SETTING STANDARDS FOR TRAINING AND COMPETENCE: THE UK ALCOHOL TREATMENT TRIAL

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Abstract — Aims: To examine factors that influence the recruitment and training of therapists and their achievement of competence to practise two psychological therapies for alcohol dependence, and the resources required to deliver this. Methods: The protocol for the UK Alcohol Treatment Trial required trial therapists to be competent in one of the two trial treatments: Social Behaviour and Network Therapy (SBNT) or Motivational Enhancement Therapy (MET). Therapists were randomised to practise one or other type of therapy. To ensure standardisation and consistent delivery of treatment in the trial, the trial training centre trained and supervised all therapists. Results: Of 76 therapists recruited and randomised, 72 commenced training and 52 achieved competence to practise in the trial. Length of prior experience did not predict completion of training. However, therapists with a university higher qualification, and medical practitioners compared to other professionals, were more likely to complete. The average number of clients needed to be treated before the trainee achieved competence was greater for MET than SBNT, and there was a longer duration of training for MET. Conclusions: Training therapists of differing professional backgrounds, randomised to provide a specific therapy type, is feasible. Supervision after initial training is important, and adds to the training costs.

INTRODUCTION

Training programmes for the management of substance misuse vary widely in content; there is no consensus on methods to provide and evaluate such training or to maintain its effects. This paper describes the methods for recruitment, training, assessment, and supervision of trial therapists adopted in the UK Alcohol Treatment Trial (UKATT), the effort required to achieve competence, the costs of training, and the factors influencing those costs.

The aim of UKATT was to enhance the evidence for the practical treatment of alcohol problems in the UK (UKATT Research Team 2001; UKATT Research Team 2005a, b). A multi-site trial funded by the Medical Research Council compared the effectiveness and cost-effectiveness of two psycho-social treatments—Social Behaviour and Network Therapy (SBNT), described by Copello et al. (2002), and Motivational Enhancement Therapy (MET), adapted from Miller et al. (1995). To compare two therapies in this way, one needs to ensure that treatment complies with explicit protocols. Training and supervision were, therefore, delivered and monitored centrally.

Training of therapists and delivery of treatment in the UKATT were based upon the ‘technology model’ of psychotherapy research (Docherty, 1984; Carroll and Nuro, 1996), which was used in Project MATCH. This model requires specification of the treatment in the form of a manual and observation of the delivery of the treatment through video recordings of sessions, to ensure its consistent delivery (Carroll et al., 1994). The practice of recording treatments serves the needs of training and supervision in treatment manual adherence. Trainees are better able to develop their skills by direct observation of their own practice, while teaching is enhanced by feedback from external observation of practice.

Standardisation of training and supervision in the delivery and content of treatment is a particular challenge in trials where clinical sites are geographically dispersed. Video recorded practice facilitates the provision of distance training and supervision where both supervisor and supervisee can observe practice simultaneously and discuss it by telephone. Thus the number of individuals teaching and supervising therapy is reduced, inter-supervisor consistency is enhanced, and standardisation of practice is easier to achieve and maintain. This method should be initiated during the training phase of the trial, in order to establish a similar skill level across the different professional groups and treatment sites (Carroll et al., 1994).

To ensure that UKATT informed routine clinical practice, the design was pragmatic and the context was routine practice. In particular, trial treatments were delivered by existing staff in typical UK alcohol treatment agencies, in contrast to Project MATCH, which hired therapists experienced in a single therapy to deliver that therapy in the trial. Existing staff are heterogeneous, with a range of educational qualifications and experience of the field. To minimise the effects of therapist characteristics, therapists were allocated at random between the two treatments, which created new challenges for training and maintaining high standards of practice, as therapists could not choose the treatment closest to their current practice or their preferred theoretical approach. If successful, this approach would demonstrate that therapists could be trained in evidence-based approaches across varied professional backgrounds, levels of educational achievement, and work settings.

Standards and methods for the recruitment, training, supervision, and assessment of therapists were, therefore,
specified at the outset. Pre-training therapist data form the basis for examining the extent to which these therapist variables influenced the amount or outcome of training. Data on the number of training cases, the number of supervision sessions needed to achieve competence, and the duration of training form the basis for calculating the effort required to complete the task, and thus the cost of training and treatment. To inform future planning of training, we hypothesised that:

(i) Therapists’ age and sex do not influence the duration of training.
(ii) The higher the level of educational attainment, the shorter the training.
(iii) Therapists’ professions do not otherwise influence the duration of training.
(iv) The longer the duration of experience in the field, the shorter the training.
(v) The identity of the clinical service does not influence the duration of training.
(vi) SBNT, longer and more novel than MET, requires more training to achieve competence and will cost more.

METHODS

Manual preparation
Treatments specified the purpose and principles of each treatment, the content and structure of individual sessions, and the therapist style in which the treatments were to be delivered. A feasibility study had demonstrated their acceptability to therapists employed at clinical sites (UKATT Research Team 2001; Copello et al., 2002).

Selection of clinical services
Services were selected for the trial if they could provide a suitable environment which included having sufficient clients seeking help for alcohol problems, enough space and time for pre-treatment assessments and treatment sessions which could include others in addition to the client, sufficient therapists to provide the two treatments, willingness of staff to receive supervision from outside the agency, and commitment to participating in a clinical trial. Therapist training needed time for initial training and supervision thereafter, and facilities for recording supervised practice. Five services, on seven distinct sites, fulfilled these requirements.

Selection of therapists for training
Once services had been selected for the trial, clinical staff were invited to express an interest in becoming trial therapists to the Principal Investigator (PI) for that service. Suitable staff should have fulfilled five criteria: two years work experience (relaxed as UKATT progressed and more therapists were needed), not currently training in another addiction therapy, willing to learn one of two manual based treatments allocated at random (UKATT Research Team 2001), willing to attend the trial training centre for three days of training, and willing to be supervised throughout the trial from the training centre.

Candidates were invited to submit a curriculum vitae and video recordings of two practice sessions with clients, one demonstrating motivational interviewing skills and the other demonstrating the ability to work simultaneously with the client and others. Submitting recordings of practice also confirmed the acceptability of doing so during the trial. Once selected using these criteria, therapists were allocated at random to one of the two trial treatments.

Initial training of therapists
Three days of group training, provided separately for each treatment with therapists from the different services, covered the background, purpose, personnel, general procedures of the trial, and the development of team spirit. Thereafter, it focused on the specific treatment. Particular attention was paid to the theoretical and evidential basis for the treatment, demonstration of practice, and role play. The PI for the training centre, whose main role was to maintain quality and consistency across treatments, acted as one of the trainers alongside the designated trial supervisor for each treatment and authors of the treatment manual. This PI oversaw each of the treatment-specific supervisors during training and throughout the trial.

Supervision of training clients
Following initial training, candidates returned to their workplace to practise with newly referred clients (UKATT Research Team 2001). Each practice session was video recorded, with the camera trained exclusively upon the therapist. Written consent for video recording was obtained from all training clients. One copy was retained by the trainee and another sent to the training centre. Supervision comprised simultaneous viewing and discussion of the tape by trainee and designated trial supervisor, expert in the allocated therapy, by telephone (or by face to face meeting in Leeds, where the clinical site was adjacent to the training centre). This supervision provided the main opportunity for practising the skills, structure, content, and delivery of the treatment, introduced during the three initial days of training.

Assessment of competence
We compiled checklists of therapist behaviours, session structure, and session content, adjudged by the authors of the manuals to be the essential components of each treatment. Examples from MET were ‘Asks open questions’ and ‘Uses reflective listening selectively’. Examples from SBNT were “Describes the principles of network support” and “Explores the availability of network members”. The competence of trainees was assessed against these checklists by the treatment-specific supervisor and the training PI on the basis of video recordings of practice, with a minimum of two training clients in MET or of one client (with or without a social network) in SBNT. If a trainee was not judged to be competent at this point, continuing supervision with additional training cases was required. Competence was then re-assessed. The training process was designed to continue for as long as it took to achieve competence. Once therapists were deemed competent they were allowed to practise in the trial.

RESULTS

Therapist recruitment
A total of 76 therapists fulfilled the selection criteria and were allocated at random to one of the trial treatments. Of these, 72 attended the training centre in 5 separate intakes for each
treatment, i.e. 10 intakes in all. Job change or domestic circumstances prevented the remaining four candidates from travelling to the training centre after randomisation. Reasons given by eligible staff for not participating in the trial included reluctance to record practice and to randomise clients between treatments rather than allow individual therapists to decide upon the most appropriate treatment. Table 1 shows numbers of therapists recruited, randomised to each therapy, commencing training by attending the initial course, and completing training.

**Therapist characteristics**

Therapists’ demographic, professional, and educational characteristics were derived from *curricula vitae* submitted for selection and supplementary interviews with therapists. Table 2 shows demographic data, pre-training field experience, and academic qualifications for those 72 who attended initial training by randomly assigned treatment type. Their mean age was 36.6 years (range 25–52; SD 7.8); 47 (65.3%) were female. Six were nurses whose qualifications predated recognition by higher education, 30 reported qualifications below the level of a first degree, and 42 reported first degree and postgraduate level qualifications. Therapists were from many professional backgrounds; the largest group were nurses. Table 3 shows the distribution of trainees by professional group and treatment type.

**Formal training in alcohol problems and their management**

was heterogeneous and thus difficult to quantify. Thirty-three trainees reported that they had had some as part of their professional or post-qualification training. Twelve had attended non-validated courses, and four had attended courses accredited at the undergraduate level. Twenty-three denied having had any training about alcohol. Duration of experience of working with alcohol problems ranged from 1 month to >20 years, with a mean of 57 months (SD 54). Psychiatrists and nurses showed the widest ranges of duration of field experience.

**Differences between therapists who did and did not achieve competence**

Of the 72 therapists who attended the initial training in Leeds, 52 (72%) achieved competence by fulfilling the specified criteria (Table 1). There were no significant differences in the sex or age of those who did or did not achieve competence. Table 4 shows differences between services in the proportion of therapists achieving competence, but the sample is small and the differences may reflect chance variation. Also shown are the completion rates for each of the treatments, where no difference was found. Table 5 shows the duration of field experience, the educational level, and the professional grouping for those who did and did not complete training. Though no significant differences were found in duration of field experience between those who did and did not complete training, educational level, and professional group had an effect on training outcome. When educational qualifications were grouped by ‘having a first degree and higher or not’, those in the higher educational grouping were more likely successfully to complete training. Differences between

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**Table 1. Progress of trainees**

<table>
<thead>
<tr>
<th>Service</th>
<th>Number recruited</th>
<th>Number randomised by treatment type</th>
<th>Number who commenced training</th>
<th>Number (% of commenced) who completed training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MET</td>
<td>SBNT</td>
<td>MET</td>
<td>SBNT</td>
</tr>
<tr>
<td>1</td>
<td>18</td>
<td>8</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>8</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>8</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>32</td>
<td>44</td>
<td>22</td>
</tr>
</tbody>
</table>

**Table 2. Age, gender, field experience, and educational achievement of therapists who commenced training by treatment type**

<table>
<thead>
<tr>
<th>MET</th>
<th>SBNT</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (years)</td>
<td>35.6</td>
<td>37.4</td>
</tr>
<tr>
<td>Female (%)</td>
<td>21 (68)</td>
<td>26 (63)</td>
</tr>
<tr>
<td>Mean duration of field experience (months)</td>
<td>55.1</td>
<td>58.7</td>
</tr>
<tr>
<td>Educational achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Masters</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Postgraduate diploma</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Degree</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Graduate diploma</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Dip HE</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Certificate</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>41</td>
</tr>
</tbody>
</table>

*Trainee psychologist.

Formal training in alcohol problems and their management was heterogeneous and thus difficult to quantify. Thirty-three trainees reported that they had had some as part of their professional or post-qualification training. Twelve had attended non-validated courses, and four had attended courses accredited at the undergraduate level. Twenty-three denied having had any training about alcohol. Duration of experience of working with alcohol problems ranged from 1 month to >20 years, with a mean of 57 months (SD 54). Psychiatrists and nurses showed the widest ranges of duration of field experience.

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Educational level

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td>17</td>
<td>8</td>
<td>21</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Completed (%)</td>
<td>(59)</td>
<td>(88)</td>
<td>(62)</td>
<td>(67)</td>
<td>(90)</td>
</tr>
</tbody>
</table>

\[ \chi^2 \text{ with 1 degree of freedom} = 6.2 \ (P = 0.013). \]

\[ \chi^2 \text{ with 2 degrees of freedom} = 6.1 \ (P = 0.048). \]

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Professional group

<table>
<thead>
<tr>
<th>Treatment</th>
<th>MET</th>
<th>SBNT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>72</td>
<td>52</td>
<td>124</td>
</tr>
</tbody>
</table>

---

Table 5. Training completed by educational level and professional group

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Training completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1st degree</td>
<td>No (%) Yes (%)</td>
</tr>
<tr>
<td>1st degree +</td>
<td>13 (43) 17 (56)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional group</td>
<td>No (%) Yes (%)</td>
</tr>
<tr>
<td>Medical Practitioner</td>
<td>0 12 (100)</td>
</tr>
<tr>
<td>Nurse</td>
<td>13 (37) 22 (63)</td>
</tr>
<tr>
<td>Other professional</td>
<td>7 (28) 18 (72)</td>
</tr>
<tr>
<td>Total</td>
<td>20 (28) 52 (72)</td>
</tr>
</tbody>
</table>

\[ \chi^2 \text{ with 4 degrees of freedom} = 6.8 \ (P = 0.15). \]

\[ \chi^2 \text{ with 1 degree of freedom} = 0.04 \ (P = 0.90). \]

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Table 4. Training completed by service and by treatment assigned

Duration of training

The duration of training from attendance at the training centre to the achievement of competence is a proxy for the resources needed to train staff to competence. The mean duration of training was 208 days, not significantly different between male therapists (200 days) and female (212 days). Age, educational level, professional background, and duration of addiction work also showed no effect on duration of training.

Analysis of variance revealed a statistically significant difference in duration of training between the five services \( (F = 4.42; \ df = 4; \ P = 0.004). \) The service adjacent to the training centre had a significantly shorter duration of training compared with the other sites.

To check whether the differences in duration of training may have been influenced by rates of attendance for supervision, the duration of training was replaced by the number of supervision sessions required to achieve competence. No significant differences between services were found, and this was confirmed by analysis of variance \( (P = 0.3). \) Differences in duration of training may merely reflect a greater availability of training clients in service 5, or the fact that it was adjacent to the training centre.

Differences by treatment type

In addition to the duration of training in days and the number of supervision sessions attended during training, the number of training case clients seen was calculated to examine whether this provided a different dimension of the training resource required. Table 6 shows that MET took significantly longer in training, when measured by the number of both days and training clients required for the achievement of competence. When measured by the number of supervision sessions attended, however, the difference between treatment types was not significant.

Training costs

Resources used to train therapists fall into two stages: initial training at the training centre, and supervision until a therapist is adjudged competent. The cost of initial training comprises: the cost of premises for the training, the cost of the trainers, and the opportunity cost of those being trained (Table 7). The main cost of supervision was a 45 minute session every 2 weeks between training and competence. To bring therapists to one training center needs both travel and accommodation, costs that might not be incurred in normal practice if therapists train at, or close to, their base. So these were categorised as research costs rather than training costs. Selecting therapists for training requires them to make videos of current practice and submit a CV, to be assessed by the training team. This was also categorised as a research cost.

As the training suite occupied one-third of the total area of the host clinical unit, the cost was estimated from the capital charge on that unit plus the recurrent costs of heating, lighting, and other facilities. Initial training took 3 days for each of 10 courses (5 each of MET and SBNT), leading to a total premises cost of £1660 for each therapy. All costs are shown in 2000/2001 prices. The cost of trainers’ time was based on the time committed and estimated from actual salaries plus employers’ costs for pensions and national insurance, and management overheads taken as 8% of salary (Netten et al., 2001).

The cost of therapists’ time spent in training is the largest component of the training costs for each therapy (Table 8). The cost per day for each therapist was calculated from the individual salary grade inclusive of estimated employers’ costs for pensions and national insurance. The calculated cost per day was multiplied by three for the days engaged in the first training episode. The same method was used to cost follow-up training when undertaken.

In principle, supervision of therapists lasted 45 minutes every 2 weeks between initial training and being judged competent or disengaging from training. In practice, data were available on the supervision sessions undertaken by each therapist trained. These components were then summed to give an
individual cost for each of the 72 therapists attending initial training for either MET or SBNT. The costs in Table 8 show differences because SBNT training used more trainers, whereas some MET therapists requested a follow-up session. Other differences arose from variations in therapist salaries, supervision received, and the time to gain competence.

The total costs of training can be expressed in different ways. Calculating averages per person trained yields estimates of £895 per MET therapist trained (31 in all), and £1020 per SBNT therapist trained (41 in all). As a different proportion of each group gained competence, however, dividing the cost of incompetent therapists across all the competent therapists yields estimates of £1260 per competent MET therapist and £1390 per competent SBNT therapist.

Training is an investment expected to deliver benefits over a period of time. However therapists in UKATT had limited opportunities to deliver the treatments, depending on the successful recruitment of clients into the trial and randomisation to their therapy. The training cost per session delivered in UKATT is £35 and £38 for MET and SBNT respectively. However, we use a more realistic assumption to estimate the cost of training therapists for routine practice.

Assuming that a competent therapist can deliver 736 sessions per year (or 46 weeks multiplied by 16 sessions per week) and that the effects of training would endure for a year, training costs would amount to £1.71 for MET and £1.89 for SBNT.

DISCUSSION

UKATT overcame the pragmatic challenge of training staff with a wide range of professional backgrounds and employed in a variety of agencies, and achieved a high standard of practice in each of two heterogeneous treatments. While the range of backgrounds made inter-professional comparisons difficult, UKATT has provided good evidence that it is possible to train staff across different educational and experiential backgrounds to a standard level of practice. The method chosen for the assessment of competence to practise was designed to reconcile the need for a universal standard with the pragmatic nature of the trial, which dictated the need for replicability in routine practice where local supervisors might be expected to assess therapists’ competence. The potential disadvantage of unblinded assessment causing bias was balanced by the requirement that consensus was reached on the basis of the checklist of treatment specific skills with the PI for training, who had not been involved in individual supervision.

In principle, trial staff responsible for supporting therapists during training followed standard procedures. Two factors may have caused variation in this support, accounting for different rates of acquiring competence across services. First, one clinical site was alongside the trial training centre, yielding easier access to clients and allowing supervision face to face. Second, some trial services included multiple sites.
Care was, therefore, taken to standardise training for both treatments.

Nevertheless, we found significant differences between MET and SBNT in the number of clients and duration of training needed to acquire competence, though not in number of supervision sessions. Of these we expected significant differences in the number of clients seen, because SBNT therapists have more opportunity to demonstrate competence across their planned eight sessions with the same client than MET therapists across their planned three sessions per client. It was this difference that led us to propose that SBNT needed one client for competence while MET needed two. That this also led to a difference in the duration of training may be explained by differences in the speed with which UKATT recruited clients for each treatment (UKATT Research Team 2001). Fortunately similar numbers of supervision sessions, and thus similar costs of training in both groups, provide reassurance that UKATT was indeed comparing like with like.

A major challenge for training was to develop confidence in the treatment to which therapists had been randomised, so we highlighted the evidence in favour of that treatment and enabled therapists to practise on their return to their workplaces. In some sites video recording was a novelty, perhaps contributing to differences in the time to acquire competence. The provision of accessible equipment was important in establishing the acceptability of that procedure.

Raw training costs differed between treatments. The finding that training in SBNT was costlier was not attributable to greater duration of training, but to the more expensive initial trainer costs. This was the result of the decision to include as SBNT trainers all those who developed the SBNT treatment, which is unlikely to be a model for future training, though it is not possible to say whether the same quality of training could be provided by fewer trainers. Fortunately our main calculation, based on routine practice and the assumption that the effects of training would endure for a year (even though annual training is unlikely) showed that training cost little for either treatment.

CONCLUSIONS

One of the most significant learning points about training in this trial was that substantial resources are required, both initially and to maintain practice. There is a view that when manuals are available, they will suffice to guide practice after introductory training. Our experience in UKATT was that the supervision after initial training was critical in the acquisition of competence. Not only did we believe that supervision ensured that therapists adhered to treatment protocols over time, but also that it underpinned understanding of the treatment and its purpose. Provision of both technical support and time was essential. Manuals do not provide these. Indeed they were less likely to be followed without these elements. As role and organisational support are critical ingredients for developing therapeutic commitment and ability to practise (Cartwright, 1980; Lightfoot and Orford, 1986), they were provided throughout training and the trial. When spread over a year’s professional work the cost of training is a very small part of the cost of providing structured, manual-guided and effective treatment (UKATT Research Team 2005b).

REFERENCES


