Institution: King's College London

Unit of Assessment: UoA4 - Psychology, Psychiatry & Neuroscience

Title of case study: 9: Maudsley family therapy for adolescent anorexia nervosa

1. Summary of the impact

Anorexia nervosa affects 1-4% of people over their lifetime with approximately half of all adolescents with anorexia requiring inpatient treatment. A specific form of family therapy, developed at the Maudsley Hospital and evaluated by researchers at King's College London through a series of randomised controlled trials, has been widely acknowledged as the principal evidence-based treatment for adolescent anorexia nervosa. The treatment is recommended by NICE in the UK and clinical guidelines in other countries and is strongly supported by advocacy and carer groups. It has influenced service commissioning with a growing number of specialist family-oriented outpatient services being developed in the UK and abroad. The Maudsley service model has been adopted by the Department of Health's Increased Access to Psychological Treatments programme as a specialist component of Systemic Family Therapy training.

2. Underpinning research

Anorexia nervosa (AN) is a life threatening illness with high morbidity, significant mortality and a lifetime prevalence of between 1-4%. In the UK, 40-50% of children and adolescents with AN are treated as inpatients for an average of 4-5 months. More psychiatric beds are occupied by young people with AN than any other diagnostic group. However, while inpatient care is effective in the short term, it has high relapse rates (25-30% for first admission and 50-75% for subsequent admissions) leading to prolonged illness. Over the past 30 years, Professor Ivan Eisler (1982-present, Professor of Family Psychology and Family Therapy), Dr Christopher Dare (1991-2001, Research Fellow) and colleagues at the Institute of Psychiatry, King's College London (KCL) and the Maudsley Hospital have developed, tested and refined a family-oriented specialist service model for adolescents with AN that can be used on a largely outpatient basis, reducing the need for costly hospital admissions.

KCL researchers show long-term efficacy of family therapy: The Maudsley model of family therapy for AN is a non-blaming, collaborative therapy that focuses on family resources and family strengths. In the early stages of treatment, parents are supported to manage their child's eating at home with the family attending weekly sessions (or more frequently if necessary). In later stages, with less frequent sessions, the focus moves away from the eating disorder, towards exploring adolescent issues and restoring normal family life. The initial study of this therapy (in the 1980's) involving patients with AN or bulimia nervosa, showed that family therapy is more effective than individual therapy, especially in those whose illness was not chronic and had begun before the age of 19. A 5 year follow-on study, of 80 patients found the significant benefits from previous psychological treatments were still evident. Published in 1997, this was the first clinical trial of a psychological treatment for anorexia demonstrating maintained benefits over the course of 5 years, suggesting family therapy for people with early onset and a short history of anorexia was the most effective treatment (1).

Tailoring treatments to meet patients' needs: KCL researchers have refined family therapy for different needs. For instance, in a study in 2000, 40 adolescent patients with AN received either "conjoint family therapy" (CFT, where patient and parents are seen together) or "separated family therapy" (SFT, where they are seen separately). While both forms of family therapy led to considerable improvement in nutritional and psychological state and on global measures of outcome, SFT was superior for patients with high levels of maternal criticism. Symptomatic change was more marked with SFT but there was considerably more psychological change with CFT (2). In a 5 year follow-up of this study, more than 75% of participants were free of eating disorder symptoms, with only 8% of those who had achieved a healthy weight by the end of treatment reporting any kind of relapse. There were no deaths and only 10% required hospital admission (3).

Researchers at KCL also developed a more intensive multi-family therapy (MFT) format of the treatment where up to eight patients and their families participate initially in 4 days of day-long sessions, followed by further one day sessions for 6 months. A pilot trial of this form of therapy, which is combined with individual family therapy for a year, suggested the programme to be beneficial with a very positive response from participants (4).

3. References to the research

1. Eisler I, Dare C, Russell GFM, Szmukler GI, Dodge E, Le Grange D. Family and individual therapy for anorexia nervosa: A 5-year follow-up. Arch Gen Psychiatry 1997;54:1025-30. Doi: 10.1001/archpsyc.1997.01830230063008 (247 Scopus citations)
2. Eisler I, Dare C, Hodes M, Russell GFM, Dodge E, Le Grange D. Family therapy for adolescent anorexia nervosa: The results of a controlled comparison of two family interventions. J Child Psychol Psychiatry 2000;41:727-36. Doi: 10.1017/S0021963099005922 (225 Scopus citations)
3. Eisler I, Simic M, Russell GFM, Dare C. A randomised controlled treatment trial of two forms of family therapy in adolescent anorexia nervosa: a five-year follow-up. J Child Psychol Psychiatry 2007;48:552-60. Doi: 10.1111/j.1469-7610.2007.01726.x (66 Scopus citations)
4. Dare C, Eisler I. A multi-family group day treatment programme for adolescent eating disorder. Eur Eat Dis Rev 2000;8:4-18. Doi 10.1002/(SICI)1099-0968(200002)8:1<4::AID-ERV330>3.0.CO;2-P (50 Scopus citations)

Grants

- 1994-97. PIs: I Eisler, C Dare. Medical Research Council. £70,000. Evaluation of family treatments for anorexia nervosa: five year FU study of two RCTs
- 2002-09. PIs: I Eisler, U Schmidt, J Treasure, B Lask, J Beecham, S Landau, P Hugo. Health Foundation. £625,000. A multi-centre RCT of the outcome, acceptability and cost-effectiveness of family therapy and multifamily day treatment compared with inpatient care and outpatient family therapy for adolescent anorexia nervosa
- 2003-05. PI: I Eisler. South London and Maudsley NHS Trustee Fund. £48,000. Training development grant for family interventions in eating disorders
- 2007-12. PIs: U Schmidt, J Treasure, K Tchanturia, H Startup, S Ringwood, S Landau, M Grover, I. Eisler, I. Campbell, J. Beecham, and G. Wolff. National Institute of Health Research. £2,000,000. Programme Grant: Treatment of Anorexia Nervosa

4. Details of the impact

Direct impact of KCL research at the Maudsley Eating Disorders service: The KCL research detailed above has been, and continues to be, developed in collaboration with the South London and Maudsley (SLaM) NHS Foundation Trust. SLaM's specialist Child and Adolescent Eating Disorders Service (CAEDS) provides comprehensive care at all levels of severity of the illness centred on the Maudsley family-based treatment. CAEDS currently provides treatment for seven London boroughs (population 1.8 m) and sees approximately 110-120 young people a year (1a). A recent audit of 316 consecutive SLaM CAEDS cases showed that the KCL research findings (Eisler et al 2000; 2007) of high recovery and low hospitalisation rates translate well when the service model is implemented in clinical practice. After 9-12 months of typically 18-25 family sessions at CAEDS, 64% had recovered and were referred back to primary care with no further treatment and a further 16% recovering from the eating disorder but referred to their local Child and Adolescent Mental Health Services (CAMHS) for problems such as depression or anxiety. Only 13% were transferred to adult services at 18 years of age. The majority of those seen in the service were treated as outpatients, with only **12% requiring more intensive treatment (7.5% day care and 4.5% inpatient treatment) (1a) compared to 40% rates of hospital admission for adolescent anorexia typically found in non-specialist CAMHS services (1b)**.

In September 2010, SLaM was awarded the Tier 4 CAMHS contract for Kent and Medway and the SLaM CAEDS team is now screening all eating disorders referrals for hospital admissions and providing family therapy as an alternative where appropriate. **Over the following year hospital admissions for eating disorders were reduced by approximately 50%** (1c).

Research findings influence therapy provided in the UK: A growing number of regions are adopting this family based outpatient specialist service model. Prof Eisler and colleagues run regular training sessions and service development consultations in family treatments for eating disorders. Over the past 10 years they have trained over 800 eating disorders specialists in the Maudsley approach. Participants include individuals or small groups of clinicians, managers and commissioners, with team-based outreach training for larger groups (2a). As a result of KCL research on the efficacy of family therapy, and training delivered by Prof Eisler and colleagues, many UK services have altered their service provision and treatment approach for eating disorders, including services in North Essex, North East London, Dorset, Oxfordshire and Buckinghamshire

(2b).

Underpinned by KCL research, the service model has recently been adopted by the Department of Health for inclusion in the Children and Young People's Project of the NHS's Improving Access to Psychological Treatments (CYP IAPT) programme as a specialist module in Systemic Family Practice IAPT training. KCL research, including Eisler, et al. 1997, 2000, 2007, is cited as evidence of the efficacy of family therapy in the Eating Disorders module (2c).

Worldwide take up of the Maudsley family therapy approach: The Maudsley family approach has also been widely adopted by Eating Disorders services in many other countries. In part this is due to the SLaM CAEDS team also providing training to overseas participants. A recent survey of the two largest international Eating Disorders professional organisations (Eating Disorders Research Society and the Academy for Eating Disorders) indicated that approximately 60% of the 350 respondents use the treatment with children and adolescents suffering from anorexia nervosa (3a). Prof Eisler has also disseminated KCL research including preliminary evidence of the efficacy of MFT to various professional audiences, including to both of these organisations in 2010 and 2013 (3b,c). In Europe, Prof Eisler and the CAEDS team provide ongoing consultation to the Eating Disorders Service in Prague, Czech Republic, who have recently published on the success of the approach there (3d). They also have a contract with the Ministry of Health in Cyprus for a 2 year training and service consultation to develop a Cyprus-wide specialist Eating Disorders service based on the Maudsley service model (3e).

In North America, the CAEDS team have also provided consultation and training to the Hospital for Sick Children in Toronto, Calgary and Vancouver in Canada (3f) and they have an ongoing training collaboration with the University of California San Diego, USA (3g). A number of other services in the USA highlight on their websites how they use the Maudsley family therapy model including Comer Children's Hospital in Chicago (3h), the Stanford School of Medicine Child and Adolescent Psychiatry service (3i) and the Children's Hospital in Colorado (3j).

Guidelines show Maudsley family therapy is a key treatment for child and adolescent AN: Findings from KCL research are reflected in and quoted by the current NICE guidelines for eating disorders (confirmed as current in 2011), which widely cite Eisler et al. 2000 as part of the evidence for a key recommendation that children and adolescents with AN should be offered focussed family therapy (4a). Similarly, 2011 guidelines from the American Psychiatric Association on eating disorders use Eisler et al. 2007 when discussing how "the practice guideline strongly recommends family treatment for children and adolescents with eating disorders" (4b). In 2010, the Canadian Paediatric Society published family-therapy guidelines aimed at community physicians. Here Eisler et al. 2007, along with a review by Prof Eisler containing Dare et al. 2000 and Eisler et al. 1997 and 2000, are used when discussing how "the evidence to date suggests that family-based treatment is the most effective treatment for children and teenagers with AN" (4c). Additionally, 2009 Spanish Clinical Practice Guidelines for Eating Disorders use Eisler et al. 1997 and 2000 to highlight how scientific evidence supports the use of family therapy (4d).

Impact on individual patients and their families: The evidence of the effectiveness of the Maudsley family based treatment approach has led to a growing demand from family carer groups for making the treatment more widely available. FEAST (Families Empowered and Supporting Treatments for Eating Disorders), an international group founded in 2008, quote a leader in the field who said that this approach "should be the gold standard or first-line outpatient treatment for medically stable teens" (5a). Maudsley Parents, an independent eating disorders organisation founded in the US in 2006 cite Eisler et al. 2000 when discussing this model and say that "the Maudsley Approach holds great promise for most adolescents who have been ill for a relatively short period of time" (5b). This growing 'bottom up' demand has had a particularly notable effect in North America and Australia. A number of accounts have been published describing the experience from the perspective of families who have undergone Maudsley family therapy (5c,d). KCL research is also used in patient-centred resources. For instance, the Royal College of Psychiatrists in their information page about eating disorders say that "the best researched form of family therapy for anorexia is known as the 'Maudsley Model'" citing Eisler et al. 1997, 2000 (5e).

5. Sources to corroborate the impact

1) Direct impact of KCL research at the Maudsley Eating Disorders service

a. SLaM Eating Disorder service: http://www.national.slam.nhs.uk/services/camhs/camhs-eatingdisorders/
b. House J, et al Comparison of Specialist versus Non-specialist Service Provisions for Adolescents with Anorexia Nervosa and Related Eating Disorders. *Int J Eat Dis* 2012:45:8 949–956. DOI: 10.1002/eat.22065
c. SLaM Annual Report for NHS Kent and Medway available on request

2) Take up of the Maudsley family therapy approach in the UK

a. Training: http://www.national.slam.nhs.uk/services/camhs/camhs-eatingdisorderstraining/
b. Letters of corroboration available on request
c. CYP IAPT (pg 27-29): http://www.iapt.nhs.uk/silo/files/curricula-for-systemic-work-with-families-.pdf

3) Worldwide take up of the Maudsley family therapy approach

a. Wallace LM and von Ranson KM. Perceptions and use of empirically-supported psychotherapies among eating disorder professionals. Behav Res Ther 2012;50(3):215-22. Doi: 10.1016/j.brat.2011.12.006
b. Eating Disorders Research Society 2010; Cambridge, Massachusetts. http://www.edresearchsociety.org/2010Meeting/2010_EDRS_Program_Schedule.pdf
c. Academy for Eating Disorders 2013: Montreal, Quebec http://www.aedweb.org/AM/Template.cfm?Section=Clinical_Teaching_and_Research_Training_Day1&Template=/CM/ContentDisplay.cfm&ContentID=3277
d. Mehl A, et al. Adapting multi-family therapy to families who care for a loved one with an eating disorder in the Czech Republic. J Fam Ther 2013;35:82-101. Doi: 10.1111/j.1467-6427.2011.00579.x
e. Service contract with Cyprus available on request
f. Hospital for Sick Children, Toronto: http://www.oise.utoronto.ca/aphd/UserFiles/File/Counselling_Psychology/Sickkids_08.pdf
g. University of California San Diego, School of Medicine: http://eatingdisorders.ucsd.edu/patient/ift-pages/bft.shtml
h. University of Chicago Medicine, Comer Children's Hospital: http://www.uchicagokidshospital.org/specialties/psychiatry/eating-disorders.html
i. Stanford School of Medicine, Child and Adolescent Psychiatry: http://childpsychiatry.stanford.edu/clinical/eating_disorders.html
j. Children's Hospital Colorado: http://www.childrenscolorado.org/conditions/psych/eatingdisorders/philosophy.aspx

4) Guidelines show Maudsley family therapy is a key treatment

a. NICE (2004) Guideline CG9: Eating disorders http://www.nice.org.uk/nicemedia/live/10932/29220/29220.pdf
b. American Psychiatric Association (2011). Practice guideline for the treatment of patients with eating disorders. 3rd ed. Washington (DC): American Psychiatric Association: http://psychiatryonline.org/content.aspx?bookid=28&sectionid=39113853#0
c. Findlay S, et al. Family-based treatment of children and adolescents with anorexia nervosa: Guidelines for the community physician. Paediatr Child Health 2010;15(1):31-40: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2827322/pdf/pch15031.pdf
d. Catalan Agency for Health Technology Assessment and Research: Clinical Practice Guideline for Eating Disorders (2009)*:* http://www.gencat.cat/salut/depsan/units/aatrm/pdf/cpg_eating_disorders_cahta2009.pdf

5) Impact on individual patients and their families

a. FEAST: http://www.feast-ed.org/TheFacts/MaudsleyApproach.aspx
b. Maudsley Parents: http://www.maudsleyparents.org/whatismaudsley.html
c. Alexander J, Le Grange D (2010). My Kid is Back. Empowering Parents to Beat Anorexia Nervosa. Melbourne University Press, Melbourne, Australia. ISBN-10: 041558115X
e. Brown, H. Brave Girl Eating. Hachette UK. 2011; ISBN-10: 0061725471
f. Royal College of Psychiatrists: http://www.rcpsych.ac.uk/expertadvice/problemsdisorders/anorexiaandbulimia.aspx