Designing & implementing the SoL local community program – a multi-level and multi-component health promotion program

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Tallinn, November 5, 2015

Abstract: There is a growing interest for health promoting interventions addressing the environment in the settings of everyday life and a growing number of interventions that aims to “do more things in several places” in order to add intensity have been developed. Such interventions have become known as multi-level and multi-component interventions and are aiming at impacting the totality of the local community foodscapes and different arenas in order to induce behavioural change. The paper presents the SoL program that was implemented in the three neighborhoods at the isle of Bornholm. The program works through an integrated approach where promotion of health eating and non-sedentary behavior is coordinated across supermarket, media, school & kindergarten setting. SoL is building conceptually on a partnership between representatives from civil society, community-based associations, businesses and the public administration. The primary target group is families with children aged 3-8 years-old. A broad range of outcome measures are measured baseline and follow up. The paper will present some of the findings on the media component of the program as well as some of the lessons learnt from developing the components in participatory manner in cooperation with a long range of local community stakeholders.
PHN Strategies
the EDE model

Environment design

Education

Enforcement

Modified after the ‘5 E’s model (Engineering Education Encouragement Enforcement and Evaluation)’
Why these communities

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristic</th>
<th>Unit</th>
<th>Bornholm</th>
<th>Odsherred</th>
<th>Capital Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geophysics</td>
<td>Population</td>
<td>1000</td>
<td>41</td>
<td>32</td>
<td>1.754</td>
</tr>
<tr>
<td></td>
<td>Area. Square km</td>
<td>km²</td>
<td>588</td>
<td>355</td>
<td>2568</td>
</tr>
<tr>
<td>Health status</td>
<td>Overweight, BMI ≥25</td>
<td>%</td>
<td>50</td>
<td>53</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Diabetes</td>
<td>%</td>
<td>6.5</td>
<td>5.7</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>High blood pressure</td>
<td>%</td>
<td>16</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Health behavior</td>
<td>Citizens with very unhealthy diet behaviors</td>
<td>%</td>
<td>14</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Citizens with &lt; 30 min/day MVPA behavior</td>
<td>%</td>
<td>36</td>
<td>41</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Citizens with self perceived poor health</td>
<td>%</td>
<td>18</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>Socio Economic Position (SEP)</td>
<td>Without occupational affiliation</td>
<td>%</td>
<td>26</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Without higher education (only prim. rr sec. school)</td>
<td>%</td>
<td>19.1</td>
<td>18</td>
<td>7.6</td>
</tr>
</tbody>
</table>
Potentials of the “local”

“A geografical area where citizens objectively have & subjectively feel a social & functional community”

Sundbo
High-intensity intervention sites

1. Islanders are more homogeneous as a sample
2. Islands are more isolated = easier measurement

<table>
<thead>
<tr>
<th>Location</th>
<th>Citizens</th>
<th>Settings</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allinge/Sandvig</td>
<td>1700</td>
<td>1</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>51</td>
</tr>
<tr>
<td>Hasle</td>
<td>1700</td>
<td>1</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nexø</td>
<td>5000</td>
<td>1</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>47</td>
</tr>
</tbody>
</table>

https://www.youtube.com/watch?v=BMqM-211zPU&feature=youtu.be
”Do more things ...more places”
Multi-Level Multi-component (ML-MC)

To activate coordinated thematic interventions across more settings at the same time in order to increase intensity

Mikklesen, Novotny & Gittelsohn MULTI-LEVEL, MULTI-COMPONENT APPROACHES TO COMMUNITY BASED INTERVENTIONS FOR HEALTHY LIVING – A THREE CASE COMPARISON,
Intervention & control
Robust & participatory
The SoL ML-MC "supersetting"
- doing more things coordinated in more places


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

Levels

1. Community
2. Village/Neighbourhood
3. Settings within village
4. Families/Individuals
<table>
<thead>
<tr>
<th>Setting</th>
<th>Public institutions</th>
<th>Private sector</th>
<th>Media</th>
<th>Civil sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Village</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Family</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Individual</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

- X: Present
- *: Absent
Transitional governance
action research in practice

Time

Ownership

Local community action groups

Research team
Stakeholder complexity

Diagram of municipal actors
Participatory design
Professional Kick Off  7.3 2012
Participatory design
Peoples Meeting
Environmental design

SOL-projektet blev sat som en skovtræ på Christianshøj.

Foto: Mette Brochorst © DR Bornholm

Skrevet af: Carper Henriques

Grønt-salg tre gange så stort

08. nov. 2012 06:04 Nyheder

Frugt og grønt har i udvalgte butikker i Hasle, Allinge og Nexø sidste lige for næsten af kunderne i cirka to måneder, som en del af sundhedsprojektet SOL, Sundhed og Lokalsamfund.

Og det har fået kunderne til at købe tre gange mere brocoli og gulerødder, fortæller Lars Kure, der er varehuschef i Kvickly i Nexø.

Frugten og grønten er nemlig blevet mere tydelig for at få bonemælere og os andre til at leve og spise sundere.

- Kunderne køber stadig mere frugt og grønt, selvom at omtalen af SOL er gået ned i medierne. Vi

Netto-direktør kan sagtens foreslå sig, at et bornholmer-

Sund mad

Butikskæde er parat til at gemme det usunde væk

Torsdag 6. september 2012 kl. 13:45 af Gitte Nielsen, Berlingske Nyhedsbureau

Netto-direktør kan sagtens foreslå sig, at et bornholmer-

Folkesundhed er et vigtigt emne i tiden og noget, som optager både politikere og almindelige danskere. Derfor er direktøren for butikskæden Netto, Claus Juel-Jensen, heller ikke i tvivl om at et forsøg med såkaldt nudging på Bornholm kan blive læreragt for butikskæden.

I alt seks supermarkeder på Bornholm er med i et nyt forsøg, hvor forbrugerne skal have et "nudge", et skub, i den rigtige retning, når de køber ind. Det skal butikkerne hjælpe dem med ved at give slik, chips og andre usunde varer en mindre fremtrædende plads. Derimod skal sundre varer som frugt og grønt placereres, så de frister kunderne mere.

- Vi sagde ja til at være med i forsøget, fordi det er spændende, og fordi vi som kæmper med måse også kan lære noget og blive klogere på tidsånden, hvor folkesundhed er noget, som optager mange, siger Claus Juel-Jensen.
Environmental design
Taste education at Paradisbakken School
Methods

Data collection

• 70 x 2 x Telephone interviews (2012 og 2013)
• 3 In depth Interview mediepartners (TV2 Bornholm, DR, Bornholms Tidende)
• 24 Ipad-interviews children from Allinge skole

• 70 x Telephone interview (march 2014)
• In depth interviews with professionals and families (or fokusgroup)
• Mass media campaign (TV2, radio, newspaper) and facebook
• Ipad-interview children from Allinge skole
Methods evaluation

Quantitative outcome measures

- Questionnaire
- 220 families on Bornholm/Odsherred + 1500 random selected Bornholm/Odsherred
  - Dietary intake, sedentary behaviour, social capital
- Anthropometric measures
- Children
  - Body Mass Index (BMI), Skin fold,
- Biomarkers
  - Urine samples (biomarkers for fruit & veg.)
- Supermarket Sales
  - Sales of healthy & unhealthy food products (Fruit, veg. & wholegrain: 25/15 % increase, Sweets: 25/15 % decrease)
Results: media coverage proxy for program awareness

Number of media-events
Results: program awareness
Citizens assisted knowledge (prompted recall)

- High impact intervention sites increased from 19-36% to 62-85%
- Compared to 17-40% in the background population on the island.
Results: Its much more difficult to change behavior than environment*
from semi-structured interview

“I would never go somewhere else to buy it. The problem is when it’s right there in front of my nose for a long time then I can’t help it”

Woman in thirties, 2 children

Lise Lawaetz Winkler,*, Ulla Toft, Charlotte Glümer, Bent Egberg Mikkelsen, Ulla Christensen

*I choose what I feel like*: Using practice theories to analyze food shopping routines and perceptions of nudging in supermarkets

* Wansink, B: Slim by design
Results: weekly sales for F&V
Quarterly removal of VAT (20%) on F&V

Figure 1: Weekly index numbers* for sales of fresh vegetables in the “price+space intervention” (blue line), “space only intervention” (red line) and control (green and brown line) supermarkets

*Weekly index numbers are sold weight of fresh vegetables in 2012 compared to the same weeks in 2011.
Results

FV liking & intake

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Toft, U. Evaluation of SoL program; First results, Danihs Publich Health Days Confernce, Nyborg Beach, September 29, 2015
Conclusion: roadmap for successful implementation

1. Building collaboration and partnership through action research & co-creation
2. Creating synergy and intensity by using more components at more levels
Conclusion

- Use the recent interest in the local
- Assess preparedness carefully
- Combine a strong research design with a participatory design
- Align with public policies
- Don’t underestimate cost of “action”
- Engage with and use media
- Be prepared to negotiate