Preventing childhood obesity through community-based initiatives

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Prevention is widely recognised to be the most efficient and cost-effective way to tackle the obesity epidemic; the most promising approaches target populations rather than individuals, are focused on environmental and policy changes, and require multi-sectoral responses. This article looks at existing community-based initiatives in Europe.

Changing behaviours and the environment

The aetiology of obesity is complex and eating and physical activity habits are likely to be developed at a young age. An 'obesogenic' environment elicits the consumption of too much energy and discourages physical activity. The need for obesity prevention in the whole population has stimulated the implementation of hundreds of community-based initiatives (CBIs) across Europe.[1]

CBIs are multi-factorial strategies aimed at changing behaviours through interventions focused both on individual behaviours and the environment. Modifying unhealthy habits requires changing perceptions, the micro-environment (e.g. schools, homes, neighbourhoods) and the macro-environment (e.g. education and health systems, governments, the food industry and society's attitudes and beliefs) so that healthy behaviours prevail.[2] Interventions must be adapted to fit the local context, so almost all CBIs execute a mixture of strategies at a local level.[1]

The example of EPODE

A pilot programme in two communities in Northern France found that the prevalence of children overweight fell in these towns (11.4% in 1992; 8.8% in 2004) and not in the control towns (12.6% in 1992; 17.8% in 2004).[3] This cross-sectional study did not prove that the intervention reduced obesity, but it led to the development of EPODE "Ensemble Prevenons l'Obesité Des Enfants", meaning "Together let's prevent childhood obesity."

EPODE is a coordinated approach aimed at empowering communities to combat and prevent childhood obesity. It relies on four main pillars:[4]

1. sound scientific background, evaluation and dissemination of outcomes
2. strong political will and involvement of political representatives
3. coordinated organisation and an approach based on social marketing
4. multi-level, multi-stakeholder approach, involving public and private partners

Primary EPODE target groups are all children aged 0–12 years, regardless of their weight, and their families. A local project manager, appointed by the local political leader (e.g. the Mayor) able to champion the programme, is trained by a central coordination team. The role of the project manager is to mobilise a multi-faceted local steering committee and a diversity of local stakeholders especially in schools, extracurricular organisations and social networks of associations, thereby placing the community at the heart of the system.

Resources are supported by public and not-for-profit funding, as well as corporate sponsorships. In 2008, the European Directorate General for Health and Consumers provided funding for the development of the EPODE European Network to accelerate the implementation of CBIs across Europe. To date, several CBIs in Europe are based on the EPODE methodology, and there are similar large-scale projects across Europe (some examples in Table 1).[1]

The main challenge: Evaluation

Increasing evidence suggests that CBIs may be an effective way to prevent childhood obesity, but there is a need for better scientific evaluation.[2,4] The evaluation of CBIs relies on the collection of information on:[4]

- process indicators (e.g. central partnerships, local steering committee meetings)
- output indicators (e.g. number of local actions, participation of families and children)
- outcome indicators (e.g. changes in dietary habits, physical activity, BMI, wellbeing and knowledge)

Overall, it is difficult to compare interventions due to variances in outcomes and quality of study designs. CBIs reporting positive results are probably overrepresented in the table.[1] Furthermore, even when using the same protocol the effectiveness of a CBI cannot be assumed to be duplicated, because of the adaptation to the local situation. The EU-funded project IDEFICS (Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS) was conducted to provide reliable, standardised methodology to assess childhood obesity on a global scale. Data from this and other ongoing initiatives will be substantiated in the coming years. Further monitoring and research using consistent methods will provide valuable information about the effective elements of community-based prevention of overweight and obesity.

Evaluation is an essential tool to motivate global actors and policy makers to support CBIs in a

sustainable manner, and the process should embody an optimum balance between scientific standards and practicality.

Obesity is a worldwide issue, requiring a global approach that supports local actions. Enhancing implementation and sustainability of CBIs, with high quality monitoring, should be a global priority.[5]

References

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Annex

Table 1. Examples of community-based initiatives in Europe

Country	Programme acronym (meaning)		Starting year	Children reached[1]	Results
Belgium	VIASANO		2006	22,597 5-12 years	Monitoring suggests decrease (22%) in the prevalence of overweight in nursery school children, the results are yet to be published in a peer-reviewed journal. More information: http://www.viasano.be

France	EPODE ('Ensemble Prévenons l'Obésité des Enfants' or 'Together Lets Prevent Childhood Obesity') Some EPODE programmes have been renamed to VIF ('Vivons en Forme' or 'Let's live in good shape')	2004	973,386 5-12 years	The rate of childhood overweight in two pilot towns went from 11.4% in 1992 to 8.8% in 2004 (compared to 12.6% in 1992 to 17.8% in 2004 in the control towns).[3] Data from the other eight French EPODE pilot towns also suggest a decrease of overweight and obesity between 2005 and 2009, but these are yet to be published. More information: http://www.vivons-en-forme.org/ http://www.epode.fr/ (currently unavailable)
France	ICAPS (Intervention Centered on Adolescents' Physical activity and Sedentary behaviour)	2002	475 11-12 years	After four years of the ICAPS intervention 4.2% of adolescents not affected by overweight became affected, compared to 9.8% of adolescents who were affected by overweight in the control schools.[1,6] ICAPS intervention indicated a positive impact especially among adolescents not affected by overweight at baseline. More information: INPES (2012). Promoting physical activity in children and young people based on the Icaps experience
Greece	PAIDEIATROFI	2008	63,364 0-12 years	More information: http://www.paideiatrofi.org/en/
Portugal	MUNSI ('Municípios - Saúde Infantil' or 'Childhood health at Municipality level')	2009		More information: http://www.mun-si.com/
Romania	SETS "Şi eu trăiesc sănătos" or "I'm living healthy too!	2011	30,000 0-12 years	More information: http://www.sets.ro/ro
Spain	THAO	2007	14,500 0-12 years	More information: https://www.programathao.com/

Sweden	Jönköping		2004	80,000 0-18 years	An initial decrease after 2 to 3 years seemed to be followed by rising rates thereafter.[1]
The Netherlands	B.Slim: beweeg meer en eet gezond! (move more and eat healthy)		2005	6650 0-18 years	Prevalence overweight: stabilized since 2006[1] More information: http://www.bslim.nu
The Netherlands	GO-Overvecht (Gezond gewicht Overvecht (GO))		2005	6500 0-19 years	Prevalence of overweight: 26% (2004-05) to 20% (2008-09)[1] More information: http://www.utrechtgezond.nl
The Netherlands	JOGG (Youth On Healthy Weight)		2010		More information: http://www.jongerenopgezondgewicht.nl