Where do we start? Doing something locally to treat children and adolescents with eating disorders

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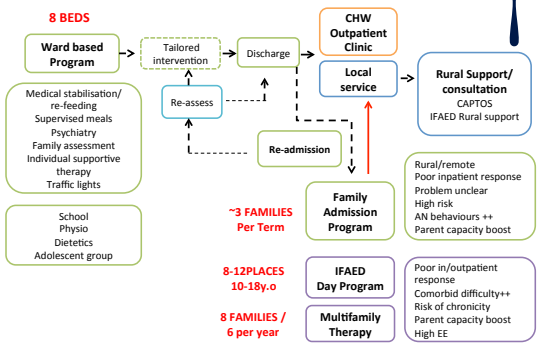
SCHN
Westmead
EATING
DISORDER
SERVICE

EDS Westmead Inpatient Clinical Pathway



Guiding Principles

1. Multidisciplinary specialist care essential to positive outcome
2. Evidence based practice and treatments central
3. Developmentally sensitive to medical and psychological needs
4. Family focused, inclusive and enabling
5. Intensity and support to target illness complexity

What we know?

Key issues

- Specialist vs generalist care
- Systems support
- Treatment efficacy

REGULAR ARTICLE (CE ACTIVITY)

Comparison of Specialist and Nonspecialist Care Pathways for Adolescents with Anorexia Nervosa and Related Eating Disorders

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ABSTRACT

Objective: To explore the role of specialist outpatient eating disorders services and investigate how direct access to these affects rates of referral, admissions for inpatient treatment, and continuity of care.

Method: Services beyond primary care in Greater London retrospectively identified adolescents who presented with an eating disorder over a 2-year period. Data concerning service use were collected from clinical casenotes.

Results: In areas where specialist outpatient services were available, 2–3 times more cases were identified than in areas without such services. Where initial outpatient treatment was in specialist rather than nonspecialist services, there was a significantly lower rate of admission for inpatient treatment and considerably higher consistency of care.

Discussion: Developing specialist outpatient services with direct access from primary care is likely to lead to improvements in treatment and reduce overall costs. © 2012 by Wiley Periodicals, Inc.

Keywords: adolescents; anorexia nervosa; care pathways; inpatient treatment; outpatient treatment; service organization

(Int J Eat Disord 2012; 45:949–956)

2012
N=378 (34 services)

Specialist services -

- Identify 2-3 more cases
- Lower rates of inpatient admission
- Higher consistency of care

Specialist service = >25 new ED referrals, MDT, one person with experience treating ED's, expertise to deliver EBT

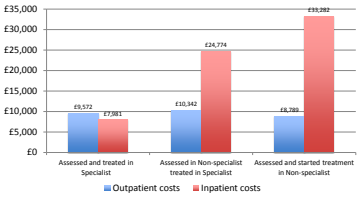
Cost by care pathway

Figure 1 - Direct healthcare costs by care pathway

Schmidt et al (submitted) paper
Data from Eisler & Simic 2014 *Submission to the House of Commons Health Select Committee*

Inpatient and outpatient costs

Figure 2 - Average outpatient and inpatient costs by care pathway



Schmidt et al (submitted) paper
Data from Eisler & Simic 2014 *Submission to the House of Commons Health Select Committee*

BRIEF REPORT

The Effectiveness of Family-Based Treatment for Full and Partial Adolescent Anorexia Nervosa in an Independent Private Practice Setting: Clinical Outcomes

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ABSTRACT

Objective: Anorexia nervosa (AN) is a severe psychiatric illness with little evidence supporting treatment in adults. Among adolescents with AN, family-based treatment (FBT) is considered first-line outpatient approach, with a growing evidence base. However, research on FBT has stemmed from specialist services in research/public health settings. This study investigated the effectiveness of FBT in a case series of adolescent AN treated in a private practice setting.

Method: Thirty-four adolescents with full or partial AN, diagnosed according to *DSM-IV* criteria, participated, and were assessed at pretreatment and post-treatment. Assessments included change in % expected body weight, mood, and eating pathology.

Results: Significant weight gain was observed from pretreatment to post-treatment. 45.9% of the sample demonstrated full weight restoration and a further 41.2% achieved partial weight-based remission. Missing data precluded an examination of change in mood and ED psychopathology.

Discussion: Effective dissemination across different service types is important to the wider availability of evidence-based treatments. These weight restoration data lend preliminary support to the implementation of FBT in real world treatment settings. © 2016 Wiley Periodicals, Inc.

Keywords: eating disorders; anorexia nervosa; family-based treatment; adolescence; effective treatment

(Int J Eat Disord 2016; 00:000–000)

Mean sessions 14.14 (9.19)
Drop out rate 28%

2016
N=34

- Admission % EBW 82.72 (7.28)
- EOT 45.9% EBW > 95%; 89% EBW > 85%
- Comorbid rate 54.1%

REGULAR ARTICLE

Understanding the Uptake of Family-Based Treatment for Adolescents with Anorexia Nervosa: Therapist Perspectives

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Susan Jack, PhD[3,4]
Alison Niccols, PhD[3]
Sherry Van Blyderveen, PhD[1,2]
Gail McVey, PhD[3,4]

ABSTRACT

Objective: To explore and describe therapists' perceptions of the factors affecting their uptake of family-based treatment (FBT) for adolescents with anorexia nervosa (AN).

Method: Fundamental qualitative description guided the sampling and data collection in this study. A purposeful sample of 40 therapists providing treatment to youth with AN, completed an in-depth interview. Conventional content analysis guided the development of initial codes and categories, whereas constant comparison analytic techniques were used to compare and contrast therapist perceptions across contexts. Summative content analysis was used to provide counts of keywords, phrases, and themes.

Results: Therapists face several barriers to the implementation of FBT, divided broadly into interventional, organizational, interpersonal, patient/family, systemic, and illness factors. Therapists support the implementation of evidence-based practices, including FBT for AN, but fidelity to this model is not practiced. Specific concerns about the intervention included weighing the patient, providing nutritional advice, and the family meal. Ninety-five percent of therapists requested further training in the FBT model.

Discussion: Further investigation into the barriers and facilitating factors to the use of FBT is warranted. Understanding effective dissemination and training strategies is critical to ensuring patients receive the best possible care. © 2012 by Wiley Periodicals, Inc.

Keywords: family-based treatment; evidence-based practices; qualitative

(Int J Eat Disord 2012; 00:000–000)

2013
N=40

- Poor fidelity is the rule rather than the exception!
- Not one therapist included
  - Weighing patient, Family meal, Providing nutritional guidance without involving a dietician

EMPIRICAL ARTICLE

Clinician Adherence to Guidelines in the Delivery of Family-Based Therapy for Eating Disorders

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ABSTRACT

Objective: Clinicians have been shown to drift away from protocol in their delivery of evidence-based treatments. This study explores this phenomenon in the delivery of family-based therapy (FBT) for eating disorders, and the clinician characteristics that might explain such therapist drift.

Method: The participants were 117 clinicians who reported using FBT for eating disorders. They completed an online survey, which included questions relating to clinician characteristics, caseload, and reported use of FBT manuals and core therapeutic tasks, as well as a measure of anxiety.

Results: The use of core FBT tasks was higher than for other therapies, but there were still noteworthy gaps between recommended and reported practice. Approximately a third of clinicians reported delivering "FBT" that deviated very substantially from evidence-based protocols, often appearing to be on an individual therapy basis. Using an FBT manual to guide treatment delivery was associated with greater adherence to recommended techniques. Clinician caseload and anxiety were associated with differences in the use of specific FBT tasks.

Discussion: Consistent with previous research regarding clinicians' use of other therapies, the delivery of FBT for the eating disorders is not homogeneous.

Conclusion: Further investigation of this phenomenon is needed to determine the impact of deviating from treatment protocols on the effectiveness of FBT for the eating disorders. © 2014 Wiley Periodicals, Inc.

Keywords: family-based treatment; evidence-based practice; eating disorders

(Int J Eat Disord 2014; 00:000–000)

2014
N=117

- Use of manual related to use of specific techniques
- 57% or less focused on each core elements 90-100% of the time
- 30% deviated substantially from model

Specialist LHD teams

- Identified people (medical and non-medical)
- Specialist knowledge development
  - Identified 'expert'
- Standardized approaches
  - Assessment
  - Admission
- Identified sequence of care (clinical pathway)
- Organisational support and recognition

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ORIGINAL ARTICLE

A randomized controlled trial of in-patient treatment for anorexia nervosa in medically unstable adolescents

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Background. Anorexia nervosa (AN) is a serious disorder incurring high costs due to hospitalization. International treatments vary, with prolonged hospitalizations in Europe and shorter hospitalizations in the USA. Uncontrolled studies suggest that longer initial hospitalizations that normalize weight produce better outcomes and fewer admissions than shorter hospitalizations with lower discharge weights. This study aimed to compare the effectiveness of hospitalization for weight restoration (WR) to medical stabilization (MS) in adolescent AN.

Method. We performed a randomized controlled trial (RCT) with 82 adolescents, aged 12–18 years, with a DSM-IV diagnosis of AN and medical instability, admitted to two pediatric units in Australia. Participants were randomized to shorter hospitalization for MS or longer hospitalization for WR to 90% expected body weight (EBW) for gender, age and height, both followed by 20 sessions of out-patient, manualized family-based treatment (FBT).

Results. The primary outcome was the number of hospital days, following initial admission, at the 12-month follow-up. Secondary outcomes were the total number of hospital days used up to 12 months and full remission, defined as healthy weight (>95% EBW) and a global Eating Disorder Examination (EDE) score within 1 standard deviation (s.d.) of published means. There was no significant difference between groups in hospital days following initial admission. There were significantly more total hospital days used and post-protocol FBT sessions in the WR group. There were no moderators of primary outcome but participants with higher eating psychopathology and compulsive features reported better clinical outcomes in the MS group.

Conclusions. Outcomes are similar with hospitalizations for MS or WR when combined with FBT. Cost savings would result from combining shorter hospitalization with FBT.

Received 9 November 2013; Revised 30 May 2014; Accepted 6 June 2014

Background

- Treatment costs in anorexia nervosa (AN) are among the highest for all psychiatric disorders due to the extensive use of hospitalization.
- While hospitalization for management of acute medical instability is essential to preventing morbidity and mortality the benefits of further hospitalization for weight restoration are unclear.
- Findings from uncontrolled studies are contradictory with some suggesting that hospitalization to near normal weight decreases the need for hospitalization over the course of the illness (Steinhausen et al., 2008), others suggesting outcomes are identical for in and outpatient treatment (Gowers et al., 2007) and hospitalization is associated with poorer outcomes (Gowers et al., 2000).

Hospitalization

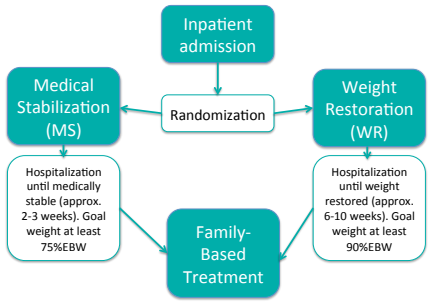
International average length of stay for adolescents:

- Iceland – 129.7 days
- France – 135 days
- United Kingdom – 106.4 days
- United States (hospital) – 16 days (limited by cost)
- United States (residential) – 83 days

Aim

To compare the effectiveness of different in-patient treatments in medically unstable adolescents with AN prior to outpatient manualized Maudsley Family Based Treatment (FBT) by conducting an RCT comparing brief hospitalisation for medical stabilisation (MS) to hospitalisation for weight restoration to 90% expected body weight (EBW).

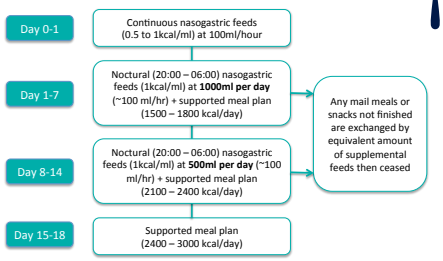
Design



Inpatient Treatment

- Specialist multidisciplinary treatment team adolescent medical ward
- **Inpatient refeeding**
- Individual supportive psychotherapy twice weekly
- **Psychiatric management of comorbidities**
- **Lenient behavioural program**
- Eating disorder group program(recreational and socialisation)
- Hospital School
- Physiotherapy program (three times weekly)

Inpatient Refeeding/Medical Stabilisation



Madden, S., Miskovic-Wheatley, J., Clarke, S., Touyz, S., Hay, P., Kohn, M. (2015). Outcomes of a Rapid Refeeding Protocol in Adolescent Anorexia Nervosa. *Journal of Eating Disorder*.

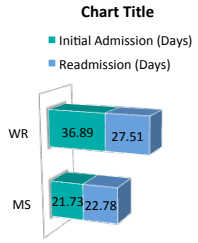
Outpatient Treatment

- Maudsley Family Based Treatment (20 sessions)
- FBT sessions recorded (video)
- 5% of recorded sessions were randomly assessed for treatment fidelity

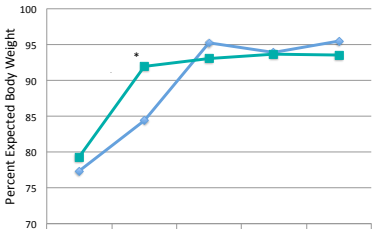
Lock, J., Le Grange, D., Agras, W. S., C. Dare. 2001. *Treatment manual for anorexia nervosa: A family-based approach.* New York: Guildford Publications, Inc.

Hospital use

- No difference in readmission episodes or readmission days following the initial admission
- Significantly greater total admission days used in the WR arm (65.5(WR) vs. 45.2 (MS) p<0.05)



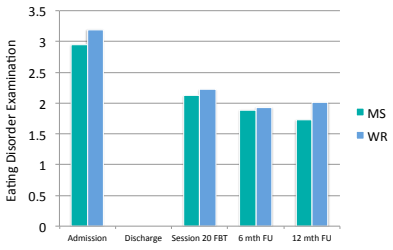
Weight Gain



	Admission	Discharge	Session 20 FBT	6 mth FU	12 mth FU
MS	77.28	84.4	95.2	93.9	95.5
WR	79.25	92	93.1	93.7	93.6

* Significant difference that set by protocol

ED Symptomatology



Significant reduction in both groups,
However shape and weight concerns prevail

Conclusions

- Longer initial hospitalizations aimed at WR did not reduce the need for hospitalization over the course of the illness or improve outcomes compared to brief admissions for MS when combined with outpatient FBT
- More total hospital days and more post protocol FBT sessions were used in the WR group
- Difference in hospital usage has financial implications
  - Australia ($1,340/day) - Cost difference of $26,800 (AUD)
  - USA: ($3,840-$4254.75/day) – Cost difference of $77,000 - $85,000.00 (USD)

Next Step

- Reviewed data to look for early indicators of remission in FBT to separate out those who need standard FBT from those who needed higher levels of care

BRIEF REPORT

Early Weight Gain in Family-Based Treatment Predicts Greater Weight Gain and Remission at the End of Treatment and Remission at 12-Month Follow-Up in for Adolescent Anorexia Nervosa

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Stephen Touyz, PhD[6]

ABSTRACT
Objective: To identify whether early weight gain in family-based treatment (FBT) predicted greater weight and remission at end of FBT and 12-month follow-up.

Method: Eighty-two adolescents, with anorexia nervosa, participated in a randomized control trial comparing brief hospitalization for medical stabilization and hospitalization for weight restoration to 90% expected body weight (EBW) (1:1), followed by 20 sessions of FBT. Sixty-nine completed trial protocol. Receiver operating characteristic analyses were conducted investigating whether early weight-gain in FBT predicted outcomes at end of FBT and 12-month follow-up. Participants were analyzed according to their original randomization and as a combined set. Binary logistic regression was used to control for randomization arm effect in combined set analysis.

Results: Weight gain greater than 1.8 kg at FBT Session 4 predicted greater %EBW (99.18 SD = 6.93 vs. 92.79 SD = 7.74, $p < .05$) and remission at end of FBT (46% vs. 11%, $p < .05$) and at 12-month follow-up (64% vs. 36%, $p = .05$). Binary logistic regression confirmed weight gain greater than 1.8 kg predicted remission ($p < .05$) while treatment arm randomization did not add significantly to the model.

Discussion: Early weight gain has potential to distinguish likely responders in FBT from those who may need more intensive intervention to achieve remission offering the potential to improve outcomes. © 2015 Wiley Periodicals, Inc

Keywords: anorexia nervosa; adolescent; early weight gain; outpatient treatment; family-based treatment; treatment optimization; long-term outcomes

(Int J Eat Disord 2015; 00:000–000).

Aim

To identify whether early weight-gain in FBT predicted higher weight and remission at end of FBT and 12-month follow-up

Statistical Analysis

- Receiver-operating characteristic (ROC) analyses were conducted with a cut point selected for comparable sensitivity and specificity
- For each analysis the cohort was separated into a high gain (HG) and a low gain (LG) group

Results

- Length of hospitalisation and %EBW at commencement of FBT had no significant impact on rates of remission at end of FBT and 12-month follow up
- ROC coordinates indicated an optimal cut-point of a 1.8kg weight gain at week 4 of FBT to differentiate the:
  - LG (n=45 (65%) M=0.13: SD=1.23kg)
  - HG (n=24 (35%) M=3.34: SD+1.56kg)

End of FBT Outcomes

- HG group had a significantly higher %EBW (p<0.05)
  - HG (M=99.18: SD=6.93%)
  - LG (M=92.79: SD=7.74%)
- HG had has a significantly higher rate of remission (strict) (p<0.05)
  - HG = 46%
  - LG = 11%

12-Month Follow-Up

- No significant difference in %EBW between HG and LG groups
- Difference in remission (strict) approached significance (p=0.07)
  - HG = 54%
  - LG = 29%
- HG had a significantly higher rate of remission (broad) than LG (P=0.05)
  - HG = 63%
  - LG = 36%

Conclusions

- A weight gain of 1.8kg by Session 4 of FBT predicted higher %EBW and remission (strict) at end of FBT and remission (broad) at 12-month follow-up.
- Early weight gain as a predictor of remission (strict) approached significance
- Early weight gain has the capacity to distinguish those who are likely to respond to standard FBT from those who may benefit for increased treatment intensity offering the potential to improve treatment outcomes