

The SOL Project –
a local community multi-level and multi-component
health promotion program

Mikkelsen, BE
 ISBNPA Capetown,
 June 9-11, 2016

Challenges in complex interventions

Craig et al (2008) summarizes four main difficulties:

- The difficulty of standardizing the design.
- Delivering the interventions in a way that is sensitive to the features of the local context.
- The organizational and logistical difficulty of applying experimental methods to service or policy change.
- The length and complexity of the causal chains linking intervention with outcome.

Craig, P, Dieppe, P, Macintyre, S, Michie, S, Nazareth, N & Peckover, M (2008) Developing and evaluating complex interventions: the new Medical Research Council guidance, BMJ 2008; 336:1370-1375

The Sol project
fact sheet in brief

- **Target:** Eating and sedentary behavior in families with children aged 3-8 years-old. 220 families in 3 neighborhoods: Hasle, Allinge og Neksø
- **Context:** The intervention site is the Baltic isle of Bornholm with 3 neighborhoods selected for high intensity treatment.
- **Project duration:** 18 months
- **Concept:** Works through synchronized multi-level interventions in supermarkets, media, school/kindergarten settings.
- **Interventions:** Multi-Level Multi- Component (ML-MC)
- **Implementation:** Participatory partnership where representatives from civil society, community-based associations, businesses and the public administration are assigned influence in designing the program along with the researchers.

The SoL program supersetting

Media – School - Retailing

TV networks

School Kindergarten

Groceries

Bloch, P; Toft, U; Reinbach, HC; Clausen, LT; Mikkelsen, BE; Proden, K & Jensen, BB (2014): Revitalizing the setting approach – Supersettings for sustainable impact in community health promotion. Published in Int J Journal of Behavioral Nutrition and Physical Activity (sept 15)

<http://www.ncbi.nlm.nih.gov/pubmed/25156715>

Targeting determinants

Community taste education

Usage of soft prepared foods

Rejection of other unappetizing foods

Sol program Design

Odsherred

Helsingborg

København

Malmö

Halmstad

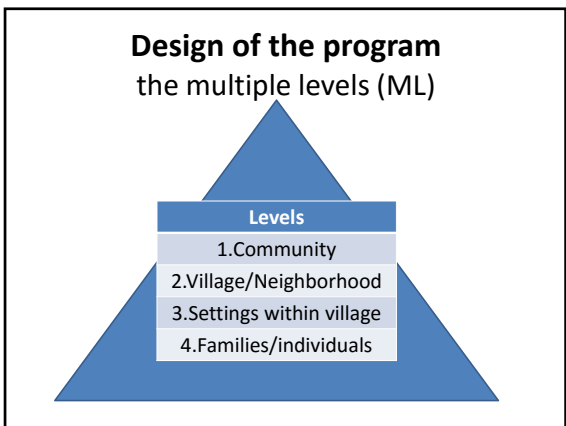
Växjö

Bornholm

Sweden

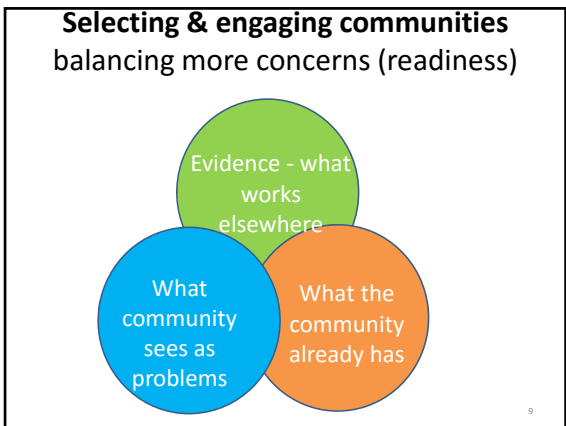
Denmark

Poland



Selecting communities

Variable	Characteristic	Unit	Bornholm Island	Odsherred (Match)	Capital Region
Geophysical	Population	1000	41	32	1.754
	Area, Square km	km ²	588	355	2568
Health status	Overweight, BMI ≥25	%	50	53	41
	Diabetes	%	6,5	5,7	4,5
	High blood pressure	%	16	23	22
Health behavior	Citizens with very unhealthy diet behaviors	%	14	16	10
	Citizens with < 30 min/day MVPA behavior	%	36	41	31
	Citizens with self perceived poor health	%	18	21	15
Socio Economic Position (SEP)	Without occupational affiliation	%	26	28	19
	Without higher education (only primary + sec. school)	%	19,1	18	7,6



Choosing intervention sites
Stakeholder identification PLU approach
(Readiness)

Stakeholder	Power	Legitimacy	Urgency
Municipality			
School Head teacher			
Local Media			
Shoop keepers association			
Local NGO's			

Low	Low-medium	Medium	Medium-high	High
1	2	3	4	5

Choosing intervention components
score card

Intervention component	Price	Strength of evidence base	Acceptability as assessed by mediators. How meaningful it is to the mediators	Acceptability as assessed by target group. How meaningful it is to the end users/target group	Infrastructures or activities already present	Total score

Low	Low-medium	Medium	Medium-high	High
1	2	3	4	5

Evaluation- Timing & target groups of summative surveys from random sample from personal security number and schools

Questionnaires	Respondent	Baseline	Follow up 1	Follow up 2
			1 year. During intervention	Post intervention
Citizens Questionnaire (CQ).	Citizen	X	X	X
Family Questionnaire (FQ).	Family/parents	X		X
Child Food Frequency Questionnaire (CFFQ).	Parent on behalf of Child	X	X	X

Implementation - Reach

COOP Groceries: 100 percent: 120 staff members

Store	Retailer Group	Community	Inhabitants
1	Coop	Allinge-Tejn 1	2600
2	Coop	Hasle	1650
3	Coop	Nexø	3700
4	Coop	Allinge-Tejn 2	2600

Substituting sugar-sweetened drinks with fruits and vegetables: A strategy for expanding and sustaining a study on obesity prevention

Implementation Media Events program awareness

- Knowledge of Project SoL and its activities increased significantly
- Awareness of the project raised to 86% of population at the end of the project.

Effect of a multicomponent intervention on awareness, attitudes and motivation to behavioural changes within the community-based health promotion project "Health and Local Community". Helene Christine Reinbach¹, Ulla Toft¹, Lone Lawaetz Winkler¹, Paul Bloch¹, Susanne Carlsen¹, Charlotte Glümer¹, Bent Egeberg¹, Mikkel Jensen¹, Jens Jørgensen¹

Summary of impacts

Store

- Price reduction (20%) on F&V significantly increase in sale
- Sales of fresh vegetables increased by 22% compared with the control supermarkets.
- The consumption wholegrain increased by 25 %.
- Sale of Carrot snack pack increased significantly

Child


- No reduction for waist measures and BMI among children
- Consumption of SBB among children decreased at 1st follow up

<http://politiken.dk/forbrugogliv/sundhedogmotion/ECE3185518/forskingsprojekt-har-laert-bornholmere-at-spise-sundere/>

Buch Andersen, T, Madsen, AL, Eriksson, F, Bloch, P, Glümer, C, Mikkelson, SE, Toft, U (2016). Effects of a multi-component community-based health promotion intervention on eating behavior in 3-9-year-old children. The Danish Health and Local Community (HLC) project. Submitted to Public Health Nutrition.

Achievements

"agency" to challenge the "structures"

- Created a "health brand" 
- Demonstrated the power of school nutrition action groups (SNAG's)
- Engaged groceries community wide
- Integrated media actors strategically
- Created an ML-MC "industry standard"
- Integrated ML-MC in municipal health policy

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Conclusion

- The status quo (inertia) - tremendous energy needed to make change
- Populations are influenced by many factors
- Intervention should ideally target all
- Since that's not possible then better many than only one
- But support/participation is need among citizens
- ML-MC can be speculated to create that support
- In other words is also about agenda setting and politicization (from Evidence2Policy)

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Thanks for your attention!

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