Using Policy & the Socio-Ecological Model to Promote Healthy Weight

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Learner objectives

• Describe public policymaking using a Socio-Ecological perspective.

• Discuss how policy can influence health weight promotion at all levels of the Socio-Ecological Model.

• Review differences between public policy, institutional and organizational policies, and programs and how to create synergy across the domains.
Path for today

Public policy

Social Ecological Model

Healthy Weight: Policy-level interventions

Challenges
Public Policy
What is public policy?

• “A statement by government of what it intends to do *or not to do*, such as law, regulation, ruling and decision, or order, or a combination of these” (Birkland, 2001)

• “Political decisions for implementing programs to achieve goals” (Cochran & Malone, 1995)
Policy is government’s response to societal problems.
Policymaking

• Policymaking is essentially a decision-making process involving the allocation of scarce resources; it can be conceived of as a competition
• Need to develop an understanding of:
  • The particular type of decision-making
  • The decision-making context, participants and processes

“[Political] competence entails knowing how and where to exert influence”  (Longest, 2002, p. 43)
Policymaking process

• Three components:
  • Policy formulation
  • Implementation
  • Modification

• Characteristics: continuous, inter-related, cyclic, no phase complete without the others.
Social Ecological Model

*Effective behavior change/health promotion must target individual and social factors; multi-level interventions are synergistic.*
Aims

• Improve health outcomes
• Reduce disparities
Social Ecological Model

Roots

Ecology (derived from the biological sciences)

Describes the complex interrelationships among organisms and the environment in which they are embedded

Social Ecology

The study of the influence of the social context on behavior, including institutional and cultural variables (Sallis & Owen, 2002).
Two features of the model

• **Embeddedness**—One system is nested in hierarchy of other systems at different levels of analysis

• **Emergence**—System at each level is greater than the sum of its parts
Two key concepts

**Multiple levels:** Behavior affects and is affected by multiple levels of influence

**Reciprocal causation:** Individual behaviors shapes, and is shaped by, the social environment (similar idea in Social Cognitive Theory)
If social change supports individual change, more self-sustaining.
Policy-Level Interventions for Healthy Weight
Majority of obesity interventions address clinical, behavioral or educational issues; little attention paid to environmental factors.
Types of policy interventions

- Voluntary or mandatory
- Bill → law/act/statute
- Rules and regulations
- Agency implementation
- Court decisions
- Guidelines
- Directives
Overview government food policy strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population education</td>
<td>Places responsibility on individuals</td>
</tr>
<tr>
<td></td>
<td>Effects uncertain, particularly among marginalized populations</td>
</tr>
<tr>
<td>Point-of-purchases labelling</td>
<td></td>
</tr>
<tr>
<td>Food incentives &amp; disincentives</td>
<td>Can be aimed at consumers, producers, &amp; retailers</td>
</tr>
<tr>
<td></td>
<td><strong>Generally effective</strong></td>
</tr>
<tr>
<td>Food assistance programs</td>
<td>Designed to help disadvantaged individuals &amp; families</td>
</tr>
<tr>
<td></td>
<td>Emphasis on healthy or culturally-appropriate food often lacking</td>
</tr>
<tr>
<td>Procurement standards</td>
<td>Government, schools, military, food assistance programs</td>
</tr>
<tr>
<td></td>
<td><strong>Buying power</strong>; standards not established</td>
</tr>
<tr>
<td>Industry quality standards</td>
<td><strong>Low-cost, sustainable, and effective.</strong></td>
</tr>
<tr>
<td></td>
<td>Can be politically challenging; standards are evolving</td>
</tr>
</tbody>
</table>

(Mozaffarian, Angell, Lang, & Rivera, 2018)
Overview government food policy strategies *cont’d.*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition standards</td>
<td>Early childhood schools &amp; care, school, &amp; after-care institutions Limited budgets; benefits assumed but have not been rigorously tested</td>
</tr>
<tr>
<td>Food marketing standards</td>
<td><strong>Low-cost, sustainable</strong> Should include all forms of marketing (not just children’s programs); political &amp; social resistance.</td>
</tr>
<tr>
<td>Local built environment</td>
<td>Promising approach; more research needed</td>
</tr>
</tbody>
</table>

(Mozaffarian, Angell, Lang, & Rivera, 2018)
Public policy interventions

- Public policy interventions or influences can be direct or indirect:
  - Direct: Policy regarding food packaging, advertising
  - Indirect: Farming policy, production practices, trade agreements
Food environment

- Proximity unhealthy food choices are major driver of weight
- Disparity between cost/calorie of healthy food and energy-dense foods are growing
- Portion sizes also growing; portion size directly influences consumption
- Frequency of eating away from home growing; associated with decreases in food quality
- Marketing favors unhealthy food choices
Environmental drivers of obesity

• Humans heavily influenced by \textit{default conditions}

• Defaults are conditions people are exposed to in day-to-day life affecting behavior and health

• Defaults in food environment can influence selection and consumption of food

\textit{Policy interventions that change defaults are swiftest and most effective way of producing change}
Obesity Causes & Corresponding Policy Responses

Role of Policy and Government in the Obesity Epidemic, Volume: 126, Issue: 19, Pages: 2345-2352, DOI: (10.1161/CIRCULATIONAHA.111.037929)
Examples of policies to change defaults

- Safe Routes to Schools
- Let’s Move!
- Healthy Food Financing Initiative
- Healthy, Hunger-Free Kids Act
- ACA menu labelling

(Novak & Brownell, 2012; Mozaffarian, Angell, Lang, & Rivera, 2018)
Quick survey TN early childhood policies

Early childhood education

<table>
<thead>
<tr>
<th>Policy</th>
<th>TN</th>
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</thead>
<tbody>
<tr>
<td>Allow/encourage breastfeeding</td>
<td>Green</td>
</tr>
<tr>
<td>Defined amount &amp; level physical activity</td>
<td>Red</td>
</tr>
<tr>
<td>Healthy eating policies</td>
<td>Green</td>
</tr>
<tr>
<td>Nutrition standards</td>
<td>Green</td>
</tr>
<tr>
<td>Private breastfeeding space</td>
<td>Red</td>
</tr>
<tr>
<td>Limit screen time</td>
<td>Green</td>
</tr>
</tbody>
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State of Obesity, n.d.
Quick survey TN school-based policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>TN Elementary</th>
<th>TN Middle</th>
<th>TN HS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phys Ed (PE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE time requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recess</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe school routes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared use facilities</td>
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<td></td>
</tr>
</tbody>
</table>

State of Obesity, n.d.
Quick survey TN community policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>TN</th>
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</thead>
<tbody>
<tr>
<td>Complete streets</td>
<td></td>
</tr>
<tr>
<td>Healthy Food Financing</td>
<td></td>
</tr>
</tbody>
</table>

State of Obesity, n.d.
Three most cost-effective policy interventions

• Tax on unhealthy food and beverages
• Traffic light nutrition labeling system
• Decreased marketing of unhealthy food and beverages to children

(Novak & Brownell, 2012)
Challenges

*Multi-level interventions* are scarce; most interventions are single-level and primarily focused on intrapersonal change.  

(Scholmerich & Kawachi, 2016)
Addressing environmental defaults

• Generally fail to address most powerful defaults:
  • Marketing unhealthy foods to children
  • Availability of sugary drinks

(Scholmerich & Kawachi, 2016)
Questions?