Recognizing, Preventing and Responding to People Who Ingest Non-food Items or Who Have a Diagnosis of PICA



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Key Topics

- Pica Diagnosis
- Pica-like Behavioral Patterns
- Safety & Habilitative Responses
- Staff training and Management
- Quality of Living



Pica Definition

Practical definition of pica:

a pattern, i.e., more than 1x vs. one time only

of **ingesting**, i.e., swallowing **vs**. simply mouthing items

inedible material, e.g., rock, leaf, string, bead, dirt, ball or <u>latex glove</u> vs. food from floor or trash



Formal Definition (Diagnosis)

To understand I suggest you consult:

- DSM-V (2013);
 and
- DM-ID (2007)



Who makes a diagnosis of pica?

- A clinician qualified to do so:
 - A professional
 - Relevant experience
 - MD or advanced practice nurse
 - Or a MH professional with a minimum of a Master's degree e.g. in Psychology, Social Work and a license that allows independent practice



What harm might Pica do?

- Poisoning
- Parasitic infection
- Perforation of GI tract
- Blockage of GI tract
- Also bad for mouth & teeth



Continuum of Concern

No Ingestion

Some ingestion

Many instances

- Most people we support never have ingested a non-food item and don't frequently chew on non-food items
- Some people we support chew habitually on non-food items (wash cloth, T-shirt, etc.) and "never" swallow the material

Continuum of Concern

What about people we support who do not have a diagnosis of pica BUT have a history of ingesting inedibles?



Continuum of Concern

DDS supports some individuals with a formal diagnosis of pica



Who has Pica?

- Mostly individuals with <u>severe or</u> profound intellectual deficits
- Person may also present with symptoms consistent with:
 - Autism;
 - OCD, depression or mania; or



• Prader Willi – Syndrome

Two special groups:

1. A few individuals with severe or profound ID may develop OR RECOVER pica late in life, e.g., due to loss of opportunity to eat by mouth or dementia

2. Children with sickle cell disease also know as sickle cell anemia (~30% with pica)



How many people have Pica?

- I'm unsure ...
- Estimates of incidence vary: From 3% to 6% (low end) to about 25% (high end)
- Why such a big range ??
- "Different levels of pica" &
- Our interest = Safety



Why do some people with ID swallow inedibles?

- A) Behavioral Perspective:
- Literature suggests many motivated by "automatic reinforcement" (i.e., sensory based NOT socially mediated), for example:
 - Automatic Positive reinforcement, i.e., swallowing it produces good feeling for person
 - Automatic Negative reinforcement, i.e., swallowing it relieves bad feeling for person

CENTER FOR DEVELOPMENTAL DISABILITIES EVALUATION AND RESEARCH

Why Pica?

B) Developmental:

Cannot discriminate food vs. non-food due to ID or developmental level

C) Other (my experience):

Hunger/want more food. Sensible to ask if the individual may want more food & to offer more food



Why Pica?

- D) Health Perspective (literature):
 - Nutritional deficiency lack of zinc or iron
 - Sickle Cell Disease
 - History of lead poisoning
 - Parasites
 - Addiction (e.g., caffeine rare).
 - Mental illness such as OCD, mania, depression or psychosis
 - E) Combination, e.g., "A" + "C"

Where Do We Start?

- Safety Assessment
- Assessment of:
 - **q** Individual
 - **q** Environment
 - **q** Staff Team



Find Out About the Person

Assessment of person:

- History (especially a Pica history)
- MEDICAL ISSUES??
- Ability
- Motivation (for pica & alternatives)
- Opportunity (for pica& alternatives)

And Supports

Assess the Environment (does it make pica more or less likely?)

- In "good shape" (lead paint)?
- Things for person to do?
- Is the environment cluttered, dirty, etc?



Assessment of Staff – Team:

- Enough Staff (too many)?
- Do staff know about person & pica?
- Do staff follow plan(s)?
- Are they vigilant?
- Have some good ideas?
- Are they WORKING TOGETHER??



Prevention & Treatment – "the old ways:"

 Preventive equipment, e.g., helmet with face shield

And, VERY barren environments



Prevention & Treatment Strategies

- 1. Have an emergency plan in case pica happens
- 2. Work with "Qualified Clinician(s)" and analyze behavior; develop a safety, behavior change; and TEACHING plan.
- 3. Treat underlying medical, psychiatric or neurological conditions



Prevention & Treatment Strategies

- 4. Manage the physical environment carefully
- 5. Offer substitutes including more food and make them always easy to obtain
- 6. Be prepared for contacts with medical professionals & hospitals



What helps?

 A few cases are improved via treatment of mineral deficiencies

A few are helped with psychotropic medication



What helps?

- Most people with pica need help communicating what they want and how they feel
- Some individuals with pica may need a lot of oral sensory stimulation (I see this as early developmental level)



What works? Management Strategies

Are Monitoring data used? (BM; sweeps & fidelity)

- Compiled?
- Charted and Reviewed by "right" people?
- Used for feedback and decisions?



What Works – Behavioral Assessment

- Behavioral Assessment:
 - Preference assessment;
 - Skill assessment;
 - Opportunity, support, and
 - Assessment of pica behavior



What helps – Behavior Treatment

Behavior treatment based on assessment

- Preferred items available
- Skill development
- Address opportunities & supports contingencies for +/- of pica



Tom

- Tom has CP and Profound ID and has had Pica "all his life"
- Within the last ten years he ingested latex gloves, was hospitalized, operated on, etc.
- He was living in Springfield Area in a homeshare and doing fine, NO pica
- He moved to a new home-share 4 months ago
- Agency did lots of planning and training and is doing follow up with care-providers



Tom - Continued

- I went to visit Tom and members of his new Team
- I went through home and made recommendations, e.g., get rid of cardboard in his room and they followed up quickly
- And, new care provider seemed great; she asked me, "Do you think we are perfect?"



Barney - @ 30 years old ...

- He has autism, anxiety, severe ID & Self injurious Behavior
- He's swallowed inedibles several times in his life, maybe more. Last time in 2008
- He rips and chews and stims with parts of his t-shirts but does NOT seem to swallow the bits he rips off



Barney - Results

- Question I tried to answer: "Does he need more supports when he's alone in his room?"
- My assessment was Team can make some changes and improve his safety with out negative impact on quality of life



Bob – Consult #1 spring, 1998

- History
- October 1997 ER Visit
- Items he has ingested
- Consult Findings, Spring 2008



Bob Consult #1 Findings

Staff reported:

- 1.Bob has a 'defined pica chain'; pick-up item, play with it, put in mouth, chew and swallow
- 2. His pica can be interrupted, i.e. he will give material to staff
- 3. His pica **keys** = no supervision + available item (**opportunistic**)



Bob Consult #1:

RECOMMENDATONS:

- Supervised by trained staff at all times
- Continue "sweeps" of all environments
- Check for mineral deficiency
- Enhanced communication with HCPs



Recommendations Continued

- Easy access to food all day
- Continue encouraging alternate, safe materials to hold & mouth
- Continue work on apparent mental health challenges (anxiety? Mania?) {Staff noted Bob less agitated & more focused with Ativan post surgery}
- Get Occupational Therapy consult : a)
 Mouthing? and b) Best replacement items?

Bob Consult #2 2007

- This was a co-consult with another Area Office psychologist
- Bob was 46 at time of consult in spring 2007
- He was being supported by a different agency
- Passed a latex glove in late 2006
- Consult goals = Review supports and make recommendations

Bob Consult #2 2007, cont'd.

- Bob was "healthy looking" no longer thin
- Had "free" access to food & regularly ate (apple, 4 muffins, some Goldfish, & drank water)
- Moving, active, noisy (~driven) and
 "...never has had a stable sleep pattern"
- Team reported "less pica" & mother happier

Bob Consult #2 2007, cont'd.

Our opinion: solid supports except:

- QUESTION "pushpins" needed at Day Program?
- CONCERN latch broke on cabinet storing latex gloves in day program bathroom
- CONCERN laundry soap available to him at his home
- QUESTION No mental health treatment beyond sleep prescription (1 of 3 nights give Ativan)?

Bob Consult #2 2007, cont'd.

- Bob's mother had two concerns beyond his pica per se:
- 1. Family history of **diabetes** Would long term easy access to food result in diabetes for Bob?
- 2.Bob **no longer sat at meals with peers**, he would walk around & take a bit of food at one time as he did rest of day



Recommendations

 Weekly inspection of his supports by a team of "Super-supervisors"

 Expert review from behavioral psychologists;
 Also add sleep & affect measures to data sheet



Recommendations (con't.d)

- Modify "available food:"
 - 1. Get expert advice on foods offered, e.g., switch to whole grain muffins
 - 2. No food 1hour pre meal (House Manager said 'he can go for walk')
- Vet materials he has access to that are small enough to swallow, e.g., pushpin (CONVENIENCE) vs. latex glove (NEEDED)

MAJOR Van Incident -2010

- Bob had been incontinent; driver had not been trained and he put a "chuck" under Bob & he ripped off and ingested part of it.
- RESULTS = Emergency Protocol followed –
 "Bob's OK" Transportation Agency has yearly pica" training



What will be the next "chuck"

Bob in 2012 per his clinician

- "Still scans every room, if he has a chance he'd pica"
- For last 2 years = Seroquel (50 mg bid)
 improved sleep & not tired during day
- Has a level 1 Behavioral Support Plan
- Has "free food access" (98 lb)
- Still has ongoing access to replacement (sensory) items



Bob in 2012 (con't.d)

- Still has 1:1 while awake
- Has enema protocol (bowel)
- Clinician interested in teaching Bob to, e.g., "give non-food items to 1:1"
- Zero pica since August 2011



Why Does Bob Have Pica?

I'm not sure but (in order):

- Lots of interest in food and, by report, has less pica w/food easily available. Is this hunger or automatic reinforcement?
- Mental Health issue e.g. mania or OCD?
- Developmental, young at heart
- **Discriminating** food vs. non-food (ball, glove, chuck, landscaping plastic)?

Final Thoughts on Bob

- Team continue to work on preventing pica (what will be the next "chuck"?)
- More clinical work is needed: Analysis of behavior? Emphasis on teaching relevant skills?
- Bob needs to be kept safe, 24/7



In Conclusion

- The best strategy to address Pica is prevention and treatment
- Have an emergency plan in case ingestion happens
- Teach new skills
- Team work together



For more information



- DDS Website
 - MA DDS Pica Fact Sheet
 - http://www.mass.gov/eohhs/docs/dmr/reports/family-support/fspica.pdf
 - MA DDS Pica Risk Management Protocol
 - http://www.mass.gov/eohhs/docs/dmr/awp/hpci-risk-pica.pdf
 - QA and Improvement Reports
 - http://www.mass.gov/eohhs/consumer/disability-services/servicesby-type/intellectual-disability/newsroom/quality-assurance/
- Quality Is No Accident Brief, September 2013

http://www.mass.gov/eohhs/docs/dmr/qe-reports/qa-qina-pica.pdf

Thank you!

Questions and Answers

