Challenges and Opportunities Securing More Appropriate LifeStyle Choices

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Initially created by David Beran, PhD
from research review
by Paul Madden and David Beran
Slides 1 - 8
The Obesity Epidemic Threatens To:

- Undermine improving standards of living
- Reduce quality of life; physically, emotionally
- Hinder education
- Subvert economic growth and worsen the global financial crisis
- Collapse health care systems + governments
Influencers that Lead to Overweight, Obesity?

<table>
<thead>
<tr>
<th>MACRO level factors (international)</th>
<th>Globalization of food markets</th>
<th>Development</th>
<th>Media and advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO level factors (national)</td>
<td>Transport and Urbanization</td>
<td>Health and social security</td>
<td>Media</td>
</tr>
<tr>
<td>MESO level factors</td>
<td>Public transport</td>
<td>Public safety</td>
<td>Healthcare</td>
</tr>
<tr>
<td>MESO level factors</td>
<td>Access to leisure facilities</td>
<td>Work</td>
<td>Worksite (food and physical activity)</td>
</tr>
<tr>
<td>MICRO level factors</td>
<td>Energy expenditure</td>
<td>Food intake</td>
<td>Genetic factors; ? Changing,</td>
</tr>
<tr>
<td>Population</td>
<td>Reduced: Physical Activity and Positive Lifestyle Choices</td>
<td>Results: &gt; Overweight, Obesity, Early Hypertension, Stroke, CVD, Type 2 Diabetes, Smoking, etc…</td>
<td></td>
</tr>
</tbody>
</table>
## Influence on Behavior; What the Research Told Us

(1 = less available research; 5 = more available rsch.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of intervention (target, means of delivery, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taxes on unhealthy food</td>
</tr>
<tr>
<td>1</td>
<td>Mentoring</td>
</tr>
<tr>
<td>1</td>
<td>Industry</td>
</tr>
<tr>
<td>2</td>
<td>Behavioral Modification</td>
</tr>
<tr>
<td>2</td>
<td>New Technologies</td>
</tr>
<tr>
<td>2</td>
<td>Increasing physical activity</td>
</tr>
<tr>
<td>2</td>
<td>Improving diet</td>
</tr>
<tr>
<td>2</td>
<td>Improving lifestyle (diet and exercise)</td>
</tr>
<tr>
<td>2</td>
<td>Motivational Interviewing</td>
</tr>
<tr>
<td>2</td>
<td>Healthcare workers</td>
</tr>
<tr>
<td>2</td>
<td>Parents</td>
</tr>
<tr>
<td>2</td>
<td>Summer camps</td>
</tr>
<tr>
<td>3</td>
<td>Schools</td>
</tr>
<tr>
<td>3</td>
<td>Workplaces</td>
</tr>
<tr>
<td>4</td>
<td>Improving physical activity by changing the PA environment</td>
</tr>
<tr>
<td>4</td>
<td>Improving physical activity by using Video games</td>
</tr>
<tr>
<td>4</td>
<td>Changes in packaging and labeling</td>
</tr>
<tr>
<td>4</td>
<td>Use of financial incentives</td>
</tr>
<tr>
<td>5</td>
<td>Community based</td>
</tr>
<tr>
<td>5</td>
<td>Government-wide</td>
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</tbody>
</table>
# Promoting and Securing More Appropriate Choices

- **Suggested measures:** [10-14]

<table>
<thead>
<tr>
<th>MICRO</th>
<th>MESO</th>
<th>MACRO</th>
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</thead>
</table>
| • Early life factors
  • Education
  • Physical activity integrated into daily life
  • Nutrition
  • Home environment; tends to be more family in early years then peer influence grows | • Inter-sectoral collaboration
  • Community participation (nutrition and physical activity education)
  • Adapting national guidance to suit local needs and needs of different sub-populations
  • Healthcare workers and health system
  • Schools (physical activity, nutritional education)
  • Clubs, Teams, Churches... | • Environmental / Societal / Economic System wide approaches
  • Wellness is a national priority
  • Nutrition labeling
  • Advertising and marketing guidelines
  • Specific policies and action plans (diet and physical activity)
  • Taxation, regulation and subsidies

- Include industry
- Media and public relations campaigns
  - Built environment
  - Food production and supply
  - Work environment

- Food production and supply
- Work environment
- Built environment
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Our Literature Review Showed

Large-scale lifestyle enhancement and obesity-prevention differs from previous public health initiatives, such as smoking cessation.

- Food is complex and **essential**.
- Urbanization combined with mechanization/automation; significant and at a unique level in history.
- Numerous systems and individuals determine people’s food and physical activity environments.
- Different factors influencing conditions: Type 2 diabetes increases at BMI of $>22$ or $>25$, environmental safety, healthy food access, etc.
- Current Rsch. and Programs: More focus on the individual versus the community and interventions have targeted: decreasing in weight, decreasing in unhealthy behaviors (television /internet viewing, etc.), increasing in healthy behaviors (fruit and vegetable consumption, knowledge of healthy behaviors, physical activity, etc.)
## Review of the Literature

Studies identified during review of literature fall into these categories:

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<tbody>
<tr>
<td>• Motivational interviewing</td>
<td>• Health professionals</td>
<td>• Taxes and other price interventions</td>
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<tr>
<td>• Behavior modification</td>
<td>• Summer camps and retreats: (primarily Type 1 diabetes, limited obesity and family programs)</td>
<td>• Packaging and labeling</td>
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<tr>
<td>• Physical activity</td>
<td>• Schools</td>
<td>• Financial incentives</td>
</tr>
<tr>
<td>• Dietary interventions</td>
<td>• Mentoring programs</td>
<td>• Food and beverage industry</td>
</tr>
<tr>
<td>• Lifestyle interventions</td>
<td>• Workplace wellness and incentive programs</td>
<td>• Governments</td>
</tr>
<tr>
<td>• Use of new technologies</td>
<td>• Community based interventions</td>
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<tr>
<td>• Including interactive video games</td>
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<td></td>
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<tr>
<td>• Parents, adults, peers</td>
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- In addition to reviewing published studies some of these examples were identified and discussed with leaders
The North Karelia Example

• The North Karelia project provides the most comprehensive community-based strategy. Some key factors determining success:
  – Community ownership and people’s participation
  – Involvement of NGOs
  – Taking into account that dietary habits are deeply rooted in the cultural and economic factors
  – Media campaigns
    • Use of role models
  – Collaboration with the food industry
  – Agricultural reforms
  – Clear and credible nutrition information
    • Information on the links between diet and health
      – Practical
      – Culturally appropriate
  – Education programs to provide information and skills
  – Use of competitions, games.
  – Long term support from all levels
Analysis of this Literature and Programs Reviewed

- Many interventions have an impact in the short-term
  - But this impact does not continue into the long-term or more often the long-term effects have yet to be studied
- Studies from the review fall into the 5 categories:
  1. Based on current evidence not enough/or evidence points to little or no positive impact
  2. Evidence shows some positive short-term impact, but no long-term impact
  3. Evidence shows a positive short-term impact, but no long-term impact
  4. A positive short-term impact, but the long-term impact has not been studied, but could be a promising option
  5. Large positive short-term impact and potential for long-term impact, but more studies needed
- Results from both scientifically evaluated interventions and those only described in “Practical examples” show:
  - At times, a clear disjuncture in comparison to what experts suggest
  - Some important issues are not being addressed
We Will Gain Most Significant Buy In By Influential Partners When We:

- Have significant positive outcomes related to health cost savings and productivity demonstrated by programs.
- Have dynamic, committed partners who benefit with participation and success.
- Can show sustainability
- Can show growth of best programs to other venues
Cyclical relationship between low self-esteem, poor metabolic control and future outcomes; adapted from *Simplified Pathway from Poor Schooling to Poor Job Success* (Gray et al 1980 in Daniel et al. 1999 p. 230)
“The child with diabetes is better looking and brighter than their siblings without diabetes.”
Priscilla White, MD
QUESTIONS of LOVE, CONCERN, FEAR
(Nagging, inappropriate statement of love and concern?)

- Did you test?
- Do you have sugar with you?
- Did you take your pill, your shot, your bolus?
- Your blood sugar is over 400, what did you eat?
- Our words as well as our tone of voice are all very important! How we convey our support and questions to loved ones is crucial! (Take a breath before you ask)
Getting Started with Children: Sample Questions

• “What do you think about the fact that your child’s A1c is high?

• How have you tried to change it for the better?

• How do you handle it, as parents, when Susie gets bad grades, or is disrespectful?

\{ Emotional Impact/Value Congruence \\
\{ Competence/Effectiveness \\
\{ Value Congruence/Effectiveness \}
Getting Started with Adults: Sample Questions

- “How do you feel about having diabetes?”
- How do you feel about him/her having diabetes?”
- Can you talk to me a bit about what attracted you to each other?”
- What are you looking forward to doing with the rest of your lives?”

Emotional impact/couple communication patterns/emotional tone of couple

Assessment of Couple’s emotional bond

Value congruence & communication patterns
Getting Started with Adults: Sample Questions

- "Would like her/him to be involved in your diabetes?"
- "Provide her/him with the words that will open your door and let him/her in"

Couple interactive dynamics/intimacy & interpersonal boundaries

Capacity for sharing, intimacy & trust
Have you ever had a low blood sugar during a game, during a test? How do you deal with this; even reduce chances that this will happen?
NCDs Are A Family & Friends Affair
Your tone, spirit, approach is KEY. Catch their attention! (my singing?!)
Learning to meet life’s challenges is not always fun + at times is thrust upon us!

The most effective learning must always be valued and reinforced, internally and by others that the individual values!
NO Moral Judgments!

Out of range blood sugar numbers, under or over eating or exercising result in a lack of balance and present incredible opportunities for sharing, learning + solutions.
What we say + what is heard!
Work with your Diabetes Mirror.

“That’s a lie. I did not tell him he could eat anything he pleased.”
Stay Focused on the “right” stuff!
Opportunities to learn; also can be discouraging and overwhelming especially when you thought you already did everything just right.
Family and Friends are vital supporting us to deal with important challenges in life that you wish belonged to someone else! Network with these other vital members of your mentee's lives.
Realistic Role Models are Key

50-75 Year Medalists: Making balanced decisions become habits!
SAFE participation in a FULL life increases with education, understanding, proper preparation + emotional support...
Being Proactive!

Believing there are solutions + U can get there!

“Look! He forgot to lock the door!”
With Chronic Medical Challenges
It’s About

• Understanding your condition, your challenges and solutions; believing you can do it!
• Working with a superb health care team
• Pain, despair, anxiety, falling apart and getting up again
• Supporting each other; both asking and giving
• Finding and believing sources of hope & inspiration
• Understanding and believing you can do it!
• Important supports and access to health
Power of HOPE
Believing that tomorrow will be better can be empowering

1890’s Promise:
Belief in a cure can help but believing the cure is tomorrow can distract individuals and families from taking care of diabetes today. Until there is a cure, management opportunities will continue to improve, ensuring are bodies are healthier when the cure(s) are developed.
You can't tell by looking; this is good but sometimes it makes it harder.
The WOW factors of life are more often simple and may even appear to be small; they occur every day and night! Capture these moments!

Positive support does more to bring about significant, lasting change; with a chronic condition this support is even more important!
One has to believe that they can do it; that they matter! You have an incredible opportunity to empower and significantly improve lives today and for a growing number of healthier tomorrows.
Stakeholders Who Can Influence Behaviors to Optimize Health

Schools
Policy Makers
Communities, Role Models, Respected Leaders, Celebrities
Corporate w/ Emphasis on Food/Beverage, Fitness, Wellness

Patients, Families

Advocacy groups

Employers
Health Care Professionals

Payers: Ins. Gov.
Healthy Kids, Smart Kids
School Wellness Program
Mission: Improve Student Quality of Life

• Our Goals Target Healthy Behavior
  – Improve nutrition and physical activity
  – Reduce childhood obesity and related health risks (asthma, diabetes, hypertension)
  – Improve student behavior & academic performance

• Focus on Environmental Change (Hard & Soft)
  • Food & beverage choices
  • Time and access to physical activities
  • Education, motivation, and expectations
Results Driven

• Positive Outcomes:
  – Improved nutrition and physical activity
  – Improved student healthy weight and BMI
  – Reduced school nurse, discipline and counselor visits
  – Better managed incidents involving students with diabetes
  – Parents adopted wellness practices at home
  – Improved student behavior and academics

The passion, commitment and understanding of the professional, positive role model is often key to a program’s success.
Web/Social Media – Still early, may flavors Some include management data/sharing

- Deep info resource/community – online and offline (CWD)
- Online/broadcast rich media/community (dLife)
- Online news, reviews, and research (diaTribe)
- Blogs (DiabetesMine, Six Until Me)
- Mainstream web 2.0 (Facebook)
- Diabetes web 2.0 communities (TuDiabetes)
- Data sharing sites (MS HealthVault, Sweetspot, SugarStats)
- Lifestyle improvement over web (Fit4D)
- Health info (Medscape/WebMD)
- Manufacturers websites

No single site provides everything: community information, interactivity (sharing numbers, professional diabetes coaching, etc.) – just a few examples cited above. Electronic networking is enhancing the health of a growing number of subscribers at minimum cost to the patient and HCP!
MyCareTeam: Electronic Collaboration

Diabetes Educators

School Employer

Family

Doctor

Proven to reduce average HbA1c by 1.9-3.0% per patient, minimum cost
More Positive Adult Roles are Needed

THANK YOU
Thank you for your expertise and passion enhancing the lives of the people you serve!
Overcoming Challenges

- “Mr. Edison, how can you continue to pursue the light bulb when you have failed 5,000 times?”

His Reply...

- “You say I’ve failed 5,000 times, but I have not failed once. I’m just 5,000 steps closer to the ultimate solution.”

- Our Reply must be similar to Mr. Edison!
Thank you from the bottom of my pancreas...

...that's like the bottom of my heart, only deeper.