.

---

1 Austria, Bulgaria, Croatia, Denmark, Finland, France, Germany, Iceland, Italy, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom.
3. **Use frameworks and theories**: Design, plan, manage, coordinate and monitor interventions based on established frameworks and behavioural change theories. This would allow to establish best-practices and draw from previous wins and challenges when developing and implementing new interventions.

4. **Adopt an integrated approach**: Health should be integrated in spatial and financial planning strategies at all time. While most individuals and governments are aware of the current rising obesity epidemic, action is still required to “bridge the gap between awareness of the problem and practical implementation of necessary lifestyle changes.” Planned interventions should therefore focus on generating changes in the social, physical and individual environments.

5. **Several and multi-component interventions**: Develop multi-sectoral and multi-level interventions. Integrated approach targeting different determinants of health will be most successful. For this reason, combined interventions (i.e. diet and physical activity) should be prioritised as well as multi-setting interventions that adopt a “whole-of-community” approach to obesity prevention programmes.

6. **Engage stakeholders, but safeguard processes from conflict of interests**: Ensure a wide range of stakeholders, from the academia, government, civil society organisations, private organisations, media as well as the community are involved in the elaboration, implementation and evaluation of interventions to address the obesogenic environment. Elaborate a stakeholder mapping can help you to identify all the players involved in city-health complex interactions. Partnership with academic institutions offer great potential for developing evidence-based research.

7. **Ensure political engagement**: Political commitment can play a key role to ensure the successful implementation of interventions. Politicians have significant influence over the social determinants of health and they can be strong advocates and often have the capacity to mobilise partners, both in the private and public environment. Local governments should ensure that all aspects of the legal framework and policies under its control promote and protect health. Policymakers should support and advocate for fiscal and regulatory policies to effectively improve the food environment.

8. **Set benchmark indicators**: Promote the collection of data to evaluate and monitor progress across and within cities. This will allow to assess the success of an intervention as well as monitor for potential disparities in the different implementation setting. Having clear, set goals could also help reduce health inequities. Academic leadership is also needed, including interdisciplinary research and expanding interdisciplinary tertiary and workforce development programmes that bring together health and the built environment.

9. **Seek community groups participatory mechanisms**: Enable community participation, involve and empower individuals, organisations, groups, communities. Also, include child and youth participation. There are a range of tools and techniques for community engagement and community participation, for example asset mapping, participatory research, co-creation workshops, communication campaigns, awareness raising, and advocacy.

10. **Ensure that the interventions are sustainable**: Set long-term objectives and engage community active participation and build capacity to achieve them. The contributions of volunteers,
including youth volunteers can be crucial in running sustainable community-level interventions. Both the financial and human resource components of interventions should be considered when assessing the sustainability of a programme.
CASE STUDIES

Across Europe, cities and communities are increasingly developing population-level initiatives to address the rising prevalence of obesity. Below are some case studies illustrating the different approaches implemented and lessons that can be learned.

Amsterdam Healthy Weight Programme

Why is a community-level intervention needed?
Amsterdam was a city that had higher than national average rates of childhood overweight and obesity. “One in four to five children in Amsterdam were found to have overweight or obesity.”

Thus, the Amsterdam Healthy Weight Programme (AHWP) was implemented in 2013 in response to this public health emergency and aimed to reduce obesity by enabling children to eat and drink healthy foods, increase their physical activity and have good quality sleep.

Given the importance of the first 1,000 days of a child’s life to his or her future health, it is essential to focus on early signs of unhealthy behaviours from expectant mothers and children of a young age.

Description of the programme
The AHWP is designed and delivered as an urban-level policy. The AHWP rests upon the assumption that the development of a healthy living environment for children is a shared responsibility.

By working with different partners all around the city, the programme wishes to make the healthy choice the easy choice by promoting three key rules:

1. Eat and drink healthily
2. Get enough exercise
3. Get a good night’s sleep

To ensure the proper development and delivery of the programme, each neighbourhood of Amsterdam has agreements with paediatricians, GPs and other healthcare professionals, parent and child professionals, youth healthcare nurses, youth counsellors and welfare organisations as well as community organisations.

Impact
Overall, the first five years of the AHWP appear to be successful: the prevalence of overweight fell from 21% to 18.5% for children between 2 and 18 years between 2012 and 2015. More specifically, this translates in an absolute decrease of 2,500 less children who are overweight, with a substantial decline among children from very low or low socio-economic status.
The Spanish 
Ciudades Amigas de la Infancia Initiative

Why a community-level intervention is needed?
Based on the Childhood Obesity Surveillance Initiative (COSI), Spain has “the second highest prevalence of obesity in Europe among primary school-age children.”  
This can largely be attributed to differences in consumption patterns, levels of physical activity, childcare practices and children’s surrounding environments. As urbanisation is rapidly growing, we are seeing that the “built environment and its patterns of use can lead to urban specific environmental health problems that health systems cannot address alone.”

Highlighted by WHO as one of the most serious public health crisis of the 21st century, NCDs such as obesity “require structural solutions on a larger scales, including interventions in the physical urban environment” and UNICEF’s Child Friendly Cities Initiative (CFCI) could provide us this opportunity.

Description of the programme

Launched in 2002, the Ciudades Amigas de la Infancia initiative in Spain received the support from a number of institutions including the Ministry of Health, Social Services and Equality, the Spanish Federation of Municipalities and Provinces as well as the University Institute Needs and Rights of Children and Adolescents. This CFCI aims to drive “participating municipalities to design and implement efficient public policies that improve the wellbeing of children, defend their rights, promote their participation and make cities more livable, sustainable and equitable.” The initiative specifically calls for:

1. The integration of child rights into municipal public policies
2. Cross-sectoral coordination
3. Child participation as a tool for social change
4. Strengthened alliances among local and regional actors

Figure 4. CFCI across Spain

Source: UNICEF
The initiative in Spain offers participating municipalities a website dedicated to the CFCI, training opportunities, networking events as well as some child-oriented participation activities and research.

**Impact**

In Spain, “277 local governments have been granted this recognition. Altogether, the initiative reaches 3,436,715 children representing about 42% of all children living in Spain” (Figure 4). Furthermore, the Spanish CFCI is strongly oriented towards active child participation and the country has established 298 local child councils in which 11,490 children are involved. These councils all have an ambassador to represent children and their associated challenge to local politicians.

According to a number of established well-being indicators, the CFCI in Spain has had considerable benefits including:

- Madrid saw an 80% reduction in school violence rates
- Pedestrian areas have increased by 30%
- Vehicular accidents have decreased by 45%

Overall, the CFCI initiative encouraged the Spanish government to improve the urban environments in which children evolve while also giving them the possibility to get a clearer understanding of the status and the needs of children. Furthermore, given the positive environmental and social impact of the Spanish CFCI, this could offer an opportunity to widen the scope of the initiative and make use of the structural changes to simultaneously address the national challenge of childhood obesity.
Finland’s “Health and Wellbeing in all Policies”

Why a community-level intervention is needed?
In 2009, the prevalence of childhood overweight and obesity in Seinäjoki was considerable: almost 1 in 5 five-year-olds was overweight. Recognising the role of the environment and the different factors that influence children’s health, the country adopted a Health in All Policies approach to promote the incorporation of health in all decision-making areas.

Description of the programme
Finland’s “Health and Wellbeing in all Policies” (HWiAP) approach was developed in the 2010 Health Care Act. Specifically, “the Act describes how, at the local level, the promotion of citizens health and wellbeing requires cooperation between administrative sectors, other local actors, private enterprise and NGOs.”

“The Government has reformed the Health Care Act to mandate health promotion services and require municipalities to involve all sectors in their plans.”

Ultimately launched in 2013 as part of the National Obesity Programme 2012-2018, the initiative was developed in the context of a wider health strategy that calls to decrease “obesity, smoking and drug use among children and young people, and more widely to promote the health of the population.” Overall the initiative focused on “attitudes, education, nutritious food, the built environment and physical activity.”

Impact
As a consequence of the adoption of a HWiAP approach, the prevalence of overweight and obesity among five-year-olds in Seinäjoki was halved. In addition to a drastic decrease, rates of childhood obesity are starting to stabilise across Finland.
CONCLUSIONS

The aim of this policy brief is to provide guidance to policymakers, CSOs and other key stakeholders to ensure the successful design and implementation of community-level interventions to help address obesity and other NCDs across Europe. It is complementary to the information available through the World Obesity’s policy dossier and webinar. The compiled evidence highlights the need to develop integrated, multi-component and multi-stakeholder local level interventions. Furthermore, we call for the need to focus on our surrounding environments and address underlying social determinants of health to address the current global obesity epidemic as well as the rising prevalence of NCDs. As highlighted throughout this briefing, built-environments can have a direct impact on the health, social and emotional development of individuals. Obesity-prevention interventions should therefore begin early in life and, as highlighted through our previous dossier, addressing the school environment could have a direct impact on national childhood obesity prevention efforts. However, all obesity-prevention interventions should be supported by strong nutritional policies and regulations from governments.

REFERENCES

2. World Obesity Federation. Changes in % adult obesity prevalence over time in selected countries around the Globe.
f3dfKAc/85YsaAAAwgkY0aAUAbwqgg1MiIcMQIBADCCAOoCg5gS1b3DQHEATAE8gAtgkqBQ2MSA5w4EQQ7EY-l-51F5b7FQ6oQ7a6GIB09jFkUnOBXh4c3mD0DB0T2czhrmzve1v2h5Smnps07TvQ

Accepted December 10, 2018.


UNICEF. Initiatives | Child Friendly Cities Initiative. UNICEF.

UNICEF. The Child-Friendly City Initiative in Germany.; 2017.


Plan, Assess and Involve.


City of Amsterdam. Amsterdam Will Become the Healthiest City for Children!; 2017.


The European Network for Child Friendly Cities (ENCFC) We Call Our Network the European Network for Child Friendly Cities (ENCFC) and Not The.


ACKNOWLEDGMENTS

Written by Hannah Brinsden, Margot Neveux and Lesly Vejar Renteria.

The production of this Briefing Paper has received support from an operating grant under the European Union’s 3rd Health Programme. The European Commission is not responsible for any use that may be made of this document.