Integrating Family-Based Interventions in an Inpatient Program for Adolescents with Eating Disorders: Challenges and Outcomes

Spettigue, W., Henderson, K., Buchholz, A., Norris, M., Obeid, N.

Presenter: Wendy Spettigue, MD, FRCPC

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- No conflict of interest

Contact Information:

Wendy Spettigue
Associate Professor, University of Ottawa
Psychiatric Director
Eating Disorder Program
Children's Hospital of Eastern Ontario
401 Smyth Rd, Ottawa, Ontario
CANADA K1H 8L1
Email: wspettigue@cheo.on.ca

Agenda:

- Background
- Description of the Program
- Family Involvement; Using FBT in an Inpatient Setting
- Case Example
- Program Evaluation: Results

Background

- Tertiary care children's hospital
- Ottawa, Ontario, CANADA
- Serves the Eastern part of the province (pop. ~1.5 million)
- Given $1.4M in 2006 to create a specialized inpatient program for youth with severe EDs

OUR INPATIENT PROGRAM

The Inpatient Program

- 6 beds on a specialized psych unit for EDs
- Pts are admitted under the care of an AH physician
- Inpatient dietician manages the nutritional needs
- Individual and family therapy administered by psychologist/psychiatrist

The Inpatient Program cont'd

- School, group therapy and group meals all day; also yoga, pet therapy, art therapy, etc
- Skilled, trained nurse-therapists and CYWs are key to creating the therapeutic milieu on the ward
- Consistency of message: by physician, therapist, frontline, parents, in groups

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:30-7am	Wake up call, Check-In (Weights & Urine), Shower, Get dressed						
8am-9am	BREAKFAST					FAMILY BREAKFAST	
9am-10am	School	Skills Group	Yoga	Nutrition Group	Nutrition Planning	Family Time *Family is welcome and encouraged to be present throughout the weekend.	
10:am-10:30	Quiet Time/Vitals						
10:30-11am	SNACK						
11pm-12pm	Nutrition Planning	School	MP/ Nutrition Planning	Mindfulness Training Group	W/E Planning		
12pm-1pm	LUNCH					FAMILY LUNCH	
1pm-2pm	Pet Therapy	School	Open Therapy	School	School		
2pm-3pm	Yoga	ED 411	School	Teen Issues			
3pm-3:30pm	Quiet Time/Vitals						
3:30-4pm	SNACK						
4pm-5pm	Expressive Arts Therapy	Expressive Arts Therapy	Expressive Arts Therapy	Expressive Arts Therapy\	Free Time		
5pm-6pm	FAMILY SUPPER *Family is welcome and encouraged to be present from suppertime onward.					FAMILY SUPPER	
6pm-7pm	Family Time			Parent Group			
7pm-8pm	SNACK						
8pm-9pm	Family Time						
9pm-10pm	Tidy Time	Evening Shower, Prepare for bed, Bedtime					

Family Involvement

The entire program is based on 'Maudsley' (FBT) principles of empowering parents to support their child's recovery

The Challenge:

- Traditional Maudsley therapy: Following medical stabilization, the patient is discharged and parents are empowered to renourish their child to a healthy weight. How do we renourish and treat youth in a group-based inpatient treatment program without 'disempowering' their parents?

Some Principles of Inpatient Management

- The therapeutic environment should be compassionate, caring, structured and consistent, but not overly behavioral; able to be flexible and to accommodate individualized care plans

Some Principles of Inpatient Management cont'd

- Families are an integral part of treatment; families will have a strong presence on the ward and in the weekly schedule and every patient will receive FBT from a team psychiatrist or psychologist who oversees the treatment of that patient

How We Include Parents:

- Parents at bedside first 48 hours, and until patient is fully in the groups
- Parent meal-support video and books and parent psychoed/support group
- Family meals: 11 meals per week in hospital
- "Family time" evenings and weekends

How We Include Parents cont'd

- Parent and child nutritional psychoed, menu planning
- Lots of passes, leading up to full weekend passes
- Family therapist does pass planning and discharge planning with parents
- The MDs order "passes at parents' request"

Empowering Parents:

- Frontline staff have been trained to support parents, to always give the message: "you are good parents and we trust you to make the best decisions for your child"

Case Example

- "Amy"
- 13 y.o. girl in grade 7
- Lives in a Northern Ontario town with two working parents and 7 year old brother

Case Example cont'd:

- Top gymnast in the region
- Lots of attention and pressure when she performed
- Decided to get "more fit": started "eating healthy" and training in Fall of Grade 7: ran 10 km/day, did 500 sit-ups and push ups; periods stopped, which pleased her

Case Example cont'd:

- Late June of Grade 7: Provincial meet, lots of attention on her, expected to win: she "fell apart" and performed poorly; she was "devastated"
- Started restricting significantly after that; intake quickly progressed to almost nothing
- Continued to increase her exercise

Case Example cont'd:

- Admitted to her local hospital in August: virtually no food or fluids for 4-5 days PTA
- BMI 16.4; 4% body fat
- High urea; neutropenia;
- HR 36; BP 80/42; Pulse difference 53

Case Example cont'd:

- At local hospital: Refused oral boost; resisted n/g tube; exercised constantly in her room
- Was certified; declared Incompetent; started low-dose olanzapine; behavioral protocol
- No progress after 3 weeks: transferred to CHEO in September

Case Example cont'd:

- At CHEO: parents asked to stay with Amy 24/7 initially; n/g tube removed; olanzapine increased to 7.5 mg/day on 2nd day after patient ran away
- Met with Amy and parents; lifted guilt and blame; externalized and blamed the illness; empathized with patient and parents, praised them; compared AN to OCD

Case Example cont'd:

- Empowered parents: they know their daughter best, they are the best ones to feed her, we will team with them
- Father left to return home; mother slept at Ronald MacDonald House, but stayed at Amy's bedside and supported all "meals" (Boost initially)
- No individual therapy; 2 sessions per week with mother and daughter

Case Example cont'd:

- Amy "hated" hospital food: mother empowered to 'entice' daughter with homemade meals at RMH; after that, ate every supper at RMH (ie 7 days per week)
- Early in admission: slept overnight in mother's bed at RMH; both preferred this, so did it every weekend; mother supported all w/e meals

Case Example cont'd:

- Gaining approx. 1.5 kg/week
- Vitals frequently unstable
- Once on food, patient joined group therapy and group meals for breakfast, lunch and snacks on weekdays
- Oct: Amy begging to go home for Thanksgiving, decision in mom's hands; despite pulse diff of 40s, they flew home for the long weekend

Case Example cont'd:

- Saturday a.m.: mother called the ward to say Amy won't eat, we're returning to CHEO. I empowered her to stay and feed her daughter, any way possible; even one bite would be success (but left final decision up to parents)

Case Example cont'd:

Mother's description of the 3-day pass:

- Amy very triggered by being home; refused to eat, wanted ED back; conflict and tears, refused supper
- Mother took her to grandparents for the rest of the weekend: gave her "Boost milkshakes with berries" which she "loved"; had friends over, visited the school, went for drives with father, lots of talks, hugs, visits, love, distractions

Case Example cont'd:

- Returned from pass; parents reported she completed "90%" of meal plan; gained 800 gm that weekend, gained 1.4 kg that week
- Emotional "turnaround": patient more motivated to recover and return home, parents feeling more empowered against the illness

Case Example cont'd:

- Two weeks later: father came to visit and patient begged him to take her home; Amy 47 kg, IBW = 50-52 kg; decision re. d/c left entirely in parents' hands: they chose to leave

Case Example cont'd:

- Drove home: patient refused all food and drink throughout the trip, and once home; insisted she would rather die than recover, and if they want her to eat, they'll have to take her back to CHEO
- Lost 4 kg over the next two weeks; frequent phone calls to me re. what to do, whether to return, whether to take small steps, be more forceful, etc; my job was to continue to encourage, empower, express my belief in them, praise, and leave all decisions in their hands

Case Example cont'd:

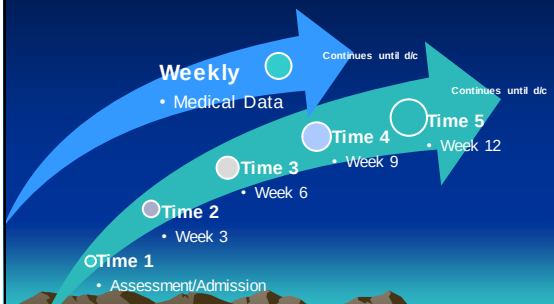
- Mother described Amy as "stuck", unable to eat, and very depressed
- One week later: Amy eating 3 meals but no snacks; not attending school; mother not returning to work, whole family pitching in; mother chose to keep trying at home….

Follow-Up:

- Amy recovered her weight, but relapsed again the next year after a one week trip to Europe with her team; returned to CHEO and repeated the process
- D/c'd to outpatient FBT
- Now fully recovered, in high school, doing gymnastics 4x/week; eating variety and desserts, no longer following a meal plan, maintaining a healthy weight

Outcomes

Measurement schedule



Description of Population (N=170)

- **Mean age**:
  - 15.38 years (SD=1.85)
  - Range = 8.5-17.83 years
- **Gender**:
  - 160 females (94.1%)
  - 10 males (5.9%)

Mean length of stay:
- 45.16 days (SD=24.58)
- Range = 2-147 days

Description of Population (N=170)

- **Provincial beds**:
  - n=21 (12.3%)

Visits:
- First visit: n=119 (70.0%)
- Readmission: n=51 (30.0%)

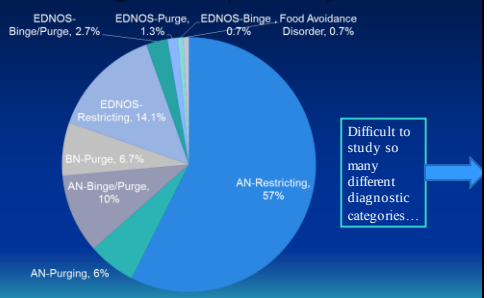
Description of Population (N=119) – first time visits only

- **Custody status:**
  - Nuclear family: 62.3%
  - Live with mother only: 19.5%
  - Joint custody: 16.9%
  - Other: 2.3%

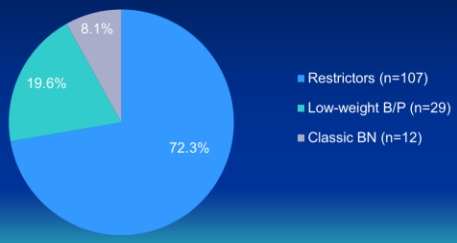
Description of Population (N=119)

- **Family psychiatric history:**
  - Depression = 71.6%
  - Alcohol abuse = 48.6%
  - Severe anxiety = 33.8%
  - Drug abuse = 23.0%
  - Anorexia nervosa = 18.9%
  - OCD = 18.9%

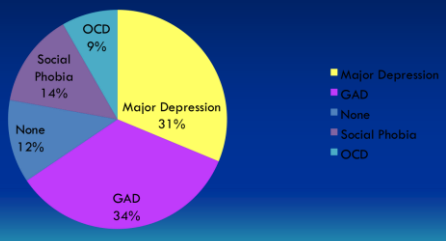
Diagnosis (n=148)



Clustering of Diagnoses N=148



Psychological Comorbidities



Comparison by ED Subtype

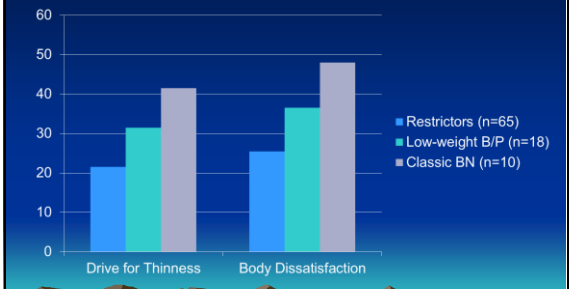
Restrictors vs AN-BP vs BN

Descriptives

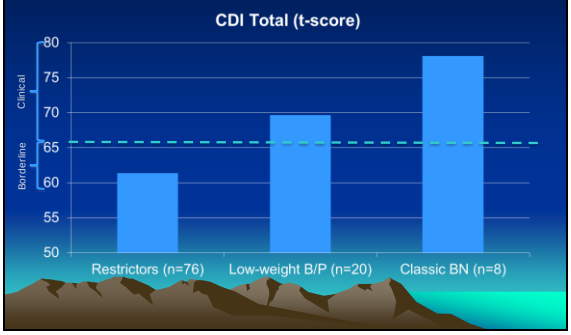
Mean (SD) (range)	Restrictors (n=57)	AN-B/P (n=15)	BN (n=9)
Age (years)*	15.08 (1.84) (12.08-17.92)	16.00 (1.03) (13.00-17.42)	16.40 (1.09) (14.33-17.42)
Weight (kg)*	42.11 (5.59) (28.30-56.70)	44.41 (7.58) (36.50-59.50)	58.00 (15.05) (52.50-102.40)
BMI (kg/m²)*	18.02 (1.79) (13.00-21.94)	18.82 (1.56) (14.34-19.45)	24.88 (4.81) (21.30-34.40)
Caloric Intake (calories)	1268.58 (322.18) (800-2000)	1074.55 (557.52) (300-3480)	1830.0 (846.53) (1030-2250)

*significant difference between groups p<.01

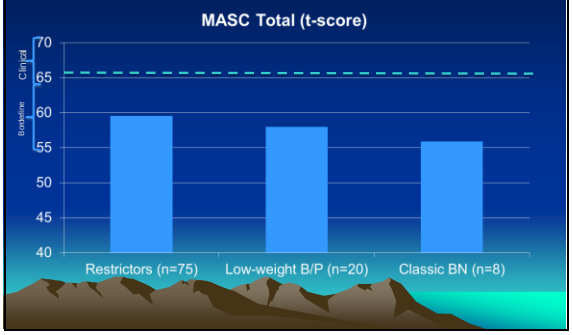
Eating Attitudes: EDI-3



Depressive Symptoms

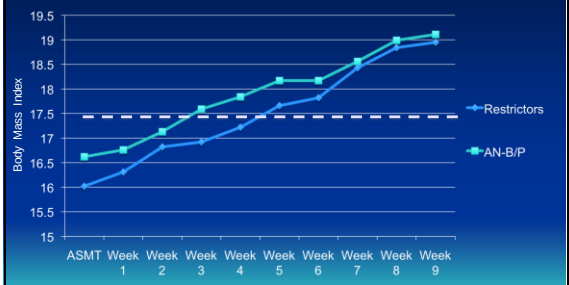


Anxiety Symptoms



Were there any changes over the course of treatment?

Medical Stabilization – BMI Profiles

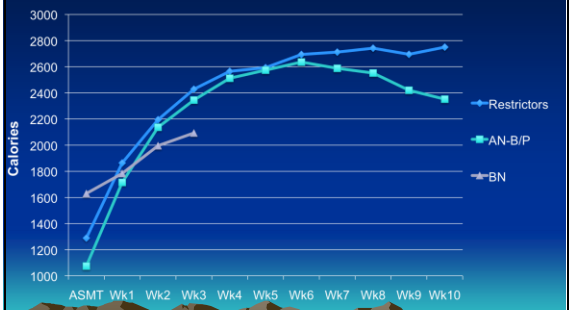


Inpatient Program Goal #2

Nutritional Rehabilitation

- *Calories*

Caloric Intake



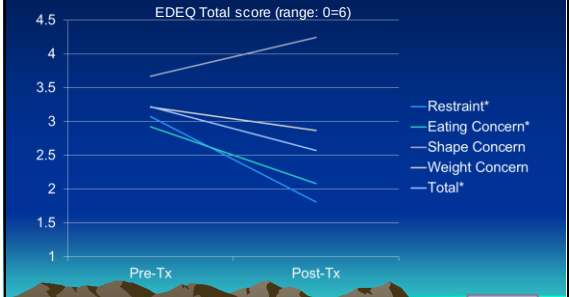
Inpatient Program Goal #3

Normalization of Eating Behaviours and Attitudes

- *EDE-Q – Restraint, Eating Concern, Shape Concern, Weight Concern, and Total score*
- *EDI-3 – Drive for Thinness & Body Dissatisfaction*

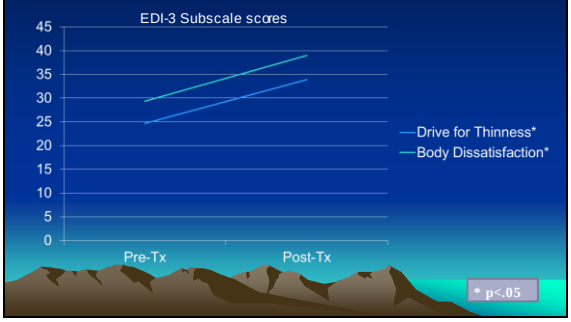
Eating Behaviours

Baseline to Discharge (n=57)



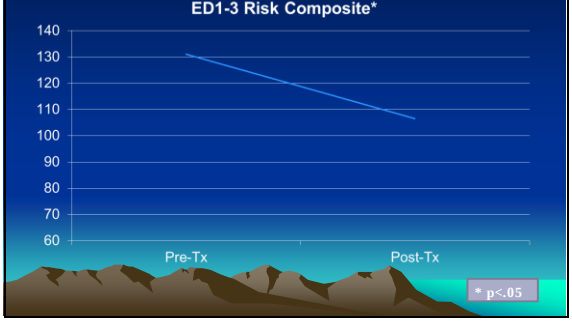
Eating Attitudes – Drive for Thinness & Body Dissatisfaction

Baseline to Discharge (n=42)



Eating Attitudes – Eating Disorder Risk Composite Score

Baseline to Discharge (n=51)



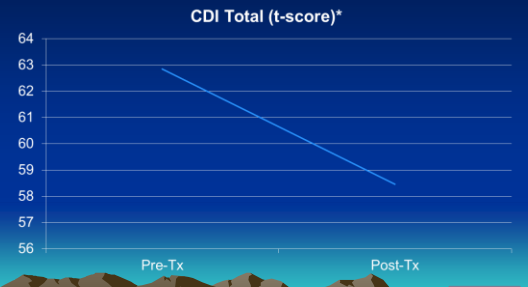
Inpatient Program Goal #4

Psychological Functioning

- *CDI – Depression*
- *MASC – Anxiety*

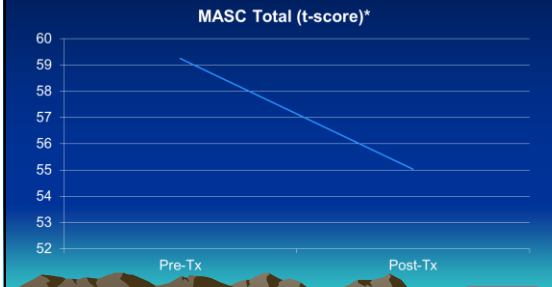
Depressive Functioning

Baseline to Discharge (n=66)



Anxiety Functioning

Baseline to Discharge (n=64)

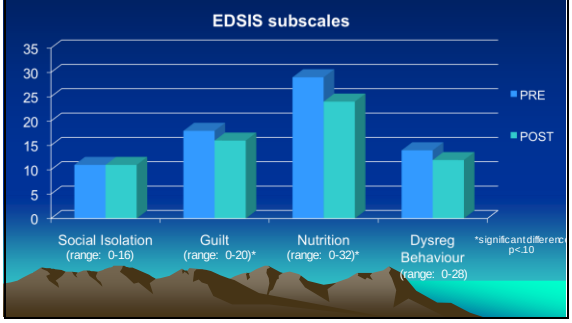


Inpatient Program Goal #5

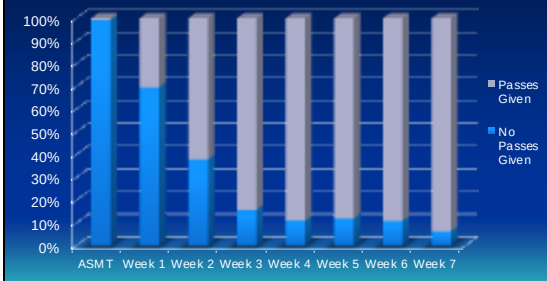
Empowering and Strengthening Families:

ED Symptom Impact - Parents

Baseline to Discharge (n=14)

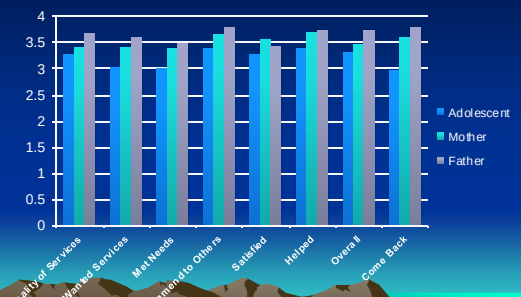


Frequency of Passes



Satisfaction with Services Provided

Scale: 1=poor to 4=excellent



Summary of Findings

- Mean age 15 years
- 94% female
- 70% 1st admission
- 70% A.N.-R + EDNOS-R; 19% AN-B/P; 11% BN
- Mean LOS 40 days
- Co-morbid Depression and Anxiety

Summary of Findings: Admission vs Discharge

- AN cohorts only:
  - Significant increase in BMI & nutritional intake
  - Reduction in ED behaviours
  - Decreases in anxiety & depression

Summary of Findings: Admission vs Discharge

- No change in Body Dissatisfaction or Drive for Thinness
- Decreases in parental guilt and nutrition concerns
- Lots of passes, but unable to show that parents feel empowered; they do express high levels of satisfaction with the program

Future Directions

- Centralized data
- Better parent scales
- Can we do more to empower parents?
- Long term outcomes
- Treatment for BN vs AN

Conclusions cont'd:

- Preliminary results suggest that one can build an effective inpatient program built on "outpatient" FBT principles; partnering with parents and empowering them doesn't need to wait until after discharge

Thank you!

Questions?