Motivational Interviewing (MI) in Pediatrics

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Dr. Haemer has no conflicts of interest to disclose.
Objectives

1. To describe MI and its evidence-based applications in pediatrics.

2. To introduce the Brief Negotiation style of MI for well-child and follow-up visits.

3. To introduce practical tools to support MI, goal-setting, and self-monitoring.
Obj 1: Pediatric Applications of Motivational Interviewing:

If a Pretty Poster and a Cute Saying are all it takes to Motivate you, you probably have a very easy job. The kind robots will be doing soon.
Evidence-Based Pediatric Applications of MI

- Childhood Overweight / Obesity
  - Improved BMI - 2-8 yr olds in primary care + RD

**Motivational Interviewing and Dietary**

**Impact of motivational interviewing on outcomes of an adolescent obesity treatment: results from**


https://doi.org/10.1007/s00431-018-3158-2

**Background and Objective:**
Delivered by primary care or delivered by providers 2 through 8.

**Methods:**
Forty-two participants (American Academy of Pediatrics care) measured BMI; only delivered 4 MI sessions (provider + RD) delivered over 2 year follow-up. Overall, child BMI was decreased.

**Results:**
At 2-year follow-up, 30% of participants achieved their BMI goal.

**Abstract**
Motivational interviewing (MI) is an effective method to promote weight loss that can be delivered by non-physicians.
Evidence-Based Pediatric Applications of MI

• Vaccination
  ▪ To postpartum moms → 6 mo vaccine coverage +7.3% (76% vs 69%)

https://doi.org/10.1186/s12889-018-5724-y

JAMA Pediatrics | Original Investigation
Effect of a Health Care Professional Communication Training Intervention on Adolescent Human Papillomavirus Vaccination: A Cluster Randomized Clinical Trial

Amanda F. Dempsey, MD, PhD, MPH; Jennifer Pyrznawoski, MSPH; Steven Lockhart, MPH; Juliana Barnard, MA; Elizabeth J. Campagna, MS; Kathleen Garrett, MA; Allison Fisher, MPH; L. Miriam Dickinson, PhD; Sean T. O’Leary, MD, MPH

IMPORTANCE The incidence of human papillomavirus (HPV)-related cancers is more than 35,000 cases in the United States each year. Effective HPV vaccines have been available in the United States for several years but are underused among adolescents, the target population for vaccination. Interventions to increase uptake are needed.

OBJECTIVE To evaluate the effect of a 5-component health care professional HPV vaccine communication training intervention on HPV vaccine uptake.
Evidence-Based Pediatric Applications of MI

- Underage Drinkers - cut dating violence 47%

Emergency Department Alcohol Protecting Young Children From

GYNECOLOGY

A randomized trial of motivational interviewing and facilitated contraceptive access to prevent rapid repeat pregnancy among adolescent mothers

Jack Stevens, PhD; Robyn Lutz, BSN; Ngozi Osuagwu, MD; Dana Rotz, PhD; Brian Goesling, PhD

BACKGROUND: Most interventions designed to reduce teen pregnancy rates have not focused on pregnant and/or parenting adolescents. Therefore, a large randomized controlled trial was conducted regarding a motivational interviewing program entitled Teen Options to Prevent Pregnancy in a low-income sample of adolescent mothers. This program recommended monthly sessions between a participant and a registered nurse over 18 months. This program also featured facilitated birth control access through transportation assistance and a part-time contraceptive clinic.

OBJECTIVE: The impact of this program on rapid repeat pregnancies at 18 months after enrollment was evaluated.

RESULTS: There was an 18.1% absolute reduction in self-reported repeat pregnancy in the intervention group relative to the control group (20.5% vs 38.6%; \( P < .001 \)). There was a 13.7% absolute increase in self-reported long-acting reversible contraception use in the intervention group relative to the control group (40.2% vs 26.5%, \( P = .002 \)). There was no evidence of harmful effects of the intervention on sexual risk behaviors, such as having sexual intercourse without a condom or greater number of partners.
Evidence-Based Pediatric Applications of MI

- Decreased physician burnout
- Increased patient satisfaction

Effect of teaching motivational interviewing via communication coaching on clinician and patient satisfaction in primary care and pediatric obesity-focused offices

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ABSTRACT

Objective: Studies indicate needed improvement in clinician communication and patient satisfaction. Motivational interviewing (MI) helps promote patient behavior change and improves satisfaction. In this pilot study, we tested a coaching intervention to teach MI to all clinic staff to improve clinician and patient satisfaction.

Methods: We trained 25 clinic staff members in the intervention clinical coaching.
Why might directive counseling not work?

Traditional Counseling Model:
• Tell patient what to do, and why
  → then they should do it
  → except when they don’t

• Families know health risks but don’t change their behavior.
• Joy of living is a better motivator than fear of illness/dying
• Perhaps “Health” is not is their top priority

Key Behavioral Theory: People are more likely to take actions they see as consistent with their Core Values
Values and Behavior Change - For Medical Providers

Core Value = Health

Healthy Behavior
Core values for most men

Resnikow Quantum Change Study

1. Wealth
2. Adventure
3. Achievement
4. Pleasure
5. Be respected
6. Family
7. Fun
8. Self Esteem
9. Freedom
10. Attractiveness
11. Popularity

Health didn’t make the top 11 !!!

Core values for women
Resnikow Quantum Change Study

1. Family
2. Independence
3. Career
4. Fitting in
5. Attractiveness
6. Knowledge
7. Self control
8. Be loved
9. Happiness
10. Wealth
11. Faithfulness

Health didn’t make the top 11 !!!

Core values for Teens and Tweens???

1. Peer Acceptance
2. Acceptance
3. Acceptance
4. Attractiveness
5. Being cool
6. Sports performance
7. Safety
8. Academics
9. Environmental health
10. Family

Long term health – far down the list
Values and Behavior Change

What Core Values do Mom, Dad, Child, Grandparents follow:
Family? Being a success? Fun?
Respect? Feeling accepted?
Wearing certain clothes? Health?

VALUES???

Our goal is to align healthy behaviors with the parent’s / child’s core values?
• Understand we can’t “make” them
• Figure out what is important to them
• Help them talk about how healthy behavior fits in with their values
• Changing behaviors may be easier than changing someone else’s values
“Motivational interviewing is a **directive, client-centered** counseling style for eliciting **behavior change** by helping clients to **explore and resolve ambivalence**.”

Motivational Interviewing is:

• Primarily a **style or way of being** with people

• **Empathic** and **Guiding** at the same time

• Others will resist your attempts to change them, but will act on **motivation from within** to change themselves.

Motivational Interviewing is:

Four Key Principles:

• Roll with Resistance
  ▪ Listen to understand, don’t fix, don’t argue

• Develop Discrepancy
  ▪ between current behavior and the patient’s goals & values

• Express Empathy – feeling understood
  ▪ Use reflections, convey acceptance, employ collaboration

• Support Self-Efficacy
  ▪ Elicit the patient’s own solutions and strengths

Rollnick & Miller, 2008 Motivational Interviewing in Health Care
MI is not:
PERSUADING
EDUCATING
ORDERING
PRAISING
LECTURING
EXHORTING

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”
Our Advice / Education

Whole pie: What we say to patients

This half: patients **hear**

This quarter: Patients **understand**

This eighth: what they **remember** well enough to use!

You have probably done MI well if the patient/family:

• Spoke ~50%
• Feels understood
• Talked about what they think they CAN/WILL do
MI: Specific Goal

- Elicit Change Talk = Commitment Language
  “I want to… I can… I will… Because…”

- **D**esire to change
- **A**bility…
- **R**easons…
- **N**eed…
- **C**ommitment
- **A**ctivation
- Taking steps
Key MI Techniques

OARS
- Open-ended questions
- Affirmations
- Reflections
- Summary statements
Treatment – Counseling Techniques

• “Brief Negotiation” MI in 5-10 minutes
  ▪ Visit Outline
    1. Ask Permission - negotiate agenda
    2. Elicit their concerns
    3. Assess Readiness - tailor approach
    4. Collaboratively set goals
    5. Elicit Change Talk - OARS
    6. Summarize the Goals, Motivations, and Follow-up plan

Read this book to practice:
Motivational Interviewing in Health Care: Helping Patients Change Behavior  Rollnick 2008
Tailor Goals for a Visit to Patient Readiness

1. Raise **Awareness** of an issue

2. Address **Ambivalence** and enhance **Motivation** to change

3. Set **Specific Goals** to Change or Maintain Healthy Behaviors
Collaborative Goal Setting

When family is motivated:
• Use a menu of changes
• Choose goals together
• Use a nonjudgmental style
• Ask about Confidence in the Change
  ▪ Uncover barriers and facilitators
  ▪ Make the goal realistic
    • Ask permission to give advice
When a general goal is chosen, make it Specific...

- Cognitive Behavioral techniques
  - Self Monitoring → successful change
    - **Specific Goal**
    - **Measurable** – daily / weekly, learn cues
    - **Accountability** – parent, other
    - **Reward** – for new healthy routine
    - **Time limited** – report back, troubleshoot
**My Child’s Health Goals**

**GOAL 1:** I will help my child do this: ______________________________________

It is important to us because: ______________________________________

Our **Specific Goal** is to: ____________this much: ____________each: day / week (circle one)

Adults who can help: ________________ A reward for reaching this goal: ________________

**GOAL 2:** I will help my child do this: ______________________________________

It is important to us because: ______________________________________

Our **Specific Goal** is to: ____________this much: ____________each: day / week (circle one)

Adults who can help: ________________ A reward for reaching this goal: ________________

Make a mark/place sticker each day Goals are done. Adults can write: How Much? or how many times each day?

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>2.</td>
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</table>

Parent sign here at end of each week: ____________________ Reward: Yes / No
OARS: Make an Open Ended?

- “Does your child eat vegetables?”
- “Your A1c is 6.3. You don’t want to get diabetes don’t you?”
- Have you stopped smoking since our last visits?
OARS: Make an Affirmation

• “I keep serving the kids vegetables with every dinner, but they don’t eat much.”

• “Since I got discharged from the hospital, I’ve been checking my blood sugar every day. I’m not going back there!”
OARS: Making a Reflection

Example Reflection Starters:

- “What I hear you saying is …”
- “It sounds like …”
- “You’re feeling like …”
- “It seems like …”
- “You wish …”
- “You want …”
- “You think …”
- “From your perspective …”
OARS: Make a Reflection

- “I think my son is just big-boned like the rest of the family.”
- “I try to feed her healthy food, but it is so much more expensive!”
- “I feel fine right now, I don’t think my diabetes is a problem.”
- “You have not idea how many things we’ve done already. Nothing works!”
OARS: Summaries

Form:
- Pull together multiple previous reflections/affirmations
- Probe deeper or redirect

Purposes:
- Convey a sense of understanding / empathy
- Move the conversation along
- Conclude the discussion
Training Resources

Motivational Interviewing
Network of Trainers (MINT)
https://motivationalinterviewing.org

“Change Talk”
interactive training simulation
Internet or Mobile App:
http://www.kognito.com/changetalk/
Supplementary Slides
Study of Technology-Supported Motivational Interviewing to Decrease Childhood Overweight and Obesity in Primary Care

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1. University of Colorado, Department of Pediatrics, Section of Nutrition
2. Community Health Services, Commerce City and Westminster, CO
Research Question

Can an intervention that includes technology support for screening BMI and lifestyle habits and training for Motivational Interviewing allow primary care providers to improve child BMI outcomes in a low income population?
Methods: Study Design

Non-Randomized Delayed Intervention Control Group

- Intervention Group: 3 clinics begin year one
- Control Group: 3 clinics in year two
### Methods: Setting - Population

<table>
<thead>
<tr>
<th>Location</th>
<th>community and school-based clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>82% Medicaid</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>79% Hispanic</td>
</tr>
<tr>
<td>Age</td>
<td>Children 2-18yrs</td>
</tr>
<tr>
<td>Weight Status</td>
<td>Healthy Weight, Overweight, Obese - All screened and counseled</td>
</tr>
</tbody>
</table>
## Training: Motivational Interviewing

<table>
<thead>
<tr>
<th>Trainers</th>
<th>Weight Management Specialists: Pediatrician - PI, psychologist, and research assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td>11 Providers trained</td>
</tr>
<tr>
<td>Goals</td>
<td>5-10 min interaction at well-child visit</td>
</tr>
<tr>
<td></td>
<td>15 min follow-up visits every 3 months</td>
</tr>
<tr>
<td>Techniques</td>
<td>Didactic, modeling of MI, role-play, audit and feedback</td>
</tr>
<tr>
<td>Dose</td>
<td>Five 1 hour sessions</td>
</tr>
<tr>
<td>Frequency</td>
<td>Every 2 weeks x 4, Booster at 4 months</td>
</tr>
<tr>
<td>Technology Support</td>
<td>Electronic screening/counseling system Prompts for MI counseling</td>
</tr>
</tbody>
</table>
Rating Form

Used for

Standardized Patient Interviews

and

Recorded Visit feedback

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Specific Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ask Permission to discuss weight or healthy lifestyles</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>2.</td>
<td>Elicit Family's Concerns</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>3.</td>
<td>Assess Readiness (assess for barriers and motivating factors)</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>4.</td>
<td>Collaboratively Choose Lifestyle Change Targets</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>5.</td>
<td>Elicit Change Talk if the family is ambivalent</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>6.</td>
<td>Encourage self monitoring if families are ready to select a goal</td>
<td>Specific Words:</td>
</tr>
<tr>
<td>7.</td>
<td>Summarize the goals and arrange for follow-up</td>
<td>Specific Words:</td>
</tr>
</tbody>
</table>

Other Comments:

START TIME: ___________________________ INTERVIEWER: ___________________________ OBSERVER: ___________________________

STOP TIME: ___________________________
Intervention 2. Electronic Support

**Parent or Teen enters:**
- Family History
- 12 Lifestyle factors
- Readiness Assessment

**Waiting area**
- Touch-screen Kiosk or Tablet

**Potentially at home**

**RN/MA enters:**
- Weight
- Height
- Blood Pressure

*Potentially linked to EMR*
Bebidas Dulces

¿En un DÍA típico, cuántas veces toma su hijo(a) refrescos o bebidas dulces (por ejemplo jugos, limonada)? No cuente los refrescos de dieta

0 1 2 3 4+
Your Recommendations

Experts advise not making many changes at the same time. Choose one or two items from each section to work on for several weeks:

Your child’s BMI is at or above the 95th percentile for his or her age and sex. Studies show that he or she is much more likely to suffer from diabetes, cardiovascular problems, and to become an obese adult. Discuss this with your provider to see what recommendations would work best for your family.

Activity

Your entire family is invited to attend the next Healthy Living Program! Learn about how your family can live a healthier life together!

Sessions are Tuesdays and Wednesdays 5:30-7:30pm at the Commerce City Rec Center. The next session to be offered in English starts March 7th.

Includes cooking classes, nutrition information, parenting support, and exercise classes for kids. Dinner provided for all attending.

Call Program Coordinator Shauna at 303-724-3263 with questions.
Results: Screening Implementation

Screening completed at 98.9% (768 / 776) of well-child visits.

Average time 3 minutes for families while waiting

- 12 Lifestyle Questions
- family history for CVD risk
- readiness to change
Number of Follow-Up Visits:

- 64% two visits
- 23% three visits
- 7% four visits
- 5% five or more visits
Mean BMI Z-Score Change from Baseline to One Year

Overweight and Obese

<table>
<thead>
<tr>
<th>Group</th>
<th>Change (CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>-0.10 (-0.17, -0.03)</td>
<td>0.006</td>
</tr>
<tr>
<td>Control</td>
<td>-0.003 (-0.11, 0.10)</td>
<td>0.940</td>
</tr>
</tbody>
</table>
Mean BMI Z-Score Change Over Time

12 months Pre to Post Intervention: Overweight Children

Mean Change in BMI slope (CI): -0.19 (-0.11, -0.26)

n=219    p= <0.001
Conclusions

Primary care providers trained in time-limited MI counseling can make a small improvement in the BMI of an entire clinical population.

Similar Magnitude of Effect: PROS BMI² Study  Resnicow *Pediatrics*  April 2015