Changing the Course of Eating Disorders: Collaborating with Family Physicians

Frustrated or dissatisfied with the management of your eating disorder patients? Come talk to us. We are eating disorder specialists working collaboratively with family physicians to change the course of eating disorders, through early identification. Be part of the change. Resources will be available. Booth 402

Please take the survey.

https://www.surveymonkey.com/r/H3M8H3F

https://www.surveymonkey.com/r/KM9XGDL
CHANGING THE COURSE OF EATING DISORDERS:
COLLABORATING WITH FAMILY PHYSICIANS

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Disclosures

• Dr. Debbie Katzman
  • Relevant relationships with commercial entities
    • CIHR, NIH, Thrasher Fund & LWW (DK)
  • Potential for conflicts of interest within this presentation
    • None

• Dr. Pierre-Paul Tellier
  • Part of a research team working on HPV. One study is funded by CIHR and received funding in kind from Merck.

• Steps taken to review and mitigate potential bias
  • N/A
Objectives

Upon completion of this workshop, participants will be able to:

1. Describe the early symptoms of eating disorders in children and adolescents.
2. Generate steps to determine differential diagnoses
3. Develop a management plan that includes collaboration with parents.
About 28% of visits to emergency departments for eating disorders included admissions  

FROM 2006–2013, THE RATE OF FEMALES HOSPITALIZED IN CANADA FOR AN EATING DISORDER WAS STABLE — EXCEPT AMONG 10 – 19 YEAR-OLDS

• In that group, the rate increased by 42 per cent in just the last two years, with older teens experiencing an even sharper increase
Additional Facts

• In 2012-2013
  • 1,585 females hospitalized for an eating disorder
    • Girls aged 10 to 19 accounted for >50% of these
  • 103 males hospitalized for an eating disorder

• High mental health co-morbidity among eating disorder patients who come to emergency department
  • Depression
  • Anxiety disorders
  • Reaction to severe stress and adjustment disorders.

(Canadian Institute for Health Information, as reported by CBC Sept. 4, 2014)
Eating Disorders can be Mortal Illnesses

Eating Disorders Mortality Rates vs. Standard Mortality Rates

- 14 and younger = 3 X
- 15 to 19 years old = 10 X
- 20 to 29 years old = 18 X
- 30 and over = 6 X

(Arcelus et al. 2011, Arch Gen Psychiatry)
Medical Complications: Anorexia

- Every organ is affected

(National Women’s Health Information Centre, 2006)
Anorexia

- Growth Delay

(Morris, 2001)
Anorexia

- Osteoporosis

(Morris, 2001)
Ventriculovalvular Disproportion. Left: Normal Heart; Right: Small Heart with Normal Size Valves. The resultant ventriculovalvular disproportion may result in mitral and/or tricuspid valve prolapse with or without regurgitation.

(Dubin, 2000)
MRI in Adolescents with Anorexia vs. Controls

Adolescent Females With AN

Adolescent Females Controls

14 years
15 years
16 years

(Katzman, et al., 1996)
Medical Complications: Bulimia

How bulimia affects your body

- **Brain**: depression, fear of gaining weight, anxiety, dizziness, shame, low self-esteem
- **Cheeks**: swelling, soreness
- **Mouth**: cavities, tooth enamel erosion, gum disease, teeth sensitive to hot and cold foods
- **Throat & Esophagus**: sore, irritated, can tear and rupture, blood in vomit
- **Muscles**: fatigue
- **Stomach**: ulcers, pain, can rupture, delayed emptying
- **Skin**: abrasion of knuckles, dry skin
- **Blood**: anemia
- **Heart**: irregular heartbeat, heart muscle weakened, heart failure, low pulse and blood pressure
- **Body Fluids**: dehydration, low potassium, magnesium, and sodium
- **Kidneys**: problems from diuretic abuse
- **Intestines**: constipation, irregular bowel movements (BM), bloating, diarrhea, abdominal cramping
- **Hormones**: irregular or absent period

(National Women’s Health Information Centre, 2006)
Esophageal Injury in Bulimia

A Mallory-Weiss tear is a tear in the mucosal layer at the junction of the esophagus and stomach.

Chemical Effects of Purging

- Purging doesn’t just get rid of food – eventually it depletes the body of other elements essential for life, including:
  - Potassium – the main element used by the heart
  - Low potassium
    - heart stops beating
    - sudden death
How can we reduce admissions, morbidity, and mortality?

• Key is *early identification and treatment*
  • Collaboration between parents and family physicians
  • Access to specialist consultation and services
  • Family-based treatment
Foundation for Collaboration

• Parents may notice changes in their children before there are medical consequences to alert a family physician.

• Children and adolescents who are identified early and receive prompt treatment show better outcomes particularly with family-based treatments.
Mixed Methods Pilot Study

• Objectives
  • To learn
    • whether parents would identify common early warning signs prior to seeking help for their children
    • what barriers and facilitators parents found to getting help once they sought it (Parent Focus Groups)
    • family physician’s current awareness of early warning signs of eating disorders and the extent to which they manage eating disorders in their own practices (Family Physicians’ Survey)

Boachie, Jasper, Rogers 2016
Parent Focus Groups
What first brought your attention to your child’s eating habits?

<table>
<thead>
<tr>
<th>Themes</th>
<th># of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting out foods or eating less, becoming vegetarian, obsessed with</td>
<td>52</td>
</tr>
<tr>
<td>calories/reading labels</td>
<td></td>
</tr>
<tr>
<td>Physical changes: feeling cold, stomach aches, tired, sleeping a lot,</td>
<td>41</td>
</tr>
<tr>
<td>not sleeping, dizzy spells, lost or irregular or no periods</td>
<td></td>
</tr>
<tr>
<td>Anxiety/social anxiety, depression, perfectionism, OCD, ADHD, learning</td>
<td>23</td>
</tr>
<tr>
<td>disability</td>
<td></td>
</tr>
<tr>
<td>Exercising, increased activity</td>
<td>16</td>
</tr>
<tr>
<td>Losing weight, clothes becoming too big, not growing</td>
<td>16</td>
</tr>
<tr>
<td>Withdrawing or isolating from family and friends</td>
<td>15</td>
</tr>
<tr>
<td>Emotional or mood changes: crying, clingy, sensitive, down on self,</td>
<td>11</td>
</tr>
<tr>
<td>self-doubt</td>
<td></td>
</tr>
<tr>
<td>Escalating outbursts, defensive, confrontational, angry</td>
<td>11</td>
</tr>
<tr>
<td>Refused to go to school, bullied, excluded</td>
<td>9</td>
</tr>
</tbody>
</table>

(Boachie, Jasper, Rogers 2016)
What were mealtimes like when you were starting to get concerned?

<table>
<thead>
<tr>
<th>Themes</th>
<th># of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smaller breakfast, skipping lunch, halftime dinner; obsessed with</td>
<td>22</td>
</tr>
<tr>
<td>healthy eating or portion size, eating less and less, cutting food</td>
<td></td>
</tr>
<tr>
<td>into bits, “I don’t feel good”, only drinking water or not even water</td>
<td></td>
</tr>
<tr>
<td>Mealtimes stressful, bargaining, temper tantrums, arguing, crying,</td>
<td>13</td>
</tr>
<tr>
<td>meltdowns, always mad</td>
<td></td>
</tr>
<tr>
<td>Bingeing, purging, diuretics, laxatives</td>
<td>8</td>
</tr>
<tr>
<td>Cooking 3 different meals, couldn’t agree where to go, catering to</td>
<td>7</td>
</tr>
<tr>
<td>her, came to table but didn’t eat, eating took 2 hours, wouldn’t go</td>
<td></td>
</tr>
<tr>
<td>to restaurants</td>
<td></td>
</tr>
<tr>
<td>Headaches, stomach aches, nausea</td>
<td>6</td>
</tr>
<tr>
<td>Lost interest, didn’t want to get out of bed, no energy</td>
<td>5</td>
</tr>
<tr>
<td>Is something wrong or isn’t it?</td>
<td>1</td>
</tr>
</tbody>
</table>

(Boachie, Jasper, Rogers 2016)
Were there changes in your child’s relationship with you?

<table>
<thead>
<tr>
<th>Themes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Withdrew from family and friends</td>
<td>14</td>
</tr>
<tr>
<td>Tension/conflict/fighting/crying among or between family members – our house used to be fun</td>
<td>11</td>
</tr>
<tr>
<td>Sneakier, grumpier, more difficult to live with</td>
<td>4</td>
</tr>
<tr>
<td>Relationship was better when I wasn’t challenging the ED</td>
<td>2</td>
</tr>
</tbody>
</table>

(Boachie, Jasper, Rogers 2016)
Did you notice any changes in your child at school?

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Bullying, exclusion, didn’t want to go to school, switched schools</td>
<td>7</td>
</tr>
<tr>
<td>Thinking constantly about food, couldn’t focus, couldn’t do schoolwork, incomplete work</td>
<td>5</td>
</tr>
<tr>
<td>Standing to burn calories, started playing music through lunch</td>
<td>2</td>
</tr>
<tr>
<td>Wrote an essay with dark thoughts – teacher alerted me, sport coach called to ask if child was sick – helped validate my perception</td>
<td>2</td>
</tr>
<tr>
<td>Did better at school</td>
<td>1</td>
</tr>
</tbody>
</table>

(Boachie, Jasper, Rogers 2016)
Two Stories

I took her every year for a physical and that year I told the doctor I was concerned because of her weight loss . . . said that she wasn’t eating everything and was having problems with constipation and I took her to a nutritionist and that seemed to make things worse . . . daughter said she didn’t have any problems . . . doctor let us talk . . . examined her and did blood work and it came back fine. There were no triggers for the doctor. So I kept watching and when the laxative thing happened I took her back and the doctor did another examination and her heart rate was low and then she made the referral.
Two Stories

My initial concern was about the cutting . . . when we saw her family doctor and told him what was going on, she showed him and he asked a lot of direct questions including about her eating habits, and we were all together in the room and she answered. He said he would call the eating disorder program that afternoon and send in the paperwork. She didn’t cry, she was numb. She was hiding it for long periods. And then we started in the program – I think it was two weeks.
Family Physicians’ Questionnaire
Background

• Survey of family physicians and psychologists in Ontario about current practices related to assessment and treatment of eating disorders.
  • Physicians endorsed encountering medical symptoms of ED most often
  • Psychologists endorsed encountering psychological symptoms of ED most often
  • High proportion of psychologists and physicians do not routinely involve families in the assessment process

(Lafrance-Robinson, Boachie & Lafrance, 2012)
Family Physicians’ Study: Method

- Self-administered questionnaire
- 17 multiple-choice questions
- 5 minutes to complete
- Explored the physicians
  - experience assessing and managing EDs in children and adolescents over the past year
  - current awareness of early warning signs of EDs
  - interest in learning more about early identification and management of EDs.

(Boachie, Jasper, Rogers 2016)
Top 5 Symptoms Reported to Physicians by Parents

(Boachie, Jasper, Rogers, 2016)
Currently Manage ED Patients in Own Practice

(Boachie, Jasper, Rogers, 2016)
Would Use Screening Tool if Available

(Boachie, Jasper, Rogers, 2016)
Would Take a Practice-Based Learning Program (PBLP)

(Boachie, Jasper, Rogers 2016)
If PBLP Available, Would Manage ED’s in Own Practice

(Boachie, Jasper, Rogers 2016)
Discussion

- Parents should be seen as key informants in early identification of eating disorders.
- Family physicians, with appropriate supports, are in a unique position to identify eating disorders early.
- Working collaboratively with parents, family physicians can change the course of eating disorders.
DSM-5 Diagnostic Categories

- Anorexia Nervosa
- Bulimia Nervosa
- Binge Eating Disorder
- Avoidant/Restrictive Food Intake Disorder
- Other Specified Feeding or Eating Disorder
Differentiating an eating disorder from other co-morbidities

- A person with an eating disorder does not lose appetite
- If the person has lost appetite, then it is more likely mood related, e.g. depression, stress or anxiety, or there is an organic cause
Eating Disorders Co-morbidities

Depression
Anxiety
OCD
Perfectionist Traits
Addictions
ADHD
Trauma
Self-harm
Bipolar
Suicidality
Problems with missing a diagnosis

- Earlier diagnosis, improves outcome
- Brief interval before initiation of treatment, better outcome
- Longer the illness, more challenging to treat
- Longer the illness, poorer the outcome
- Can have significant impact on psychological and social growth and development
- Significant impact on family/parents and siblings
- Significant impact on physical growth and development
- Significant impact on medical morbidity…may not be reversible

*Family physicians can play a crucial role in detecting eating disorders at an early stage.*
Screening for Paediatric Eating Disorders

- Family physicians are in a unique position to
  - detect the onset of eating disorder
  - Stop their progression
- Screen as part of the annual health supervision
- Monitor weight and height longitudinally
- Plot on growth chart
- Monitor potential signs and symptoms of disordered eating
Subtle Signs and Symptoms

- Often wears baggy clothing (to hide weight loss or from profound sense of body dissatisfaction)
- Wears warm clothes that seem too warm or heavy for conditions
- Rarely eats with anyone (“I ate before I got here”)
- Increased use of caffeinated drinks, smoking, chewing gum
- Recent exclusion of whole categories of foods, e.g. meat, carbohydrates, fats
- Preoccupation with food: loves to cook for others but doesn’t join in eating
- Very defensive or anxious when body, weight, or shape issues are openly discussed
- Finds holidays and special occasions to be very stressful as they revolve around meals

(Boachie & Jasper, 2011)
Subtle Signs and Symptoms (cont’d)

• Eating rituals that may seem very odd, e.g. must cut food into certain size pieces or eat foods in a certain order

• Takes an unusually long time to finish a meal

• Won’t participate in activities where one’s body can be seen, e.g. swimming, sunbathing, using public showers

• Unusual physical activity, e.g. taking the dog for a walk even in bad weather

• Food is missing from shelves or fridge

• Unusual use of toilet or shower, e.g. immediately after meals, sounds or smells of vomiting

(Boachie & Jasper, 2011)
Screening Questions

- HEEADDSS Exam for all preteens and adolescents
  - Home
  - Education and Employment, Eating and Exercise
  - Activities and peer relationships
  - Drugs
  - Depression
  - Safety
  - Sexuality
  - Suicidality
- SCOFF questionnaire (validated only in adults)
Screening Questions

- HEEADDSS Exam for all preteens and adolescents
  - Home
  - Education and Employment, Eating and Exercise
  - Activities and peer relationships
  - Drugs
  - Depression
  - Safety
  - Sexuality
  - Suicidality
History - Tips

- **Weight and body image**
  - What is the most you ever weighed? How tall were you then? When was that?
  - What is the least you ever weighed in the past year? How tall were you then? When was that?
  - What do you think is your healthy weight?
  - What would you like to weigh?
  - Is there anything about your body that you would like to change?
History - Tips

• **Exercise**
  - how much, how often, level of intensity? How stressed are you if you miss exercising?

• **Diet**
  - Current eating habits: adequacy of intake, portion sizes, food restrictions, picky eating, fluid intake, ritualized eating habits? Recent vegetarianism? Excessive fluid intake?
  - 24-h diet history?
  - Calorie-counting? Fat gram-counting? Carbohydrate-counting? Reading labels?
  - Any binge-eating? Frequency? Triggers?
  - Purging history? Vomiting, diuretics, laxatives, diet pills, or ipecac?
  - Any vomiting? Frequency? Timing in relation to meals?
History - Tips

- **Past History**
  - Any previous treatment or therapy? What kind and how long? What was and was not helpful?
  - Symptoms of hyperthyroidism, diabetes, malignancy, infection, inflammatory bowel disease?
  - History of physical or sexual abuse?
History - Tips

• **Family history**
  • obesity, eating disorders, depression, other mental illness (especially anxiety disorders and obsessive-compulsive disorder), substance abuse by parents or other family members?
History - Tips

- **Menstrual history**
  - Age at menarche?
  - Regularity of cycles?
  - Last menstrual period?
  - Mother’s menarche?
History - Tips

• **Substance Use**
  • Use of cigarettes, drugs, alcohol?
  • Use of anabolic steroids (especially in boys)?
  • Use of stimulants?
  • Laxatives, diuretics, ipecac
  • CAM?
History - Tips

- **Review of symptoms**
  - Dizziness, presyncope, syncope, fatigue
  - Pallor, easy bruising or bleeding?
  - Cold intolerance? Cold extremities?
The SCOFF Questionnaire  
(Morgan, 1999)

1. Do you make yourself sick because you feel uncomfortably full?

2. Do you worry you have lost control over how much you eat?

3. Have you recently lost >1 stone (6.3 kg or 14 lb) in a 3-mo period?

4. Do you believe yourself to be fat when others say you are too thin?

5. Would you say that food dominates your life?

One point should be given for every “yes” answer; a score of > 2 indicates a likelihood of AN or BN.
The SCOFF Questionnaire (Morgan, 1999)

- 12.5% false-positive rate
- Not sufficiently accurate for diagnosing eating disorders
- Appropriate screening tool
Weight, Height and BMI

• Weight, height, and BMI
  • Determined regularly and consistently over time
  • Plot on appropriate growth charts
• Comparing individual measurements with
  • Child or adolescents own growth pattern
  • Age-appropriate population norms.
• Deviations from child’s own curve and population norms are easy to identify visually
• Specifically, falloff in weight & height and actual weight loss
Jessica’s growth curve

http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical_charts.htm
Laurie’s growth curve

http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical_charts.htm
Conventional Vital Signs

- Heart rate, Blood pressure & Orthostatic
- Oral Temperature
When Screening Raises Suspicion of an Eating Disorder…

- **Necessary to**
  - Diagnosis
    - Evaluate medical and nutritional status
    - Complete psychosocial history
    - Laboratory (CBC, electrolytes, calcium, magnesium and glucose, LFTs, TSH, urinalysis, pregnancy test, LH, FSH, estradiol, prolactin + EKG)
  - Referral to child and adolescent eating disorder expert/program based on
    - Clinicians comfort
    - Severity
    - Complexity
    - Other?
- Follow until such time
Developing a Management Plan

• At the first encounter, speak separately with parent and child, and with both together
  • Children and adolescents are far less likely to acknowledge the concerns that have caught the attention of parents
    • This is part of the eating disorder presentation
  • Their presentation to the physician may be convincing, but they do not have an emotional appreciation of the consequences to their health
    • Emotional appreciation will come from parents
• Follow up varies according to acuity of the situation . . . while you are referring to a specialist
Developing a Management Plan (cont’d)

- Assuming the child is medically stable:
- Monitor medically on a regular basis
- Follow psychological and social growth and development
- Continue collaboration with parents always
- Refer for family based treatment (FBT) for eating disorders
Conclusions

• Eating disorders are very devastating, potentially chronic, and mortal illnesses
• Early identification can improve prognosis
• Every little bit matters
• Early identification can reduce burden on health care system
  • Less likely to need emergency services
  • Parent involvement can reduce demand on physician and system
• Early identification can reduce disease burden
  • If you leave it to the patient it will be 7 to 13 years before they seek help
Take Home Points

1. Parents should be seen as key informants - listen carefully

2. Parents & family physicians can work collaboratively to diagnose and change the course of eating disorders.

3. Family physicians, with appropriate supports, are in a unique position to identify eating disorders early.
   • In Ontario, secondary and tertiary care eating disorder programs are there to support family physicians
Questions
Resources - Internet

- Academy for Eating Disorders – Resources for professionals and patients
  https://www.aedweb.org

- BC’s Kelty Mental Health Service: meal support videos and other information
  http://keltymentalhealth.ca/blog/2012/07/eating-disorders-meal-support-helpful-approaches-families

- FEAST: Families Empowered and Supporting Treatment of Eating Disorders
  http://www.feast-ed.org/

- Maudsley Parents: A website for parents of eating disordered children
  http://www.maudsleyparents.org/

- Website of Laura Collins, a writer whose daughter recovered from Anorexia Nervosa
  www.laurassoapbox.net
Resources - Books


