Food Insecurity and Health

Health Care Homes Webinar

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Diana Cutts, MD

HCMC Department of Pediatrics
Robert Kennedy Mississippi 1967
How to Reconcile with Current Headlines?

childhood obesity
Food Insecurity

The limited or uncertain access to enough nutritious food for all household members to lead an active and healthy life.

Note: copy link and paste in browser

https://www.youtube.com/watch?v=F5FTUuqNZn4
Household Food Security/Insecurity Questions

18 Questions measure:

ANXIETY - household food budget/supply inadequate

PERCEPTIONS - food eaten was inadequate in quality/quantity

REPORTED INSTANCES - reduced food intake/consequences (sensation of hunger, reported weight loss), in ADULTS of household

REPORTED INSTANCES - reduced food intake/consequences for CHILDREN in households

COPING ACTIONS - augment food budget/supply (e.g. borrow money, get food from emergency pantries)
The Hunger Vital Sign

A 2 question screening tool:

Within the past 12 months we worried whether our food would run out before we got money to buy more.

Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.

Positive if sometimes or often true to one or both

Validated on over 30,000 families
83% specificity, 97% sensitivity

Hager, et al. Peds 2010
Prevalence in US

- **14%** US households food insecure in 2014
  - 48 million people, including 16 million children
  - 14% in 2013, no change
- **19%** households with children
- **20%** households with children under age 6
FOOD INSECURITY AFFECTS MORE THAN 16 MILLION U.S. CHILDREN
How to screen and intervene

Oral and facial trauma
How to proceed in an emergency

Contemporary Pediatrics
Disparities in Food Insecurity

• **35%** Households with children headed by a single woman
• **26%** Black, non-Hispanic households
• **22%** Hispanic households
Time Trends in Food Insecurity

Trends in prevalence rates of food insecurity and very low food security in U.S. households, 1995-2014

Prevalence rates for 1996 and 1997 were adjusted for the estimated effects of differences in data collection screening protocols used in those years.

Household Food Insecurity in Young Children at HCMC

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>2007</td>
<td>33.8%</td>
</tr>
<tr>
<td>2008</td>
<td>31.4%</td>
</tr>
<tr>
<td>2009</td>
<td>28.0%</td>
</tr>
<tr>
<td>2010</td>
<td>40.6%</td>
</tr>
<tr>
<td>2011</td>
<td>44.4%</td>
</tr>
<tr>
<td>2012</td>
<td>22.5%</td>
</tr>
<tr>
<td>2013</td>
<td>46.9%</td>
</tr>
<tr>
<td>2014</td>
<td>37.9%</td>
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</tbody>
</table>
Health Effects- Children

• Low birth weight
• Inadequate diet associated with increased risk of infectious disease - otitis, respiratory illness
• Increased fatigue
• Increased headaches, stomachaches
• Increased hospitalizations, poor/fair health
• Higher prevalence of anemia
• Conflicting evidence re: obesity
Health Effects - Behavior

• Younger children – more passive, less exploratory, shorter bouts of play, less attentive to novel and social stimuli – at greater risk for developmental delays

• School children - behavioral changes - apathy, aggression, anxiety, attention difficulties – more likely to repeat a grade, to drop-out

• School studies - negative effects of even temporary hunger on cognitive tests
Health Effects - Adults

- More healthcare utilization
- Poor diabetes control
- Increased risk of chronic disease
- Obesity
- Depression
- Anxiety

Lange's 1936, Migrant Mother
Economic Cost of Food Insecurity

✓ $54.6 Million for Tx of excess congenital defects
✓ $1.2 Billion for Tx of excess mental health problems in children
✓ $1.8 Billion in excess child hospitalization costs
✓ $5.9 Billion in excess special education costs in public primary and secondary schools
So, I care about this because...?????
Strategy 1: Improve Nutrition For All Children

“I am determined to work with folks across this country to change the way a generation of kids thinks about food and nutrition.”
Strategy 2: Think Equity

How do we help those that need it the most?

Advancing health equity is not about averages. It’s about creating opportunities to be healthy.

Equality vs Equity
## SNAP and WIC

<table>
<thead>
<tr>
<th></th>
<th>SNAP</th>
<th>WIC</th>
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<tbody>
<tr>
<td><strong>Funding</strong></td>
<td>USDA ($72 Billion)</td>
<td>USDA ($7.2 Billion)</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>44.7 million Seniors, disabled, families with children, limited access for able bodied adults without dependents</td>
<td>8.9 million Pregnant and postpartum women, infants, children up till age five</td>
</tr>
<tr>
<td><strong>Eligibility</strong></td>
<td>165% FPL</td>
<td>185% FPL and/or Adjunct Eligibility</td>
</tr>
<tr>
<td><strong>Program Focus</strong></td>
<td>Food program</td>
<td>Health program</td>
</tr>
<tr>
<td><strong>Immigrants</strong></td>
<td>Five or more years documented status</td>
<td>Serves eligible regardless of immigrant status</td>
</tr>
<tr>
<td><strong>Nutrition Education</strong></td>
<td>SNAP-Ed Projects</td>
<td>Nutrition assessment and education part of each visit</td>
</tr>
</tbody>
</table>
Children On SNAP Healthier Than Eligible Non SNAP participants

Source: Children’s HealthWatch. All reductions statistically significant at $p<0.05$
WIC Improves Child Health and Development

Adjusted for site, race/ethnicity, age, gender, birthweight, caregiver education, depression, & receipt of TANF.

Black et al. Archives of Pediatrics & Adolescent Medicine 2012;166(5)
School, Summer, and Childcare Feeding Programs

In 2012, 3.4 million children

Free lunch for your child!
Summer Food Service Program

From 2012-2013, 21.5 million children

In 2014, 2.6 million children
Food Assistance: Your Community Resources

• Share Our Strength - nokidhungry.org
• Feeding America - feedingamerica.org
• Food Research and Action Center (FRAC) - frac.org
• Hunger Free Communities Network hungerfreecommunities.org
WHY HEALTHCARE SETTINGS?
The Food Shelf @ HCMC

IT'S HARD TO BE HEALTHY WHEN YOU'RE HUNGRY

FOOD IS MEDICINE

THE FOOD SHELF at Hennepin County Medical Center
Healthcare Sponsored Summer Feeding Programs

Proud to be a meal site for the USDA’s
Summer Food Service Program

Free breakfast and lunch for hungry children during summer vacation

DATE: June 1-August 30, 2015
LOCATION: HCMC Cafeteria (Orange Building, Level 3)
TIME: Monday-Friday, 9:30-10:30 am & 10:30 am-1:15 pm

Additional information: Membership in the program is open to all children, regardless of race, color, national origin, gender, age, or disability.
## EMR Facilitated Referrals

### REFERRAL TO FOOD RESOURCES

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Answer</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patients preferred phone #/contact info</td>
<td></td>
<td></td>
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<tr>
<td>2. Patient would like food assistance and asks that a SNAP Outreach staff member call</td>
<td>Yes/No</td>
<td></td>
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<tr>
<td>3. Contact's preferred language:</td>
<td>English/Spanish/Other (please use comments)</td>
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**Comments (F6):**

This order will automatically fax to Second Harvest Heartland @ 651-484-1064, upon signing. A member of their SNAP Outreach Staff will contact the patient using the contact information provided above.
Other Health Care Based Interventions

- Cooking classes
- Community Gardens
- CSA Distribution Sites
- Produce Kiosk
- WIC onsite
- Week-long pre-packed meals
- Meal Delivery

“Let food be thy medicine, thy medicine shall be thy food.”
- Hippocrates
Changes You May Wish To Make In Practice

1. **ASK** questions about Food Security
2. **REFER** to governmental & community food assistance programs
3. **INTEGRATE** Food Security awareness and resources into healthcare infrastructure
References

For more information on this subject, see the following publications:

- *Fighting Hunger Through Healthcare: A Seamless Solution*
  Share Our Strength No Kid Hungry
- *Hunger in the Community: Ways Hospitals Can Help*
  Project Bread
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https://www.youtube.com/watch?v=vhJ6hfbn4x8