A Clinician’s Perspective on Early Life Obesity Prevention 0-5 Years

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Overview

- Clinic based interventions ages 2-5 years
- The realities of clinical care ages 2-5 years
- Emerging opportunities in clinical care 0-5 years
- Potential partners for clinicians 0-5 years
Clinic-based interventions ages 2-5 years

- Virtually no solely clinic-based prevention interventions
- Some focus on treatment for overweight young children with motivational interviewing as a key component (Taveras et al., Arch Ped Adolesc Med, 2011; Resnicow et al., Pediatrics, 2015)

**TABLE 4 Two-Year BMI Percentile and BMI Percentile Change by Study Group**

<table>
<thead>
<tr>
<th>Study Group</th>
<th>n</th>
<th>Year 2 BMI Percentile (SE)</th>
<th>BMI Percentile Difference (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 - Usual Care</td>
<td>158</td>
<td>90.3 (0.94)</td>
<td>1.8 (0.98)</td>
</tr>
<tr>
<td>Group 2 - PCP</td>
<td>145</td>
<td>88.1 (0.94)</td>
<td>3.8 (0.96)</td>
</tr>
<tr>
<td>Group 3 - PCP + RD</td>
<td>154</td>
<td>87.1 (0.92)</td>
<td>4.9 (0.99)</td>
</tr>
</tbody>
</table>
“Pediatricians should use a longitudinal, developmentally appropriate life-course approach to help identify children early on the path to obesity and base prevention efforts on family dynamics and reduction in high-risk dietary and activity behaviors.”
AAP Recommendations

- **Identify Children at Risk** – growth charts, prenatal, child, and behavioral risk factors
- **Educate** – screen for knowledge about:
  - Healthy diet (and where to find it), portion sizes
  - Risk of sedentary behaviors
  - WIC and SNAP
  - Online resources, e.g. ChooseMyPlate.gov
- **Manage Food and Activity Environment**
  - Suggest healthy alternatives
- **Self Monitoring**
- **Family Focused**
Realities - Opportunities

- High access to children and parents/guardians
- Trusted source of health information
- Can link families to community resources
Realities of clinical care - Barriers

- Time and space constraints – availability of clinic rooms, short length of appointments
- Extra travel for families if more visits
- Physician care is relatively expensive, reimbursement for obesity-related care is poor
- Lack of knowledge, experience in preventing obesity for young children
- Providers often believe parents aren’t concerned about high weight for infants & toddlers
Realities of clinical care – other priorities

- Bright Futures, 3rd edition, 2 year well child visit

PRIORITIES FOR THE VISIT
The first priority is to attend to the concerns of the parents. In addition, the Bright Futures Early Childhood Expert Panel has given priority to the following topics for discussion in this visit:

- Assessment of language development (how child communicates, expectations for language)
- Temperament and behavior (sensitivity, approachability, adaptability, intensity)
- Toilet training (what have parents tried, techniques, personal hygiene)
- Television viewing (limits on viewing, promotion of reading, promotion of physical activity and safe play)
- Safety (car safety seats, parental use of safety belts, bike helmets, outdoor safety, guns)

- None of the visits 2 through 4 years list diet or nutrition as a priority!
**Bright Futures Previsit Questionnaire**

**2 Year Visit**

For us to provide you and your child with the best possible health care, we would like to know how things are going. Please answer all of the questions. Thank you.

**What would you like to talk about today?**

**Do you have any concerns, questions, or problems that you would like to discuss today?**

We are interested in answering your questions. Please check off the boxes for the topics you would like to discuss the most today.

### Your Talking Child
- How your child talks
- Reading together

### How Your Child Behaves
- Pouting your child
- Helping your child express feelings
- Knowing how to play child limited choices
- Having with others
- Helping your child follow directions
- Your child weighs

### Toilet Training
- Your child is ready to potty train
- Helping your child potty train

### Your Child Uses TV
- How much TV is too much TV
- Learning activities other than TV
- How to be physically active as a family

### Safety
- Car safety
- Bike helmet
- Being safe outside
- Sun safety

### Questions About Your Child

Has any of your child’s behavior developed new medical problems since your last visit? If yes, please describe.

<table>
<thead>
<tr>
<th>Heart &amp; Circulation</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have concerns about how your child’s heart is?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Do you have concerns about how your child’s blood is?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vision</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do your child have sight problems?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Do your child have eye problems?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Lead</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child have a sibling or playmate who has had lead poisoning?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Does your child live in or regularly visit a house or child care facility built before 1970 that is being or was recently been (within the past 5 months) remediated or remediated?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Does your child live in or regularly visit a house or child care facility built before 1970?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tuberculosis</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was your child born in a country at high risk for tuberculosis?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Has your child travelled (had contact with residents population) for longer than 1 week to a country at high risk for tuberculosis?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Has a family member or contact had tuberculosis or a positive tuberculin skin test?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Is your child infected with HIV?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dyslipidemias</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child have parents or grandparents who have had stroke or heart problem before age 55?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Does your child have a parent with elevated blood cholesterol (HDL, HDL, C or HDL) or who is taking cholesterol medication?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anemia</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child’s diet include iron-rich foods such as meat, eggs, iron-fortified cereals, or beans?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Does your child have a dermatitis?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>Does your child’s primary source of iron?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

| Does your child have any special health care needs? | Yes | No, describe |

<table>
<thead>
<tr>
<th>Have there been any major changes in your family?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move</td>
<td>Job change</td>
<td>Separation</td>
</tr>
<tr>
<td>Divorce</td>
<td>Death in the family</td>
<td>Any other changes</td>
</tr>
</tbody>
</table>

| Does your child live with anyone who uses tobacco or spend time in any place where smoke? | Yes | No |

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Bright Futures Parent Handout
2 Year Visit

Here are some suggestions from Bright Futures experts that may be of value to your family.

Your Talking Child:
- Talk about and describe pictures in books and the things you see and hear together.
- Parent-child play, where the child leads, is the best way to help toddlers learn to talk.
- Read to your child every day.
- Your child may love hearing the same story over and over.
- Ask your child to point to things as you read.
- Step out a story to your child make an animal sound or finish part of the story.
- The correct language is a good model for your child.
- Talk slowly and remember that it may take a while for your child to respond.

Your Child and TV:
- It is better to limit the play to less than TV.
- Limit TV to 1-2 hours or less each day.
- Watch TV together and discuss what you see and think.
- Be careful about the programs and advertising your young child sees.
- Do other activities with your child such as reading, playing games, and singing.
- Be active together as a family. Make sure your child is active at home, at child care, and with others.

Toilet Training:
- Signs of readiness for toilet training:
  - Dry for hours.
  - Knows if they are wet or dry.
  - Can pull pants down and up.
  - Wants to learn.
- Can you tell if your child is going to have a bowel movement?
- Plan for toilet breaks often. Children use the toilet as many as 10 times each day.
- Help your child wash their hands after toileting and diaper changes and before meals.
- Clean potty chairs after every use.
- Teach your child to cough or sneeze into her shoulder. Use a tissue to wipe her nose.
- Take the child to choose underwear when she feels ready to do so.

What to Expect at Your Child’s 2½ Year Visit

We will talk about:
- Your talking child
- Getting ready for school
- Family activities
- Home and car safety
- Getting along with other children

Politeness Help: 1-800-227-1222
Child safety seat inspection: 1-800-SEATCHECK; seatcheck.org

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Growth Charts

- Plotting BMI percentile on growth charts inconsistent in Pediatrics historically, but appears to be increasing. (Perrin EM, J Pediatrics, 2004; Hillman JB, Public Health Rep 2009)

- Weight-for-length chart <2 years infrequently used though AAP policy statement noted 95th percentile defines “overweight”.

![Growth Chart Diagram]
BUT, there is hope! – Quality Improvement

- Quality improvement (QI) – “systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.”
  - QI “movement” was initially more focused on the inpatient environment.
  - Electronic Health Records (EHR) have often been viewed negatively by primary care physicians, but optimally they can improve efficiency and quality of care.
Quality Improvement for Obesity Prevention

- High weight-for-length, high BMI could display as alarm values
  - Rapid infant weight gain too?
- Pre-visit or waiting room surveys could be automatically data entered to identify obesogenic behaviors, minimizing clinician assessment times
  - Early introduction of solids
  - Prolonged bottle use
  - Fruit juice, Sugar-sweetened beverage consumption
  - Lack of fruits and vegetables
  - TV time
Model of group healthcare with 3 main components:

- Assessment
- Education
- Support

Has been disseminated predominantly for prenatal care, but has moved into the pediatric well child care area though limited pediatric research …
Typical session 90-120 minutes, 8-9 sessions first year after birth, 6-7 parent-baby dyads

- Brief individual assessment with provider
- Self-care activities
- Self-assessment tools to examine relevant topics
- Informal discussion with other participants
- Facilitated discussion by care provider on health topics
Centering Care

- High patient Satisfaction, forms support network

- Adaptation of this being tested at NYU with low-income Latino participants, groups led by Nutritionist / Child Developmental specialist
Partnering

- WIC – can communication be improved?
- Dieticians – early intervention?
- Community resources
  - Farmer’s markets
- Obstetricians/Childbirth Education
  - Breastfeeding discussion during pregnancy
  - Promote appropriate gestational weight gain, smoking cessation
- Communication with childcare on dietary recommendations (e.g. beverages, snacks)
Partnering – Example

- NET-Works trial: RCT with intervention that integrates home, community, primary care, and neighborhood strategies (Sherwood et al, Contemporary Clinical Trials 2013)
  - Goal to promote healthful eating, activity patterns, and body weight among low-income, racially/ethnically diverse preschool-age children
  - Brochure helps primary care providers communicate about BMI percentile, healthful eating, activity
  - PCP role as trusted resource is to reinforce education from others involved in intervention