# The Society for Clinical Child and Adolescent Psychology (SCCAP): Initiative for Dissemination of Evidence-based Treatments for Childhood and Adolescent Mental Health Problems

With additional support from Florida International University and The Children's Trust.

SOCIETY OF CLINICAL CHILD & ADOLESCENT PSYCHOLOGY

practice into science into practice

DIVISION 53

American Psychological Association

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# Keynote

## Evidence-Based Treatment for Adolescents with Anorexia and Bulimia


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Professor of Psychiatry and Behavioral Neuroscience

The University of Chicago Medical Center




# Outline of Presentation

① The role of the family in eating disorders

② Evidence-based treatment for AN

- Implications of findings

③ Evidence-based treatment for BN

- Implications of findings

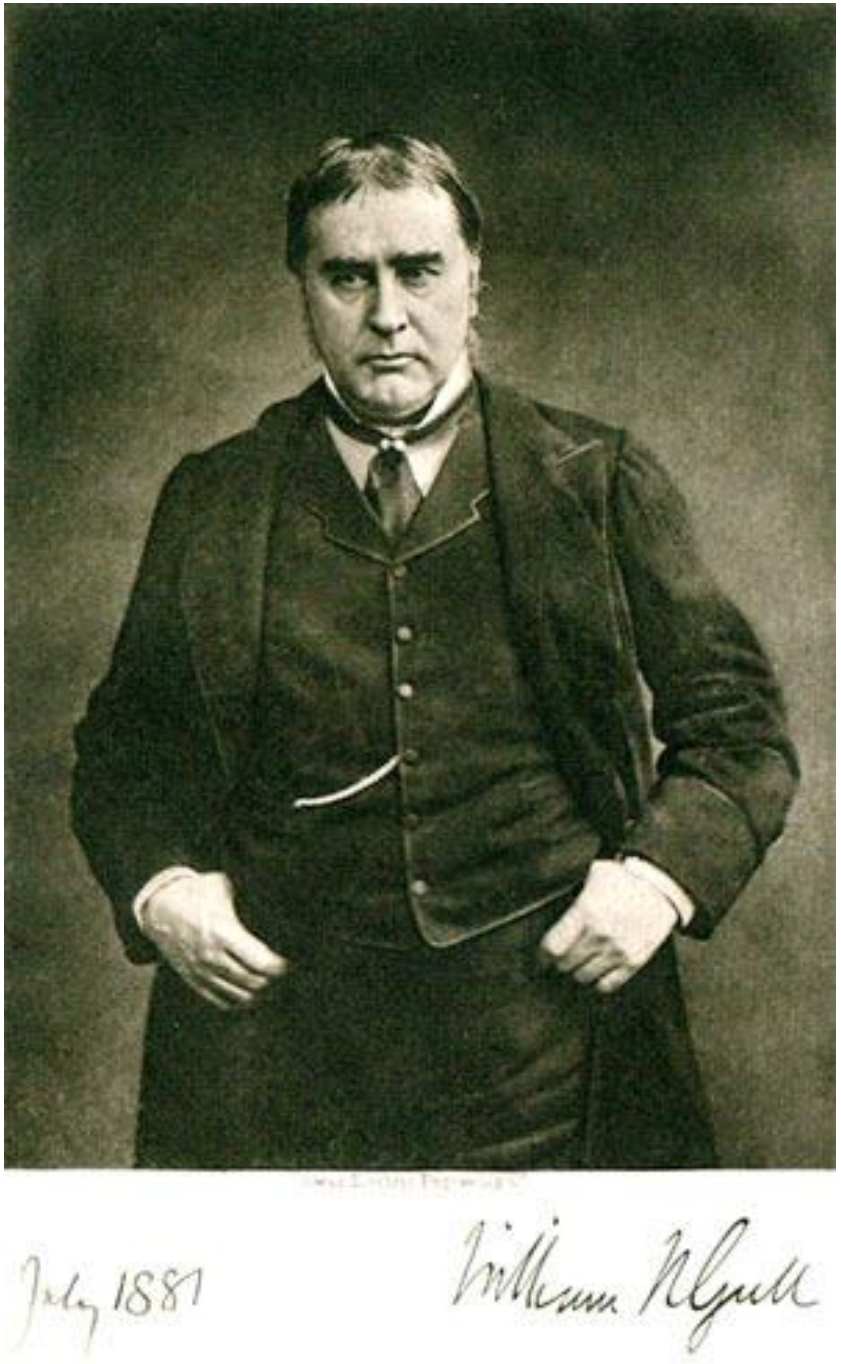
④ Resources and current studies

# Part 1

## The Role of the Family

### *Adolescent Anorexia Nervosa*

*Le Grange et al., IJED, 2010*




**“The patients should be fed at regular intervals, and surrounded by persons who would have moral control over them; relatives and friends being generally the worst attendants.”**

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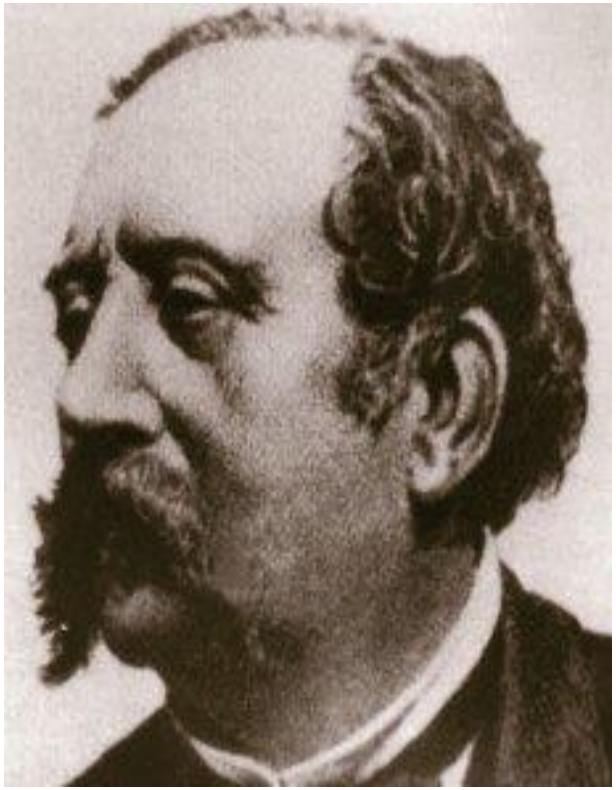
**William Gull**

**(1816-1890)**



# Charles Lasegue
## (1816-1883)

**“In view of the undoubted psychological aspects (of the disorder), it would be equally regrettable to ignore or misinterpret the patient’s psychological surroundings.”**

**“None should be surprised to note that I always consider the morbid state of the hysterical patient side by side with the preoccupations of her relatives.”**

**“It is necessary to separate both children and adults from their father and mother, whose influence, as experience teaches, is particularly pernicious”**

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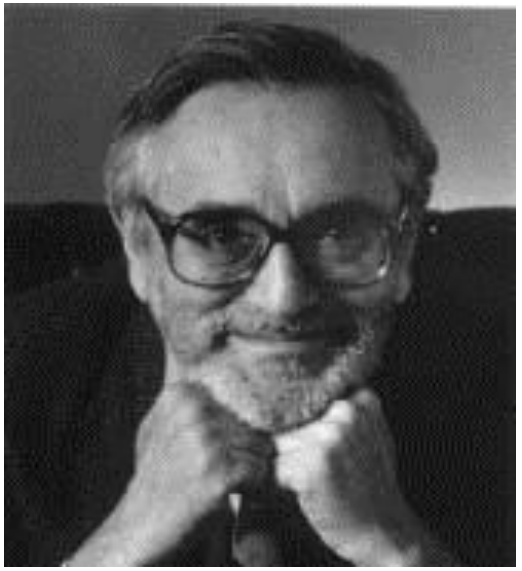
**Jean Martin Charcot**

**(1825-1893)**

# The 20th Century

**First Half - Parentectomy*: "A slang term meaning removal of a parent (or both parents) from the child."** **MedicineNet.com*

**Second Half - Salvador Minuchin, Child Psychiatrist and parent of Structural Family Therapy**



# The Maudsley Approach

**There is little doubt that the presence of an ED has a major impact on family life. With time, food, eating, and their concomitant concerns begin to saturate the family fabric. Consequently, daily family routines as well as coping and problem solving behaviors are all affected.**

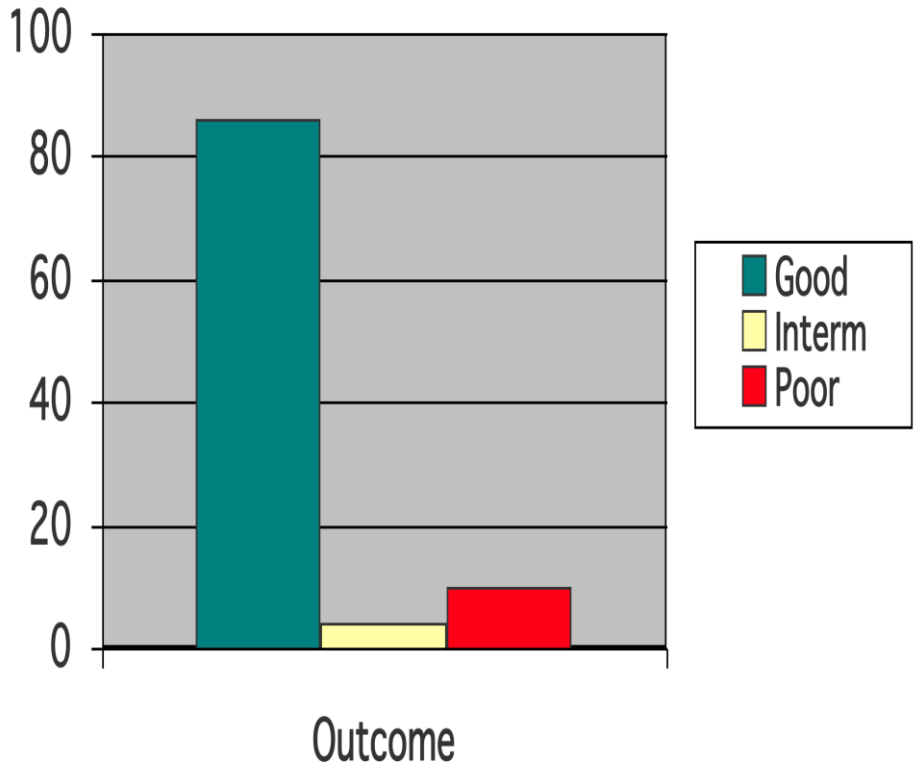
Ivan Eisler, Parent of Family Therapy for Adolescent AN

# Part 2

## Evidence-Based Treatment

### *Adolescent Anorexia Nervosa*

# First Uncontrolled Study: Structural Family Therapy




**Characteristics**

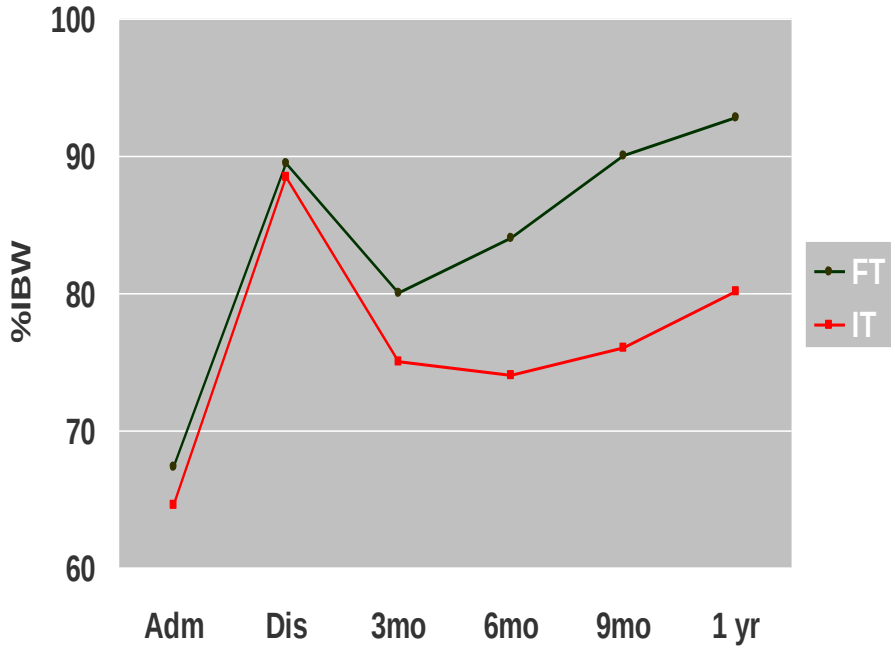
- 53 patients
- Ages 9-21 years
- 16 therapists

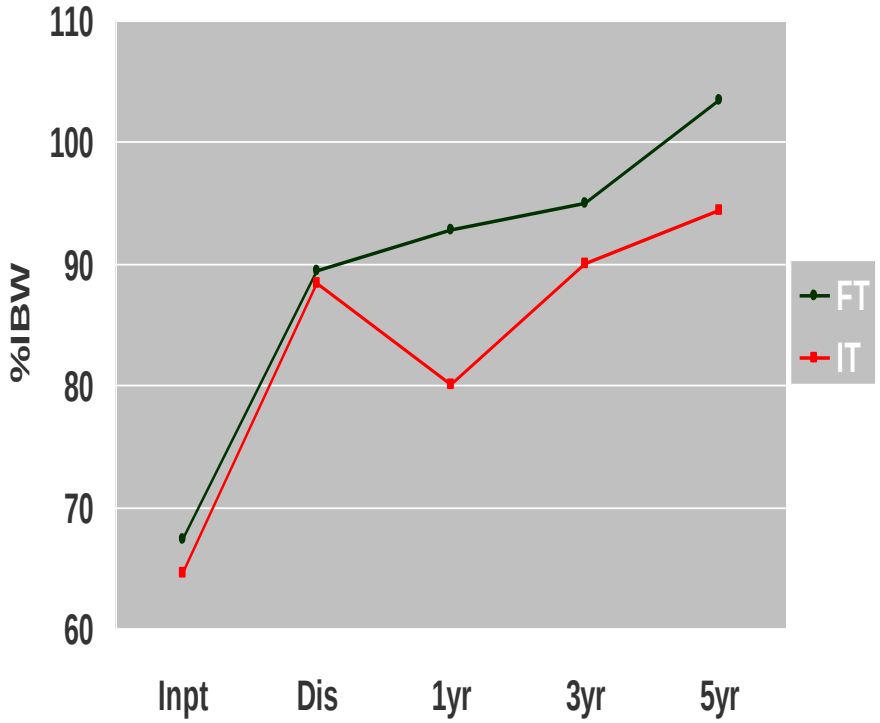
**Problems**

- No outcome measures
- No control group

# First Maudsley RCT (N=80) Subgr. 1 + 5 Yr FU

- FBT n=10
- Supportive therapy n=9
- 12 months Tx post hosp
- 5-year FU



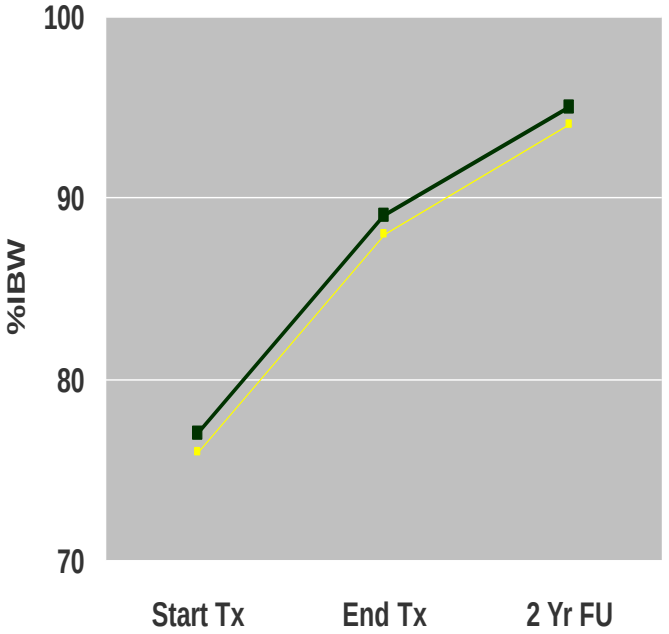

Russell, Szmukler, Dare, Eisler, *Arch Gen Psych,* 1987; Eisler, Dare, Russell, Szmukler, Le Grange, Dodge, *Arch Gen Psych,* 1997.

# Conclusions

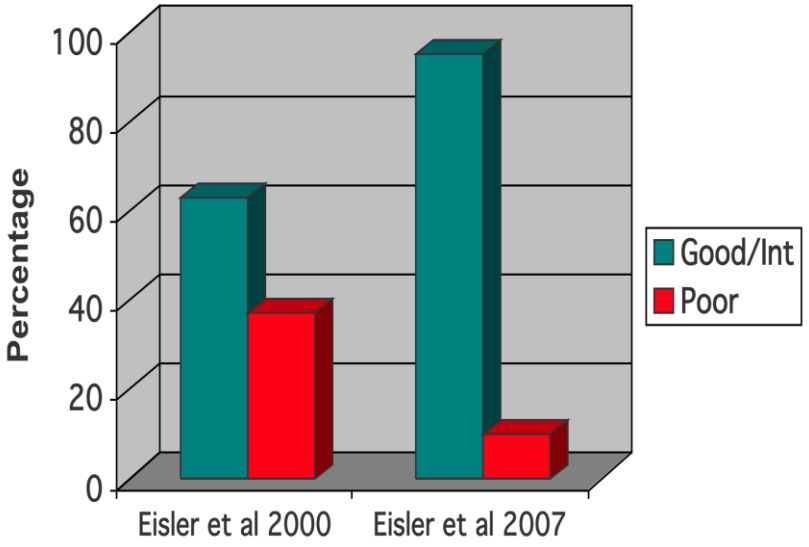
- **Family therapy was found to be more effective than individual therapy in patients whose illness was not chronic and had begun before the age of 19 years.**

- **Much of the improvements found at 5-year follow-up can be attributed to the natural outcome of the illness. Nevertheless, it was still possible to detect long-term benefits of family therapy completed 5 years previously.**

# Second Maudsley RCT (N=58)




- **Pilot n=18**
- **Larger study n=40**
- **Conjoint FT (CFT)**
- **Separated FT (SFT)**
- **4-Year FU**




Le Grange, Eisler, Dare and Russell, *IJED,* 1992; Squire-Dehouck, 1993; Eisler, Dare, Hodes, Russell, Dodge & Le Grange, *J Child Psychol*, 2000.

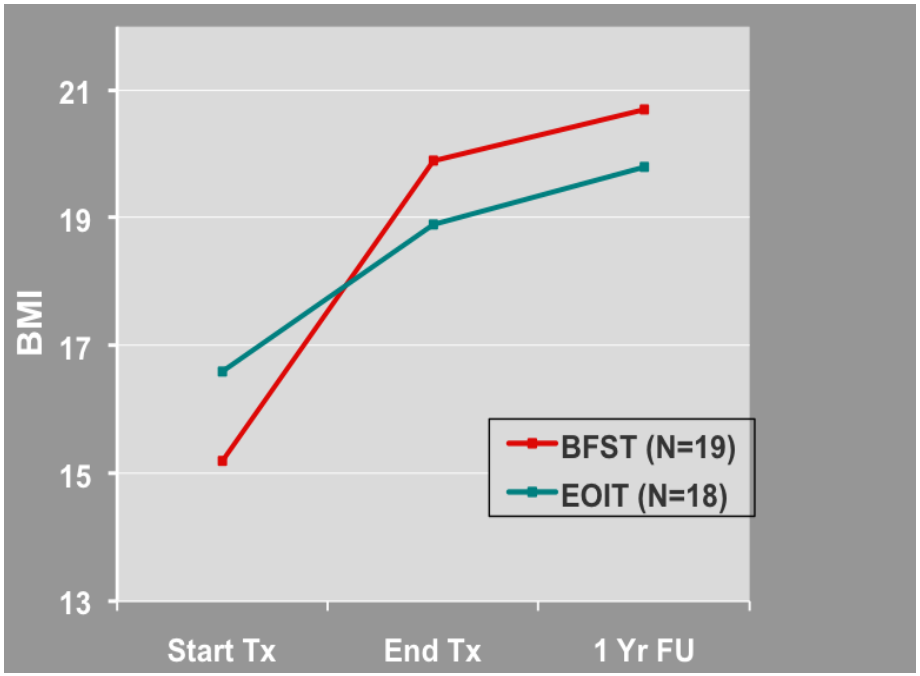
# Conclusions

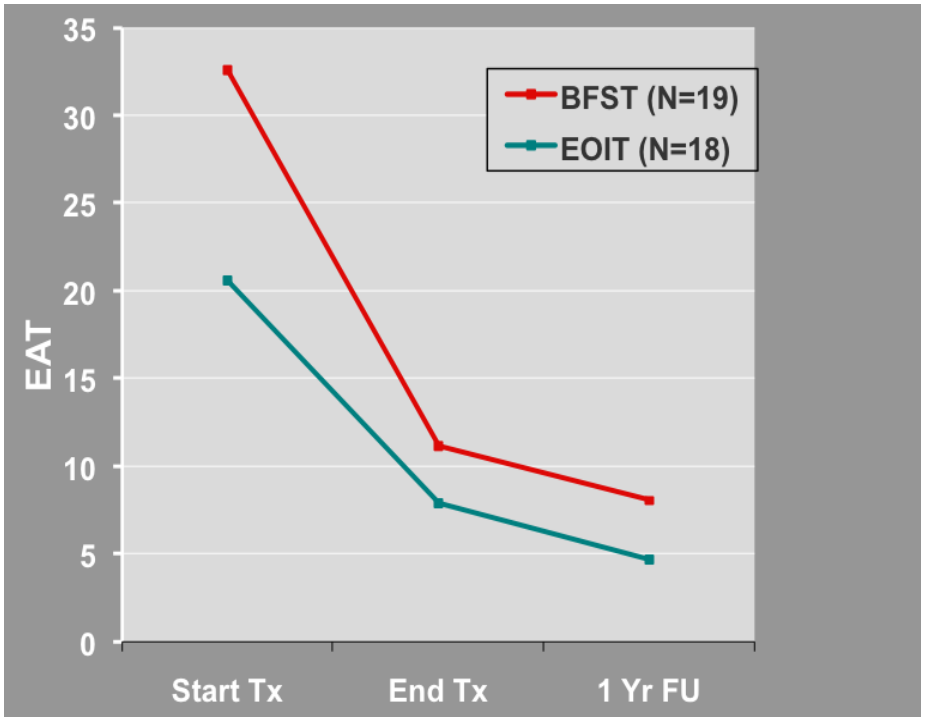
- **On global measure of outcome, the two forms of family therapy were associated with equivalent end of treatment results.**

- **For those patients with high levels of maternal criticism toward the patient, SFT was shown to be superior to the CFT.**

# Detroit RCT (N=37)

- BFST n=19
- EOIT n=18
- 12-18 months of Tx
- 1 year follow-up



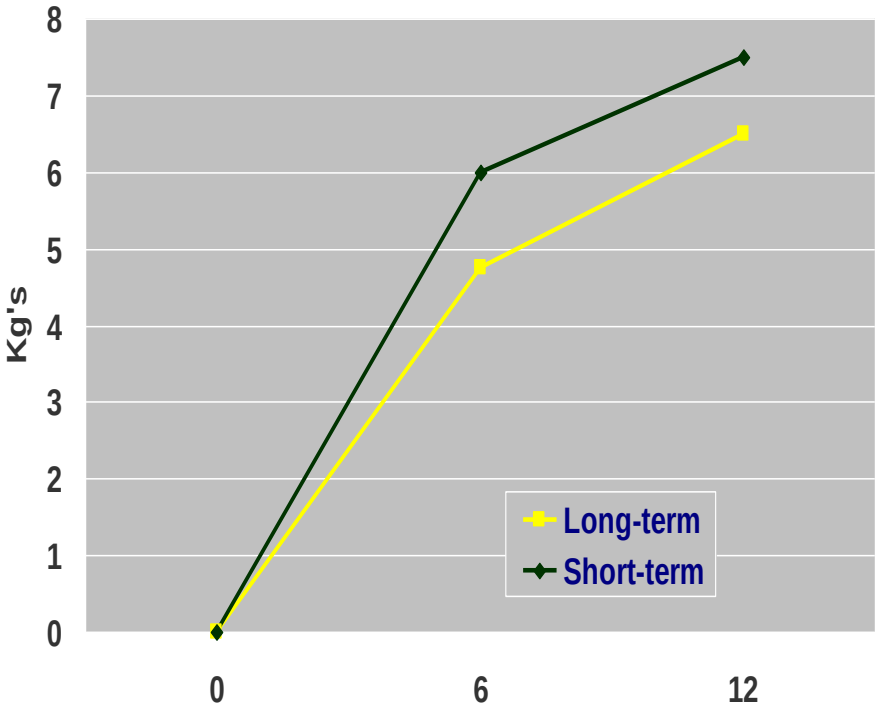

Robin, Siegel, Moye, Gilroy, Baker Dennis & Sikand, *JAACAP*, 1999.

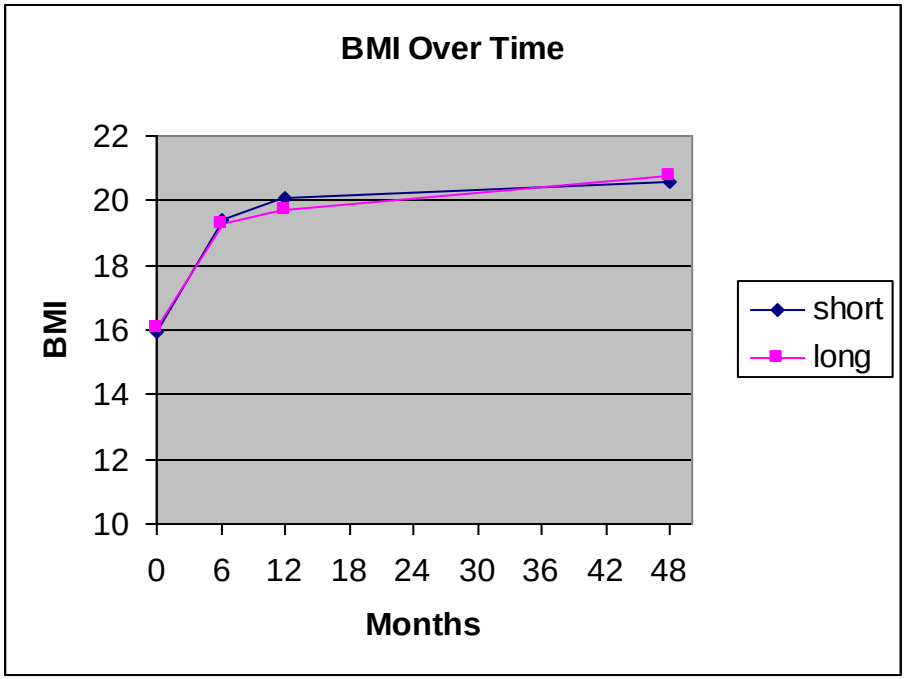
# Conclusions

- **BFST and EOIT proved to be effective treatments for adolescents with AN, but BFST produced a faster return to health.**

# Stanford Dosage Study (N=86)

- Long-term FBT
- Short-term FBT
- 12mo vs 6mo Tx
- 48mo FU




Lock, Agras, Bryson & Kraemer, *JAACAP*, 2005;
Lock, Couturier, Agras & Bryson, *JAACAP*, 2006.

# Conclusions

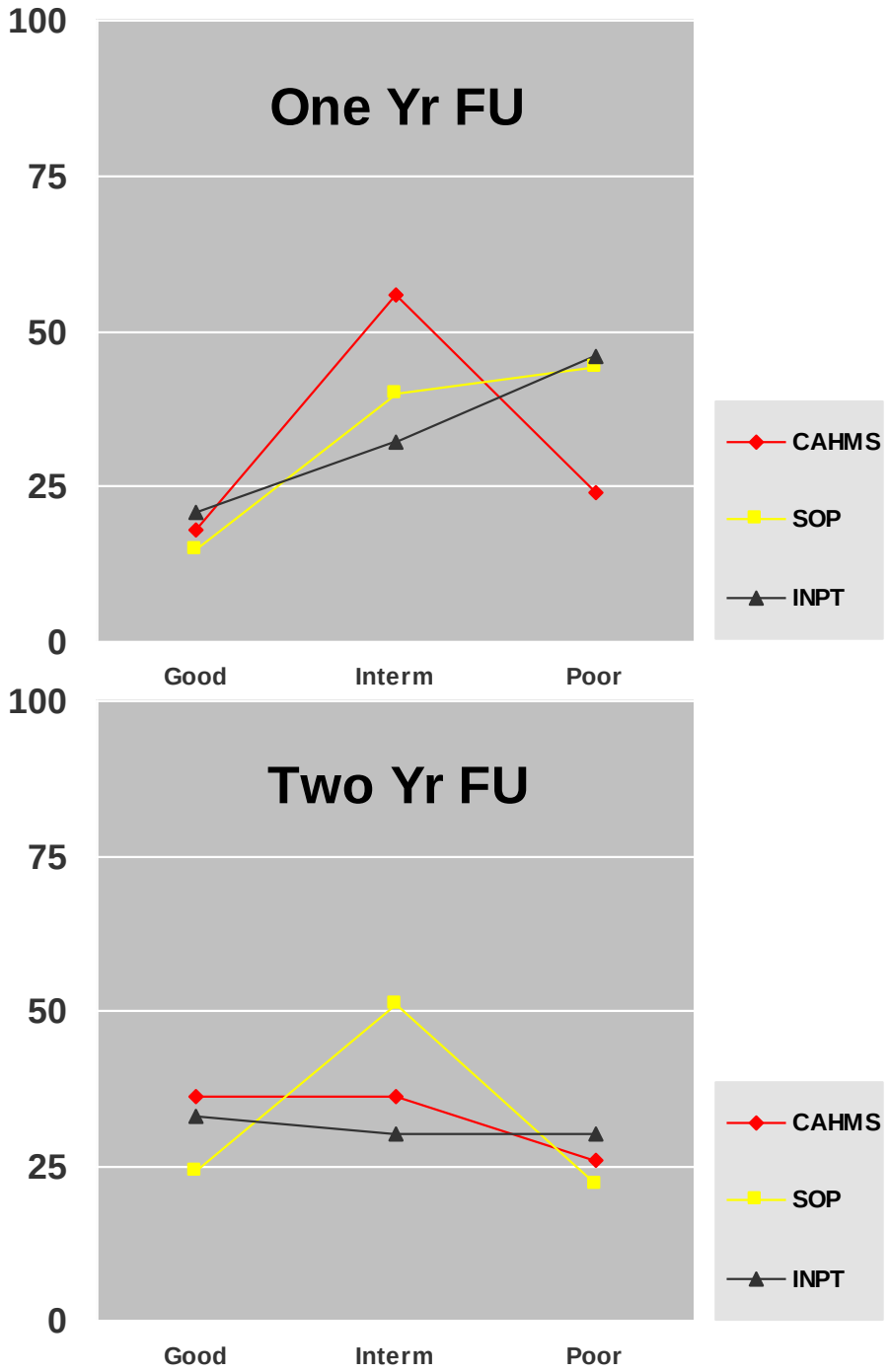
- **A short course of family therapy is as effective as a longer course.**

- **These good outcomes were maintained at 4-year follow-up.**

# Liverpool RCT (N=167)

- CAHMS n=55
- Specialized Outpt n=55
- Inpt treatment n=57
- One and two year FU

Gowers, Clark, Roberts, Griffiths, Edwards, Bryan, Smethurst, Byford & Barrett, *Br J Psych*, 2007.



# Conclusions

- **First-line in-patient psychiatric treatment does not provide advantages over out-patient management.**

- **Out-patient treatment failures do very poorly on transfer to in-patient facilities.**

# Summary of these five studies

- 5 RCTs comparing psychosocial treatments for adolescents with AN
- 4 of these involve family therapy (FBT or BFST)
- 3 of these involve individual therapy (supportive, adolescent focused therapy, CBT)
- Evidence supports effectiveness of FBT, but comparative efficacy data is limited

# Family-Based Treatment vs Adolescent Focused Therapy for adolescent anorexia nervosa

## *A multisite comparison*

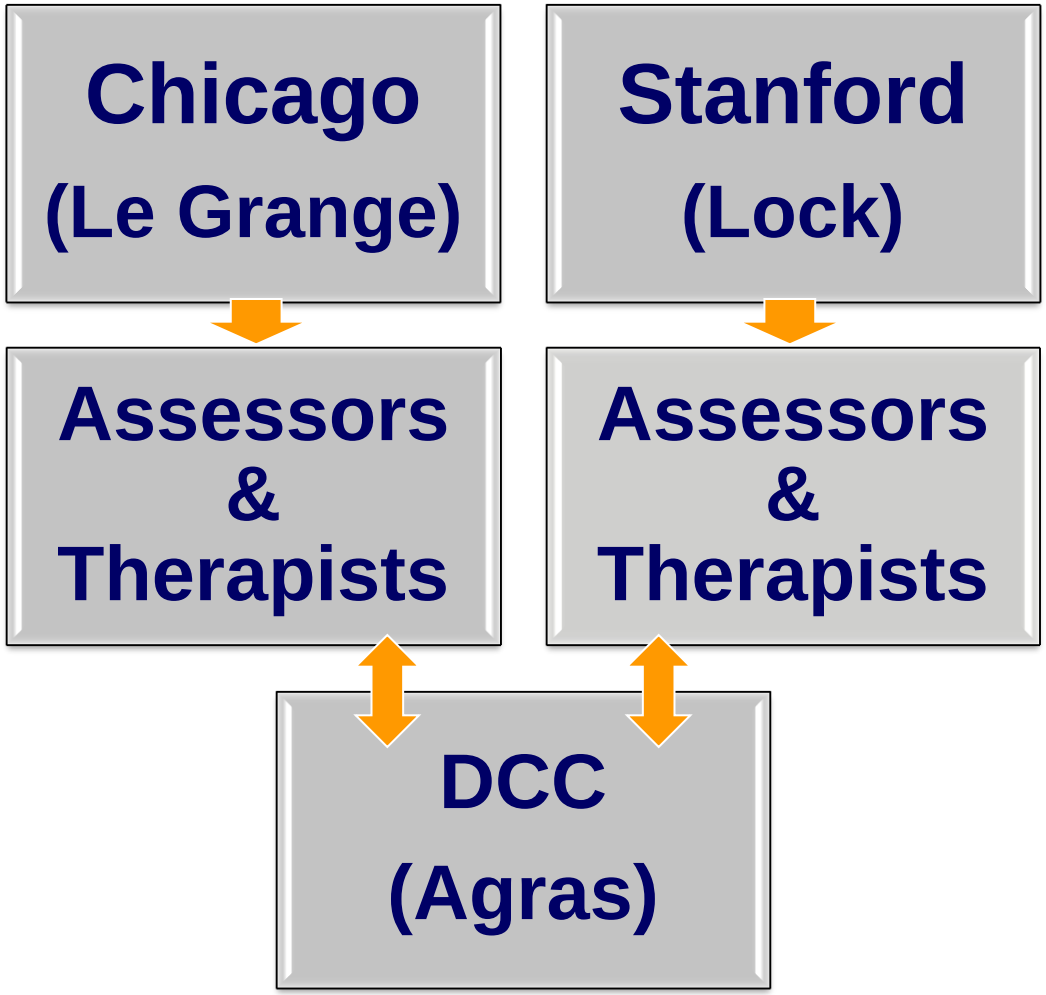
Lock, Le Grange, Agras, Moye, Bryson & Jo, *Arch Gen Psych*, 2010

# Rationale

**The predominant models for treating adolescent AN are:**

- **Family-Based Treatment (FBT) is a therapy aimed at symptom management by parents early in treatment**
- **Adolescent Focused Therapy (AFT) is a therapy aimed at promoting self-efficacy, self-esteem, and self-management of eating problems by the adolescents**

# Study Design



# Study Design

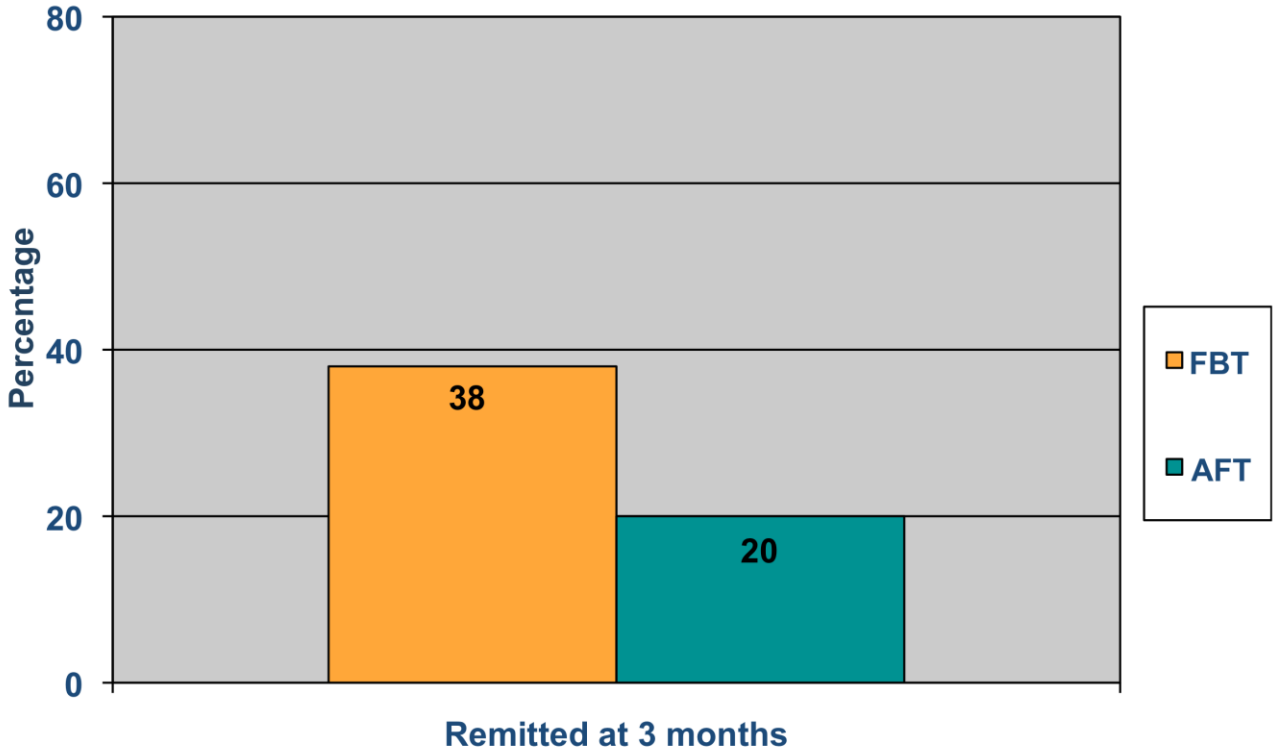
- **FBT > AFT in promoting full + partial remission; Meds will moderate outcome**
- **Randomized 121 med stable adolescent AN (excl amenorrhea) to FBT or AFT; 2 mo on stable meds dose still meeting entry criteria**
- **12 mo (24 contact hrs) of tx (24-1 hr sessions in FBT & 32-45 min sessions in AFT including collaterals with parents alone)**
- **Independent assessments of weight + EDE at BL, EOT, 6 and 12 month**

# Primary Outcome

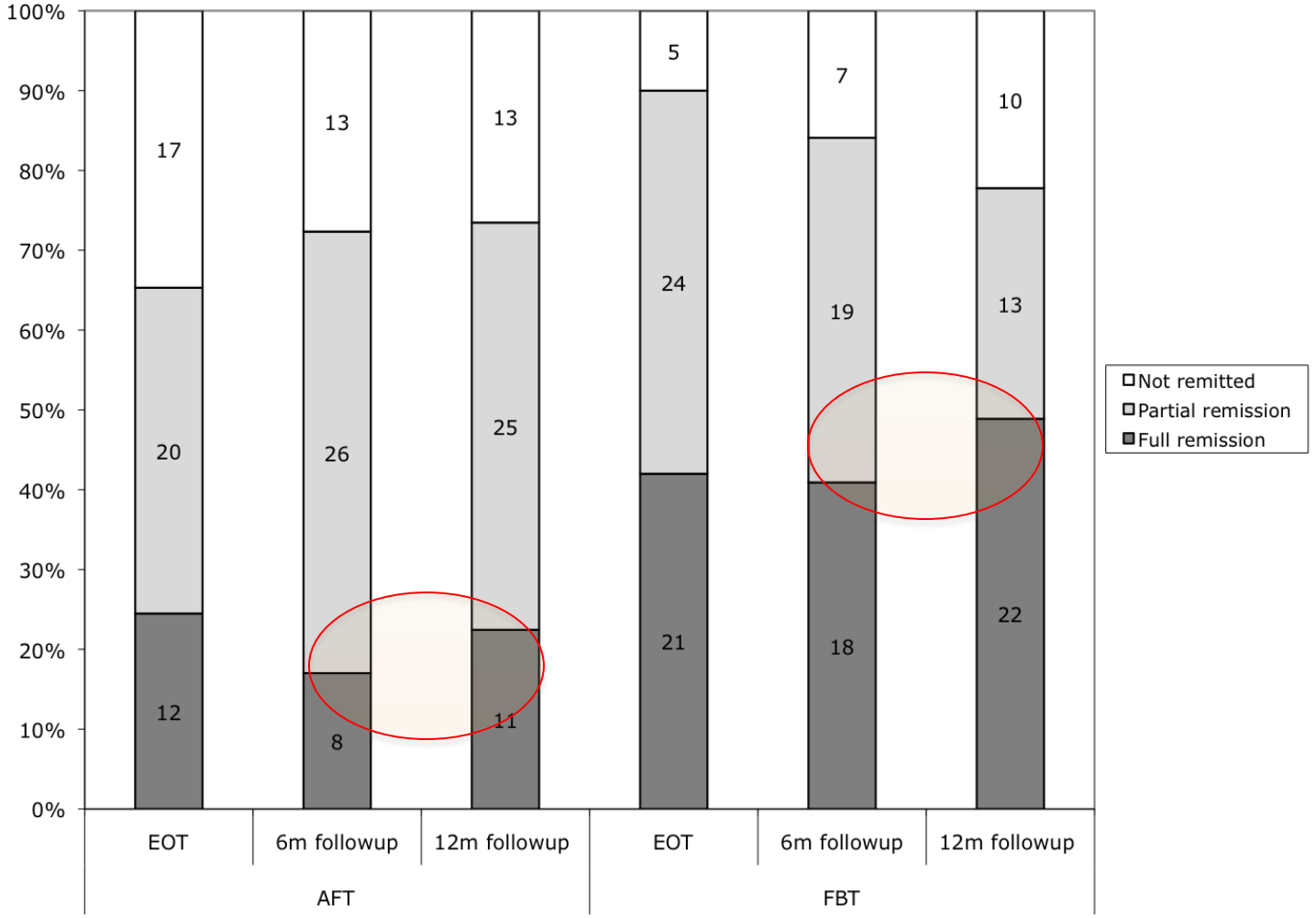
**Full remission, i.e., 95% IBW for height and age according to CDC norms + EDE within 1SD of community norms**

- **Approximates weight needed for return to full physical health in young adolescents and addresses growth, bone health, and hormonal function**
- **EDE threshold is in the normal range for community sample and addresses minimization common in adolescent AN**

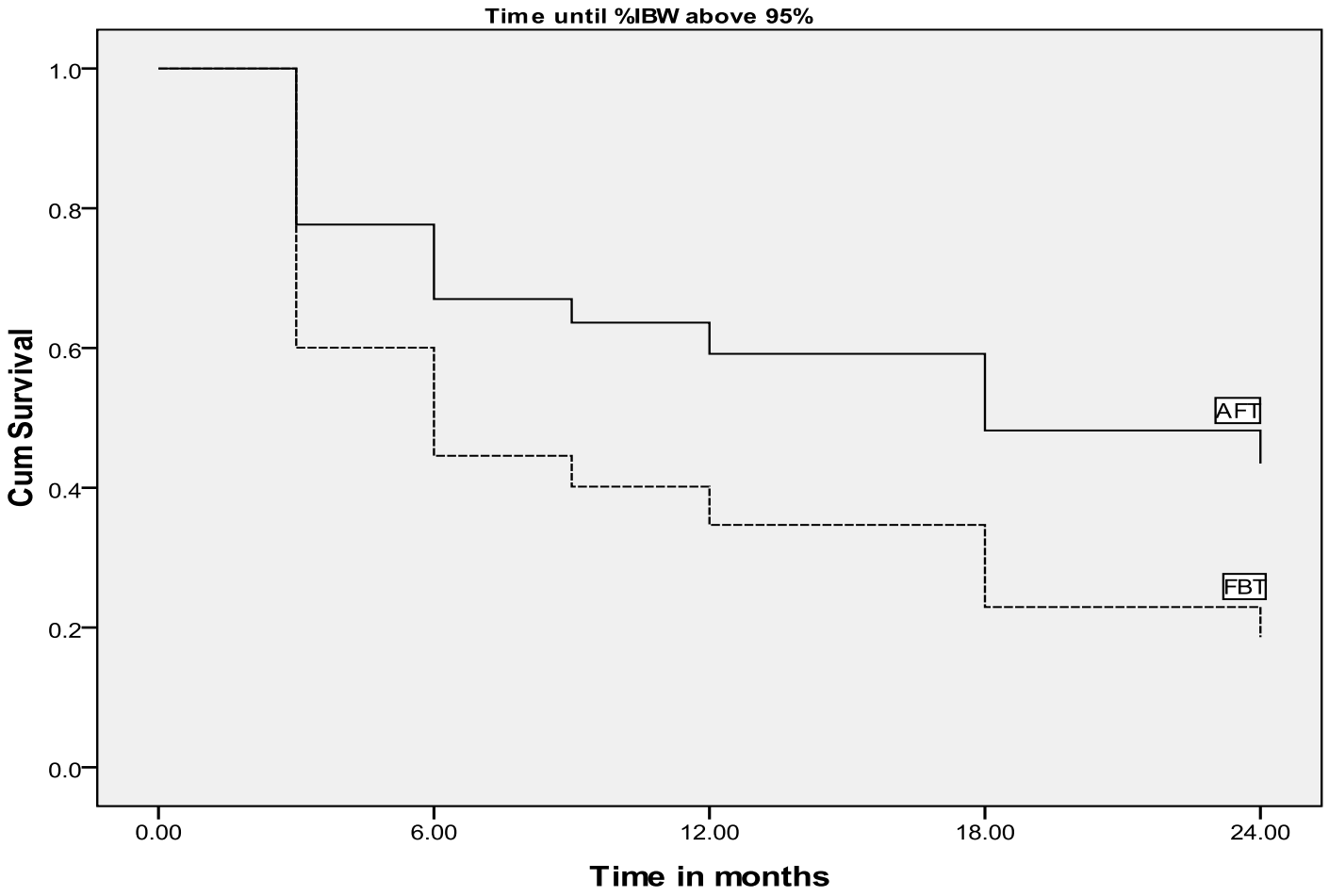
# Remitted at 3 months



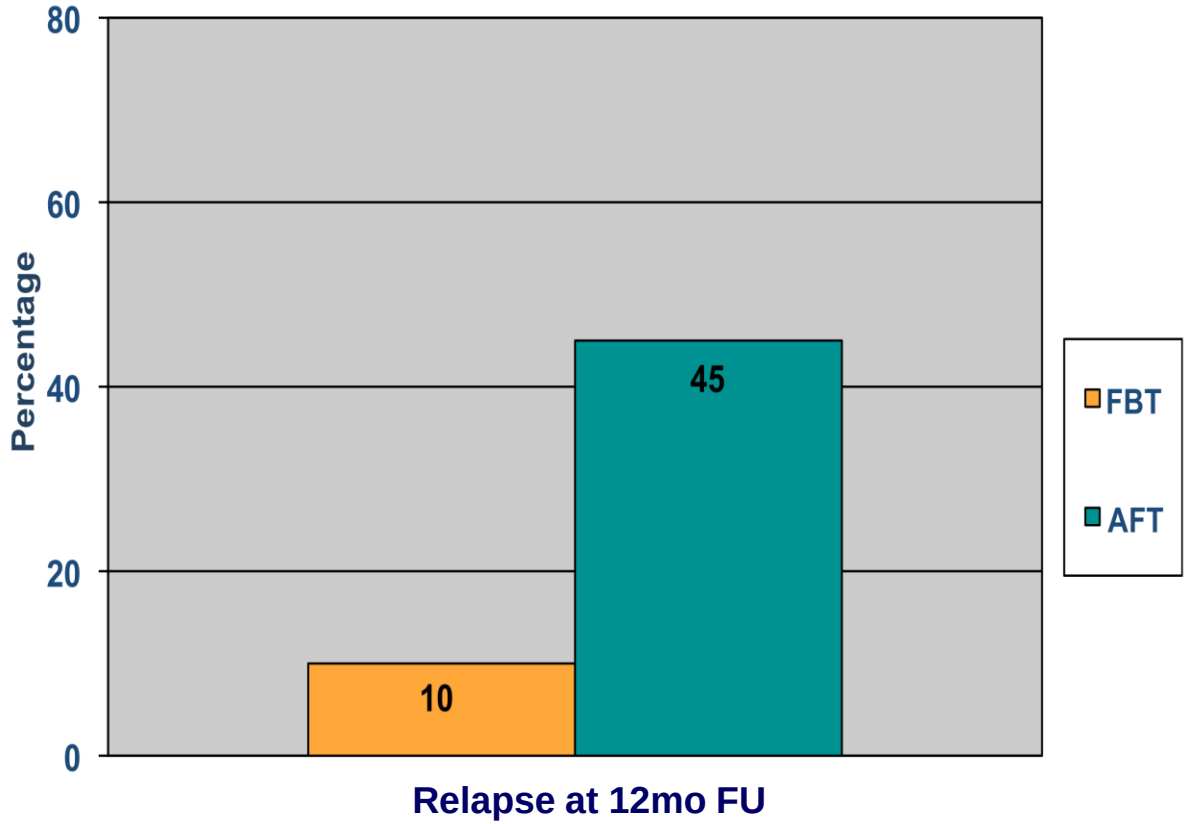
# Observed Partial and Full Remission by Treatment



# Time until %IBW > 95%



# Relapse: Post-Treatment to 12-Month Follow-Up



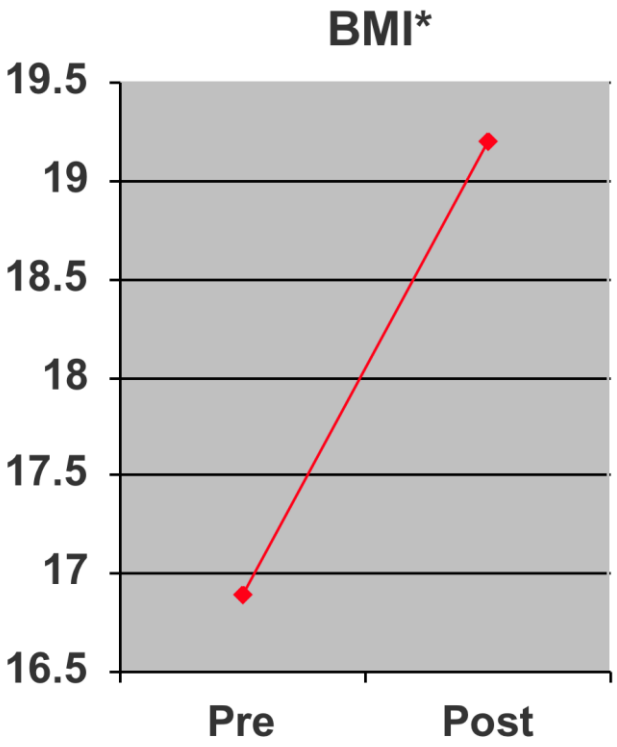
# Summary Findings

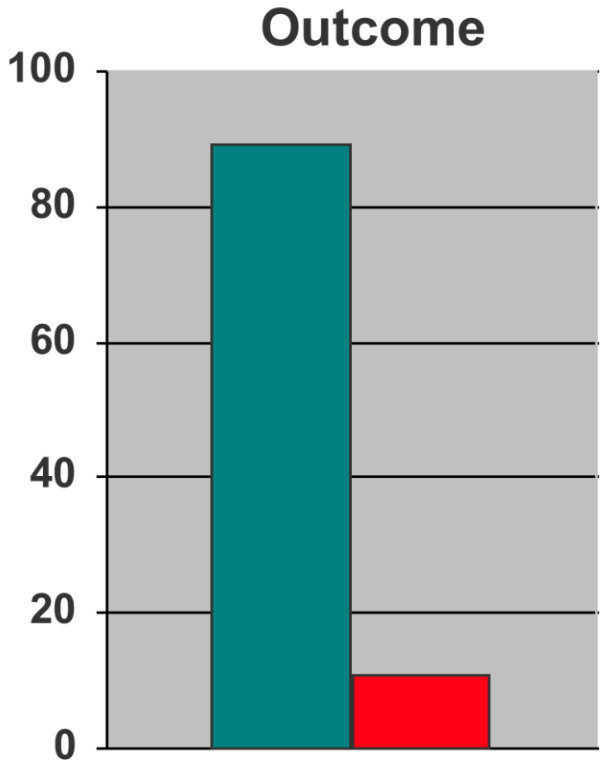
- **FBT is superior to AFT in promoting full remission at follow-up**
- **FBT is superior to AFT in promoting partial remission at EOT, but diminishes over time**
- **More participants treated with FBT reached weight restoration by 3 months than in AFT**
- **Maintenance of remission in FBT is superior to AFT**

# FBT in Clinical Practice

*Adolescent Anorexia Nervosa*

# Chicago Case Series (N=45)



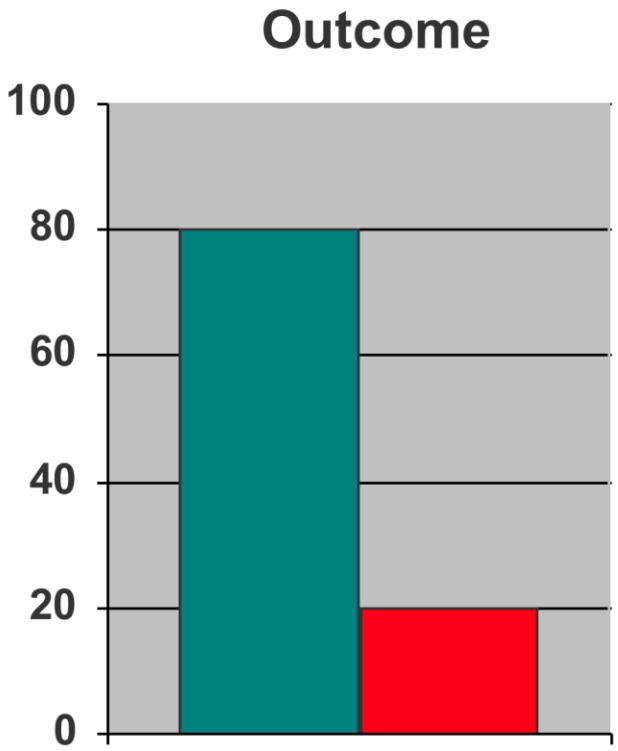

***t(44)-8.153, p<.001**

Le Grange, Binford & Loeb, *JAACAP*, 2005.

# Columbia Open Trial (N=20)

**Tx Response**

- **75% completed full course of treatment**
- **67% menstruating by end of treatment**
- **%IBW changed from 81.9 to 94.1 (p=.000)**
- **Sign changes in EDE Res, EC, binge/purge, and BDI**




Loeb, Walsh, Lock, Le Grange, Jones, Marcus, Weaver & Dobrow, *JAACAP*, 2007.

# Receiver Operating Characteristic Analysis (N=65)

**Weight gain >1.36 kgs at week 4 correctly characterized:**

- **79% of responders [AUC = .814 (p<.001)]**
- **71% of non-responders [AUC = .811 (p<.001)]**

Doyle, Le Grange, Celio-Doyle, Loeb & Crosby, *IJED*, 2009.

# Summary Findings

- **Preliminary support for the feasibility of an outpatient approach with active parental involvement in the treatment of C&A AN.**
- **FBT can be successfully disseminated, replicating high retention rates and significant improvement in the psychopathology of adolescent AN seen at the original sites.**
- **Adolescents with AN, receiving FBT, who show early weight gain are likely to remit at end of treatment.**

# Implications for AN

- FBT should be the first line intervention for adolescents with AN who are medically fit for outpatient treatment
- Most patients respond favorably after relatively few treatment sessions if illness is recognized early on
- AFT could be a credible alternative for some patients

# Part 3

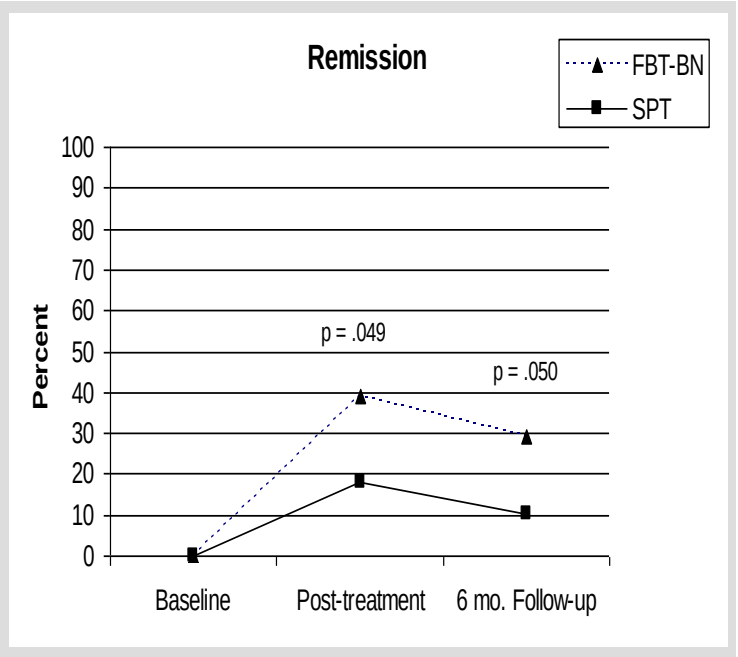
# Evidence-Based Treatment

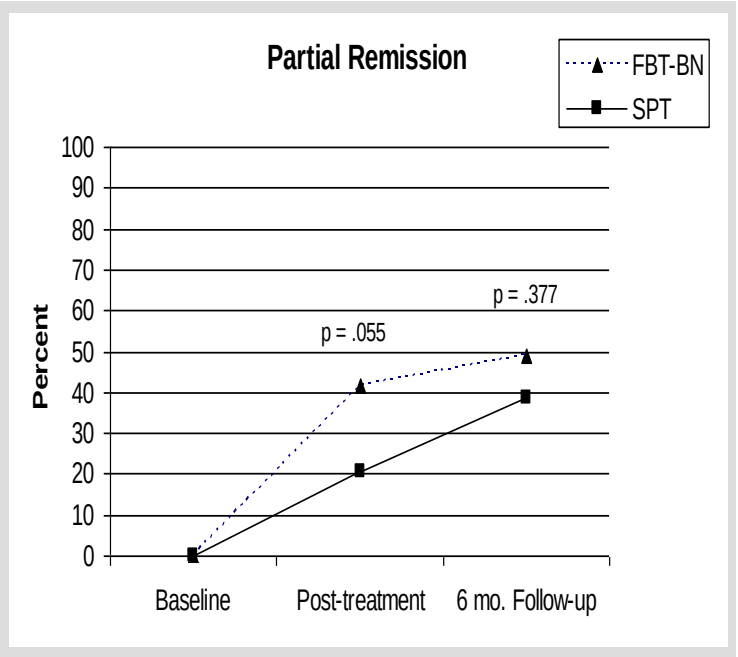
## *Adolescent Bulimia Nervosa*

# Chicago RCT
# FBT-BN vs SPT

- **N=80 adolescent BN**
- **FBT-BN n = 41**
- **SPT n = 39**
- **6 months of therapy**
- **6 month follow-up**

Le Grange, Crosby, Rathuaz & Leventhal, *Arch Gen Psych*, 2007.



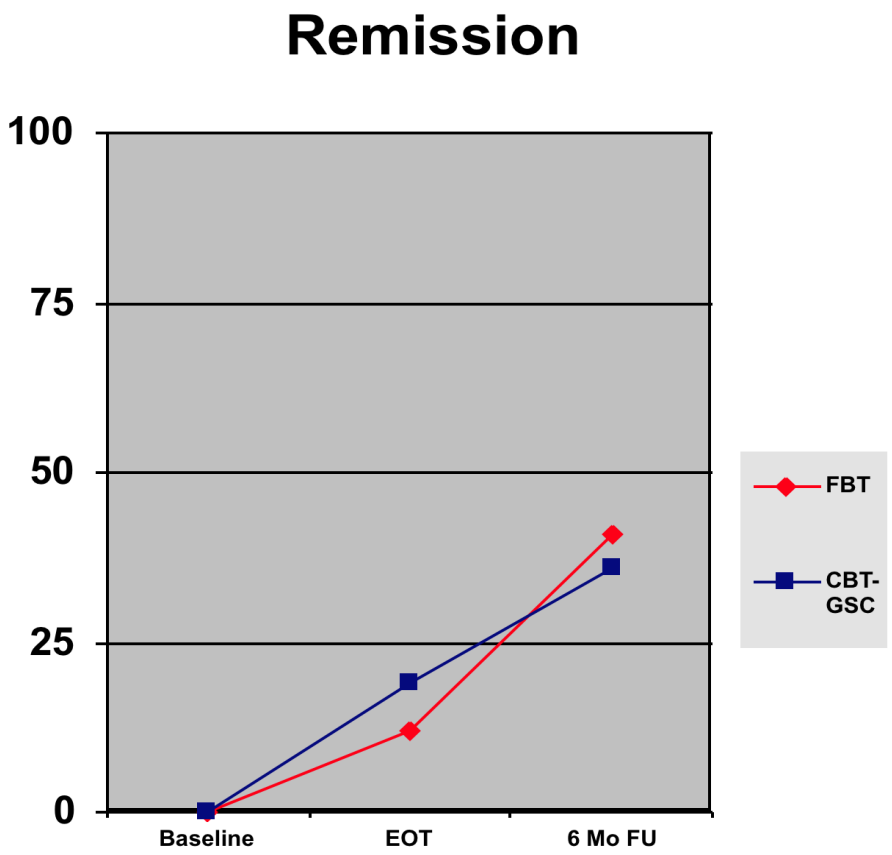
# Conclusions

- **Family-based treatment showed a clinical and statistical advantage over SPT at post-treatment and at 6-month follow-up.**

- **Reduction in core bulimic symptoms was also more immediate for patients receiving FBT vs SPT.**

# Maudsley RCT
# FBT vs CBT-GSC

- N = 85 adolescent BN
- Family Therapy n = 41
- CBT-GSC n = 44
- 6 months of therapy
- 6 month follow-up




Schmidt, Lee, Beecham, et al., *Am J Psych*, 2007.

# Conclusions

- **Compared with family therapy, CBT guided self-care has the slight advantage of offering a more rapid reduction of bingeing, lower cost, and greater acceptability for adolescents with bulimia or eating disorder not otherwise specified.**

# Summary Findings

- **Significantly greater early reductions in symptomatic behavior for patients in FBT-BN than in SPT**
- **Significantly more patients in FBT-BN than in SPT remitted at EOT and FU**
- **No differences between FBT-BN and CBT-GSC, although CBT more cost effective**
- **40% remitted at EOT is still just a “foot in the door”**

# Implications for BN

- **FBT and CBT for adolescents with BN are promising**
- **Further work is required**
  - **Type of family involvement**
  - **CBT with parental support for adolescent BN**
  - **Role of medication**

# Part 4

## Resources and Current Studies

*Adolescent Anorexia and Bulimia Nervosa*

# Resources

- **Family-Based Treatment can be successfully disseminated**
  - **Clinician Manual for AN** (Lock & Le Grange, 2012)
  - **Clinician Manual for BN** (Le Grange & Lock, 2007)
  - **Parent Handbook** (Lock & Le Grange, 2007)
  - **Parent Case Book** (Alexander & Le Grange, 2009)
  - **Clinician Handbook** (Le Grange & Lock, 2011)
- **Clinician Manuals available for CBT-BN, AFT-AN and SPT (AN & BN)**

# Current Studies for AN & BN

- Several studies are currently underway
  - FBT-AN vs Inpatient Tx (Westmead Hospital)
  - FBT-AN vs FT (Six sites in US and Canada)
  - FBT-PO vs NEC (Chicago & Mt Sinai, NY)
  - FBT-AN vs PFT (Chicago & Melbourne)
  - FBT-SAN vs SPT (Mt Sinai, NY)
  - FBT-AN vs MFGT (Maudsley Hospital)
  - FBT for Young Adults with AN (Chicago)
  - CBT-A vs FBT-BN (Chicago & Stanford)
  - Adaptive FBT (Chicago & Stanford)

For more information, please go to the main website and browse for workshops on this topic or check out our additional resources.

## Additional Resources

### Online resources:

1. SCCAP: Society of Clinical Child & Adolescent Psychology: https://clinicalchildpsychology.org

### Books:


1. Le Grange, D., & Lock, J. (Eds.) (2011). Children and Adolescents with Eating Disorders: Handbook of Assessment and Treatment. New York: Guilford Press.
2. Robin, A.L., & Le Grange, D. Treating adolescents with anorexia nervosa using behavioral family systems therapy. In J.R. Weisz and A.E. Kazdin (Eds.), *Evidence-based Psychotherapies for Children and Adolescents* (2nd Edition), (pp. 345-358). New York: Guilford Press, 2010.


### Peer-reviewed Journal Articles:


1. Eisler, I., Dare, C., Hodes, M., Russell, G.F.M., Dodge, E., & Le Grange, D. (2000). Family therapy for adolescent anorexia nervosa: The results of a controlled comparison of two family interventions. *Journal of Child Psychology and Psychiatry, 41*, 727-736.
2. Gowers, S., Clark, A., Roberts, C., Griffiths, A., Edwards, V., et al. (2007). Clinical effectiveness of treatments for anorexia nervosa in adolescents. Randomised controlled trial. *British Journal of Psychiatry, 91,* 427-435
3.Grange, D., & Schmidt, U. (2005). The treatment of adolescents with bulimia nervosa. Journal of Mental Health, 14, 587-597.
4.Loeb, K.L., Walsh, B.T., Lock, J., Le Grange, D., Jones, J., Marcus, S., Weaver, J., Dobrow, I. (2007). Open Trial of Family-Based Treatment for Adolescent Anorexia Nervosa: Evidence of Successful Dissemination. *Journal of the American Academy of Child and Adolescent Psychiatry, 46,* 792-800.
5. Lock, J., Couturier, J., & Agras, W.S. (2006). Comparison of long term outcomes in adolescents with anorexia nervosa treated with family therapy. *Journal of the American Academy of Child and Adolescent Psychiatry, 45,* 666-672.
6. Lock, J., Le Grange, D., Agras, S., Bryson, S., & Booil, J. (2011). Randomized clinical trial comparing family-based treatment to adolescent focused individual therapy for adolescents with anorexia nervosa. *Archives of General Psychiatry, 67,* 1025-1032.
7. Schmidt, U., Lee, S., Beecham, J., Perkins, S., Treasure, J., et al. (2007). A randomized controlled trial of family therapy and cognitive behavior therapy guided self-care for adolescents with bulimia nervosa and related disorders. *American Journal of Psychiatry, 164,* 591-598.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