Establishing and Maintaining Evidence-Based Treatment in Community Programs

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Over the past 40 years, an abundance of research has focused on which alcohol treatment approaches are most effective. Adult alcoholism treatment research clearly indicates that even brief treatment is generally better than no treatment at all, that certain treatments are more consistently effective than other methods, and also that there is no single treatment that is superior to all others. However, a handful of treatments seem to rise to the top in all reviews of the alcohol treatment literature. Even though most of these well supported treatments have been available for some time, the gap between science and practice remains vast.

EVIDENCE FOR THE EFFICACY OF ALCOHOL TREATMENT METHODS

There now is an abundance of research evidence to guide clinicians and funding agencies toward effective treatment methods for alcohol use disorders, at least for adults. While few clinicians have the time to read and analyze hundreds of outcome studies, there have been several recent meta-analytic reviews of this literature. Two reviews focused on the relative effectiveness of treatment methods [Miller et al. 1995; Miller, Wilbourne, & Hettema, 2001] and two others focused on cost-effectiveness [Holder et al., 1991; Finney & Monahan, 1996]. Miller et al. (1995) evaluated 211 studies that encompassed 43 treatment modalities, taking into account the methodological strength of each study's design and its support or non-support for specific treatment modalities. The five modalities that emerged as most effective were: (1) brief interventions, (2) social skills twining, (3) motivational enhancement, (4) the community reinforcement approach, and (5) behavioral contracting. The most recant version of this review (Miller, Wilbourne & Hettema, in press) included 383 controlled trials, and again included these five approaches among the top ten empirically supported methods. For the first time, two medications also appeared among the methods most strongly supported: naltrexone and acamprosate. The top ten list was rounded out by behavioral self-control training; behavioral marital therapy, and self-help manuals (bibliotherapy).

Attending to cost-effectiveness, Holder and colleagues (1991) reviewed 224 published results from controlled clinical alcohol treatment trials. Using a system for counting positive and negative trials, they reported their top five treatments as: (1) social skills training, (2) self-control training, (3) brief motivational counseling, (4) behavioral marital therapy, and (5) the community reinforcement approach. All five of these also fell into the low-cost category, whereas more expensive approaches showed less evidence of efficacy. Finally, Finney and Monahan (1996) extended the work of Holder et al. (1991) by reexamining the same studies with

different and more stringent criteria. Taking into account the strength of the design and additional outcome measures, their top five treatment modalities were: (1) the community reinforcement approach, (2) social skills training, (3) behavioral marital therapy, (4) disulfiram implants, and (5) other marital therapy. Once again, these top treatments all fell into the low to medium-low cost category.

Clearly, there is a cluster of alcohol treatment methods that seem to have "the right stuff". In the above meta-analyses there are two treatments that appear in the "supported" list for all four (social skills training and community reinforcement approach) and five more that are common to two or three of the reviews (brief counseling, motivational enhancement, behavior contracting, beh;3vioml self-control training. and behavioral marital therapy. It should be noted, of course, that most of these treatment outcome studies have been conducted in North America.

Far fewer studies have evaluated substance abuse treatments for adolescents. Multiple psychosocial intervention approaches have been developed during the past two decades to address adolescent alcohol and other drug abuse, but the vast majority of available interventions have not been adequately evaluated as to their effectiveness. In the early 1990's Catalano, Hawkins, Wells, Miller and Brewer (1990/1991) found only 16 treatment outcome studies. A recent review by Williams and Chang (2000) identified 53 adolescent treatment outcome studies. Comparatively, there have been well over 1000 studies on alcohol treatment for adults (Miller et al., 1995). Conclusions regarding adolescents are that treatment is superior to no treatment, but there is insufficient evidence to designate treatment methods that are more effective than others. The exception to this is that outpatient family therapy appears to be consistently more effective than other forms of outpatient treatment with which it has been compared (Williams & Chang, 2000).

BRINGING SCIENCE INTO PRACTICE

Although most alcohol treatment program directors and staff want to have successful outcomes for their clients, relatively few focus their treatment on methods with the best evidence of efficacy. Without clear incentives to adopt and maintain optimal practice methods, it is clear that practitioners and programs tend to continue with or drift back to familiar and often outmoded treatment approaches. The central objective of this chapter is to suggest ways of bringing evidence-based treatment methods into practice.

Getting Started

A first step is for the program or practitioner to make a commitment to the use of evidence-based treatment methods. Some programs, for example, have adopted a policy that they will use only treatment methods with adequate scientific evidence of efficacy. When scarce public funds are used to treat citizens of a community, is it not incumbent on programs to provide services with the greatest likelihood of efficacy? This commitment can also come from the funding agency, by requiring

that programs receiving public support shall use only evidence-based treatment methods.

While this may sound like a common-sense approach, addiction treatment in many nations has historically relied upon methods with little or no empirical support, using treatment methods until or even long after they have been found to be ineffective. Such traditional methods, developed without the benefit of modern clinical trial methodology, have often been used for decades, and become entrenched in practice. They become familiar and comfortable methods, with little incentive for practitioners to adopt newer, empirically sound intervention. Thus emerges the gap between science-based treatments and clinical practice.

Bridging this gap is a challenge for both researchers and practitioners. Reliable information about what works usually appears first in scientific publications written and read by researchers, in journal articles and conference. presentations. Distilling this information is no simple matter. As noted above, even carefully done meta-analyses of outcome research can come to different conclusions. By the time this information is disseminated into publications read by practitioners, it is difficult to separate reliable, data-based evidence from the writer's own unsubstantiated opinion.

When an evidence-based treatment method is identified and adopted there, is still the challenge of ensuring that therapists are competently delivering it. This, too, is challenging. If supervision occurs at all, it typically occurs by the counselor describing to the supervisor what has transpired behind closed doors. Clinicians may inaccurately perceive; recall, or describe what they did. The audio taping or videotaping of counseling sessions permits a supervisor to observe directly what is being done in treatment. Even in highly controlled clinical trials, counselors often drift from delivering the intended method and require redirection (Miller & Meyers, 1995). The basics in getting started, then, are to make a commitment to the use of evidence-based methods and have a means of directly monitoring what is happening in treatment delivery.

Hiring New Staff

The largest influence on changing the culture of a treatment program is held by the person who does the selection and hiring of new staff. One way to disseminate new methods into programmatic practice is to hire staff who have already been trained in them. Again, counselor self-description of competence is insufficient. Hiring decisions are among the most important, and we recommend directly observing the applicant's skills as part of the hiring process, as through a work sample or role play. Know what skills, style, and treatment approaches you want, and then ask candidates to demonstrate them. Experience and training do not guarantee competence. There is evidence, for example, that counselors who are highly empathic, skillful in client-centered reflective listening (Truax & Carkhuff, 1967), tend to have better outcomes in substance abuse treatment. A hiring interview might therefore include a role-play demonstration of the counselor's skill in empathic listening. Evidence-based treatment methods (such as CRA, behavioral marital therapy, or social skills training) also often require the counselor to take quite an active role in the treatment process.

People already competent in the desired evidence-based treatment methods will not always be available for hire. Therefore, consider the willingness and eagerness of potential staff to learn new methods through training and direct supervision. If there is a probationary period for new hires, this period can be used to determine that the counselor can learn and apply in practice the desired methods.

Training Staff

Implementing new, evidence-based treatment methods often requires significant changes in practice behavior, which usually happens in a gradual fashion. Reading and talking about a new approach is not enough. Usually a training workshop is not enough. Practice with feedback is how new skills are learned. Ordinary clinical practice resembles learning how to play golf in a dense fog. Ziskin (1970). One hits the ball and has some feeling for immediate effect, but there is no reliable feedback to help correct one's drive. Indeed, one could labor for years on a fog-bound driving range without improving much at the game. Even in a fog, however, systematic feedback about the length and trajectory of drives could improve one's swing in a matter of hours, especially with a golf pro at hand to offer specific coaching and positive feedback. Good clinical supervisors act a bit like a golf pro, observing practice, giving ongoing feedback, and reinforcing the desired skills.

To be sure, specific guidelines can be helpful. Many therapist manuals and videotapes are now available to aid in learning evidence-based methods. These can be supplemented by discussions with a knowledgeable supervisor or trainer. Yet reading and discussing a book about golf or watching others play it can only take you so far. It is just preparation for the next level of training.

Feedback on practice and positive reinforcement for steps in the right direction are two basic elements for the acquisition of a new skill. These two common-sense and empirically-grounded learning aids --- systematic feedback and positive reinforcement --- are sensible strategies to be included in any efforts to teach new practice behavior. One way of shaping practice is through role playing in the presence of a knowledgeable supervisor. Role-play has the advantage of flexibility. Various clinical scenarios can be constructed without waiting for them to occur in actual practice. A role-play can be tried over, using different approaches, or "fast forwarded" to a later point in treatment.

Another commonly used strategy in training therapists is pairing them with a more experienced clinician. The trainee participates in co-therapy in order to observe and practice new skills in an actual session. The experienced therapist also debriefs with the trainee at the end of the session to provide further direction, for example, through explaining the reasoning behind utilizing certain strategies in the session. As skills increase, the experienced therapist may be phased out of the therapy process as the trainee assumes greater responsibility. As an alternative to co-therapy, an experienced therapist or clinical supervisor may sit in on the session, or observe live via a one-way mirror or video link to ensure clinical integrity. Sessions may also, of course, be videotaped or audio taped for later review. If an experienced clinician or supervisor for the new treatment approach is

not available on-site, arrangements may be made with a suitably qualified professional from another agency or city to offer training.

Ongoing Supervision

Training is not a one-time event, as skill acquisition is a continuous process. Therapists' level of skill and experience in providing the intervention will vary, requiring different levels and frequency of supervision.

One point to remember here is that therapists' self-reports of what occurred in treatment sessions are at best incomplete. When learning a new approach, inexperienced therapists often do not recognize or may not report mistakes. There is thus no substitute for direct observation of sessions, usually via audio or videotaping, to monitor exactly what the therapist is doing. This allows the supervisor to point out and shape behaviors of which the therapist may be unaware. This can also work well in a group format, allowing several therapists to learn from the review of specific session takes, and permitting group discussion of problems that they are likely to encounter. It has been our experience that clients rarely object to confidential taping for research or supervision if it is presented un-apologetically as an important and routine procedure

The supervisor's role can also include working with therapists' own issues that may arise from or affect their treatment sessions. Supervisors can help therapists to be aware of their own reactions or biases, which may influence the direction of the treatment they provide. Supervisors can also monitor therapists' frustrations with client outcomes, therapy processes, and other job related issues that may interfere with learning new clinical methods. Good monitoring and positive feedback within a supportive supervisory relationship is key in putting new evidence-based methods into practice.

A certain degree of therapist self-monitoring can be aided by providing checklists or concise reminder guidelines to be used when delivering new treatment procedures. Because of the critical nature of their work, even highly experienced airline pilots continue to use checklists to ensure that they have followed correct procedures. Such checklists can help therapists keep from drifting back to old habits, and can be used by the supervisor in assessing the accuracy of self-appraisal.

PROGRAM EVALUATION

When trying out new treatment procedures in a practice setting, it is sensible to implement program evaluation procedures to study the relative impact of the new approach in this real-life setting. Getting outcome data can be useful for many reasons including program development, agency documentation, personal reinforcement and development of staff. Funding sources often request information as to how well the program is meeting the client needs and program goals. Furthermore, having consistent evaluation procedures underlines a program's commitment to evidence-based practice.

Useful program evaluation need not be complicated. Often it can be accomplished via relatively modest adjustments in routine procedures. To discover the impact of a new procedure, however, one does need three essential elements: (1) client assessment at intake, (2) consistency of treatment, and (3) follow-up evaluation.

Client Assessment

A first step in a reliable program evaluation is to implement a consistent assessment of clients at intake. Depending upon the purposes it will serve, this assessment need not be extensive, and surely it is important not to overburden clients and staff or to delay treatment with needless paperwork and questions. A stable intake assessment system provides consistent baseline information for all clients, against which outcomes can be compared. It can also be useful in determining treatment needs. Reliable assessment information is helpful to the clinician, by supplying early important information about the client (about motivation, problem severity, etc.). The assessment process can also constitute type of triage, screening for special or acute problems that need to be addressed. Finally, research has shown that clients themselves highly value assessment and that programs with formal assessment batteries are more likely to retain clients in treatment (Institute of Medicine, 1990; Sobell, 1993*).* Initial engagement and retention, in turn, are important to the process and outcomes of therapy (Slesnick, Meyers, Meade & Segelken, 2000).

Clinically, however, it is important that bombardment with questions is not the. client's first experience in treatment. Without a context of care, prolonged impersonal assessment can be invasive or stressful to clients who are seeking help, and could discourage a client from returning. One strategy that we have found useful is for the first person that a client sees to be one of the program's more experienced clinical staff. Even half an hour of attentive listening, allowing clients to tell their story and feel heard, can establish a positive relationship with the program that then offers a context for completing assessment. It may also increase the accuracy of assessment. Attrition and drop-out rates with clients in the addiction field is usually high. Anything a program can do to reduce these rates of drop-out can improve overall client outcome results. Length of time in active treatment is one variable that has been associated with a positive treatment outcome (Moos & Moos, 1995).

Some assessments can be administered via computer, not requiring interviewer time Many assessment questionnaires can be completed by the client with little assistance, again reducing actual time a staff member needs to be present (Allen & Columbus, 1995; Miller, Westerberg & Waldron, in press).

Consistent Treatment

A second quality assurance element is to ensure that the treatment being evaluated is, in fact, being delivered with fidelity. It's hard to evaluate the value of a treatment if therapeutic procedures are unreliable or changing. The training, supervision and monitoring methods described above help to ensure that treatment is being delivered properly and consistently.

This is not to say that treatment has to be done with cookie-cutter sameness. Clients can be offered a menu of evidence-based treatment methods, and involved actively in the choice of their own treatment plan. Such active involvement can enhance clients' commitment to, involvement in, and outcomes from their treatment. Keeping track of which clients chose and received which treatment components can provide clues to what seems to be working best. Total amount of treatment (i.e., number of sessions) is also useful to document, both because it is an index of service delivery and because it tends to associated with client outcomes.

.No matter how consistent you try to be, however, it is likely that therapists will differ in their competence with and outcomes from treatment. It appears, in fact, that one of the strongest determinants of clients' outcome is the therapist to whom they happen to be assigned (Najavitis & Weiss, 1994). Another useful component of program evaluation, then, is to track client outcomes in relation to the primary therapist who treated them.

Follow-up Assessment

If you have consistent information about where clients started and what treatment they received, then the remaining piece is to find out what happened to them. How did they fare?

A rudimentary level of program evaluation is to assess client satisfaction with treatment, via a questionnaire routinely administered during or at the completion of their treatment. The Working Alliance Inventory (Horvath & Greenberg, 1986), for example, is a widely-used instrument for this purpose, and clients' reports on this scale as early as the second session often predict treatment retention and outcome. Satisfaction ratings do not, of course, indicate whether therapists were using the intended treatment procedures or document their outcomes.

Outcome data are collected directly from at least a representative sample of clients, usually via questionnaires or follow-up interviews. Perhaps the simplest way to do this is to routinely contact all clients (or a representative subset) at an anniversary date of their intake or treatment completion. A good interval is 3 - 6 months, because it allows enough time to study initial impact of treatment, but it is also soon enough that contact is less likely to be lost. Mailed questionnaires can be used, but the problem is usually a poor return rate. Interviews provide direct contact, and may also be useful (even billable) continuing care. While there are some advantages in having outcome data collected by an interviewer other than the client's therapist, it appears that therapists themselves can collect reasonably accurate outcome data (Breslin, Sobell, Sobell, Buchan & Kwan, 1996).

SUMMARY

In the alcohol field, and in substance abuse treatment more generally, we now have access to a range of treatment methods with strong, evidence of efficacy. Such methods do little good, however, unless and until they are put into practice. Although it may be more comfortable to continue offering treatment in the same, familiar ways, we owe it to our clients to offer them the most effective treatments we can find. This involves making a personal and programmatic commitment to offering only evidence-based treatment methods, often hiring, training, and supervising staff to ensure their competence to provide those treatments. Program evaluation represents a further commitment to the use of evidence in guiding treatment, and involves a systematic intake assessment, clarity and consistency of treatment delivery, and follow-up monitoring to evaluate clients' outcomes.

REFERENCES

Allen, I. P. & Columbus, M. (1995) *Assessing alcohol problems: A guide for clinicians and researchers.* Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.

Breslin, C., Sobell, L. C, Sobell, M.B Buchan, G. & Kwan, E. (1996). Aftercare: telephone contacts with problem drinkers can serve a clinical and research function. *Addiction, 91, 1359-1364*

Budney, A. J. & Higgins, S. T. *(1998). National Institute on Drug Abuse therapy manual for drug addiction: Manual 2. A Community Reinforcement Approach: treating cocaine addiction* (NIH Publication No. 98 4309). Rockville, MD: U.S. Department of Health and Human Services.

Catalano, R. F., Hawkins, J. D., Wells, E. A., Milier, J. L., *&* Brewer (1990-1991). Evaluation of the effectiveness of adolescent drug abuse treatment, assessment of risk for relapse, and promising approaches for relapse prevention. *International Journal of Addictions Special Issue: Relapse prevention in substance misuse, 25(9A-10A).* 1085-1140.

Finney J. W., & Monahan, S. C. (1996) *The cost-effectiveness of treatment for alcoholism: A second approximation. Journl of Studies on Alcohol, 57(3), 229-243*

Godley, S. H., Meyers, R. J., Smith, J. E., Karvinen. T., Titus, J. C., Godley. M. D , Dent, G . Passetti, L. & Kelberg. P. (in press). Adolescent Community Reinforcement Approach *(ACRA) for* Adolescent Cannabis Users Volume *4* of the

Cannabis Youth Treatment Series. Center for Substance Abuse Treatment (CSAT). *U.S. Department of Health and Human Services (DHHS).*

Holder, H. Longabaugh, R , Miller. W. R.. & Rubonis, A. (1991). The cost effectiveness of treatment for alcoholism: A first approximation. Journal of Studies on Alcohol, 52. 517-540

Horvath, A. G. & Greenberg, L. (1986) The development of the working alliance inventory. In L. S. Greenberg & W. M. Pinsof [Eds.], The psychotherapeutic process: A research handbook (p. 529-556). New York: Guilford Press.

Institute of Medicine, (1990). *Broadening the Base of Treatment Problems*. Washington, D.C., National Academy of Press.

Kadden, R. Carroll, K. M., Donovan, D., Cooney, N., Monti, P., Abrams, D., Litt, M., & Hester, R. (*1992)* Cognitive behavioral coping skills therapy manual: a clinical research guide for therapists treating individuals with alcohol abuse and dependence (NIAAA Project MATCH Monograph. Vol. 3, DHHS Publication No-ADM 92-1895. Washington DC: US Government Printing Office

Meyers, R. J. & Smith, I. E (1995). *Clinical guide to alcohol treatment: The Community Reinforcement Approach.* New York Guildford Press.

Miller, W. R., Brown, J. M., Simpson, T. L., Handmaker, N. S., Bien, T. H., Luckie, L. F., Montgomerv, H. A., Hester, R. K., & Tonigan, J. S. (1995). What works? A methodological analysis of the alcohol treatment outcome literature. In R. K. Hester & W. R. Miller [Eds.] Handbook of alcoholism treatment approaches: Effective alternatives (2nd ed., pp 12-44). Boston: Allyn and Bacon.

Miller, W R.. & Hester, R. K. (1995). Handbook of Alcoholism Treatment Approaches: Effective Alternatives. Needham Heights, MA, US: Allyn & Bacon, Inc.

Miller, W. R . & Meyers, R. J. (1995). Beyond generic criteria: Reflections on life after clinical science wins. *Clinical Science.* Spring. 4-6.

Miller, W. R . & Rollnick, S. (2002) *Motivational Interviewing: Preparing people for change (2nd ed.)* New York: Guilford press.

Miller, W. R., Westerberg, V. S., & Waldron, H. B. (in press). Evaluating alcohol problems in adults and adolescents. In R. K. Hester & W. R Miller [Eds.], Handbook *of Alcoholism Treatment Approaches: Effective alternatives*. (3rd Ed) Boston: Allyn and Bacon

Miller, W. R . Zweben, A.. DiClemente, C. C., Rychtarik, R. G. (1992). Motivational enhancernent therapy manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence. (NIAAA Project MATCH

Monograph Vol 2, DHHS Publication No. ADM 94-3723)). Washington DC: US printing office.

Moos, R. H. & Moos. B. S. (1995) Stay in residential facilities and mental health care as predictors of readmission for patients with substance use disorders. *Psychiatric Services*, 46, 66-72.

Monti, P. M., Abrams, D. B., Kadden, R. M., & Cooney, N. L. (1989). *Treating Alcohol Dependence: A coping skills training guide*. New York: Guilford Press.

Najavitis, L. M. & Weiss, R. D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction.* 89, 679-688.