

# **Randomized controlled trial of out-patient mentalization based treatment versus structured clinical management for borderline personality disorder.**

## **Supplementary data**

### **Treatment Integrity**

All sessions were audiotaped. Adherence to the MBT-OP and SCM-OP manuals was determined by randomly selected audiotapes of individual and group sessions drawn from two distinct 6-month periods of each case using a modified version of the recommended adherence rating scale (1).

The MBT-OP adherence rating scale is a 15 item 5-point scale with a maximum score of 60. A score of 45 indicated adequate adherence to model. SCM-OP was also assessed using a 12-item scale. A subset of tapes was rated by an additional rater blind to treatment assignment and outcome. Reliability for MBT-OP for 50 randomly chosen tapes was  $r = .77$ , 95% CI: .62, .86 and for SCM-OP for 40 tapes was  $r = .68$ , 95% CI: .47, .81. Average ratings yielded 85% adherence to MBT-OP and 96% adherence to the SCM-OP manual. Higher adherence scores to both treatments were more likely to come from sessions in the second half of the treatment.

SCM tapes were rated according to the focus on advocacy, support, and problem orientated activity along with evidence of case management. Advocacy included elements of the following:

- Helping the patient plan about how to deal with problems in an appropriate and useful way

- providing information about rights and about structures of organisations the patient may have to deal with e.g. housing, probation
- helping to write letters to or arrange appointments with any person, organisation or authority who can help
- preparing the patient for meetings with, for example, social workers, psychiatrists, landlords, the police
- making links with family and carers, community mental health teams, legal representatives and so on

Rather than doing everything 'for' the patient the advocacy role involved ensuring patients had the information and support they needed to take the issue forward for themselves. Support was defined according to a number of components which included active reassurance, explanation of difficulties in psychological and psychiatric terms, guidance when a problem remained unsolved, suggestion about how to manage difficulties, encouragement about personal efficacy, and permission to express feelings.

Problem-orientated work included focusing on problems agree between patient and therapist or between group members. Each problem was broken down into small components and steps for solving the problem were identified. Subsequent work focused solely on progress with the problem-solving steps. Case management in the NHS follows the care programme approach (2) which focuses on decreasing symptoms and side effects of medication, increasing periods of independence, building support networks and minimizing or eliminating periods of crisis and monitoring risk. Overall recovery is the primary aim.

## **Therapists**

11 therapists were co-opted or recruited for the trial (MBT-OP=6, SCM-OP=5) either from staff of the PD service or from elsewhere in the service and randomly assigned to a 3 day training in MBT-OP or SCM-OP. All therapists had a minimum of 2 years' experience of treating patients in general psychiatric services following their generic training and a minimum of 1 year's experience treating patients with personality disorder. Therapists offering MBT-OP and SCM-OP did not differ in their years of psychiatric experience (mean [SD]: MBT-OP, 6.16 [1.6]; SCM-OP, 6.8 [2.3] years). 7 therapists were nurses (MBT-OP = 4, SCM-OP = 3), 3 were trainee psychiatrists (MBT-OP = 2, SCM-OP = 1), and 1 was an accredited counselor (MBT-OP = 0, SCM-OP = 1).

MBT-OP (N=6) therapists completed a 3-day basic and a 2-day advanced training course in MBT. Supervision by the first author was offered on a weekly basis for 1 hour to all therapists as a peer group. All SCM-OP (N=5) therapists attended 3 days of training on personality disorder discussing the nature of personality disorder, the common problems encountered in treatment and a focus on the SCM-OP protocol. Supervision was offered on a weekly basis for 1 hour by a senior clinician experienced in the general management of BPD. The average number of patients seen individually in the trial by each therapist was 11.8 (SD=4.3) for MBT-OP and 12.6 (SD=5.7) for SCM-OP. Four MBT therapist and three SCM-OP therapists also offered group therapy with a maximum number of 8 places.

## **Power Calculations**

Power analysis was conducted using the effect size for suicidal behavior from the MBT-PH study and followed the recommendations of Kraemer (3). We defined a minimally important

difference in outcomes between the two conditions as a reduction of more than 25% in the rate of combined suicidal, self-harming and in-patient episodes over an 18 month period of treatment.

We computed that a sample size of 50 per arm will give 86% power to detect a 25% difference in suicidal behavior (a reduction from 30% to 20%). To take account of within-therapist correlation of outcomes, we assumed an ICC of 0.02 and a total of 11 therapists, giving design effects of 1.22 in the MBT-OP arm and 1 in the SCM-OP arm, and thus reducing the power to 83%.

1. Bateman A, Fonagy P: Self rating of MBT adherence, in *Mentalization Based Treatment for Borderline Personality Disorder: a practical guide* Oxford, Oxford University Press, 2006, pp 174-176
2. DoH: Making the care programme approach work for you. [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH\\_083650](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083650)  
2008
3. Kraemer HC, Mintz J, Noda A, Tinklenberg J, Yesavage JA: Caution regarding the use of pilot studies to guide power calculations for study proposals. *Arch Gen Psychiatry* 2006; 63(5):484-9