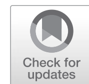

Treatment Techniques for Co-occurring Substance Use and Mental Disorders

Richard N. Rosenthal

Introduction

This chapter focuses on a basic level of practice: basic techniques that underlie the common clinical approaches that community psychiatrists and other clinicians use in treating patients with COD. This focus does not describe new interventions for COD or describe standard treatment approaches, but offers a clinically oriented way for clinicians to think about them and facilitate their implementation. Chapter "Evidence-Based Practices for Co-occurring Addiction and Mental Illness" details the psychopharmacology and psychosocial evidence base for treating co-occurring mental illness and substance use disorders (COD).

Definitions

Skills are basic clinical abilities such as listening to patients, asking open-ended questions, assessing acute risk, maintaining professional boundaries, and developing differential diagnoses. Competence in these basic skills is prerequisite for clinicians wishing to treat COD. *Techniques* are clinical interventions within a conceptual hierarchy ranging from the basic skills through complex clinical strategies. They are how the clinician applies their skills to achieve a specific outcome, such as establishing a therapeutic alliance or managing intoxication.

Tactics are the clinical decisions about the method and timing to implement specific techniques, since patients are differentially receptive to techniques depending on various characteristics such as motivational stage, severity of psychopathology, cognitive functioning, and living environment. Tactics are therefore stage-specific and graded. For example, cognitive behavioral relapse prevention (CBRP) operates on the assumption that the person is motivated for change. If CBRP techniques are applied to someone in a pre-contemplation stage (not yet interested in changing behavior), they are likely to be less effectivethan if they were applied to a patient in a contemplation stage (thinking about changing) or preparation stage (hasdecided to change). In the case of an integrated approach to substance use disorders (SUD) and co-occurring posttraumatic stress disorder (PTSD), the evidence suggests that the tactic of first stabilizing the SUD through the teaching of sobriety skills with cognitive behavior therapy (CBT) improves outcomes of an exposure therapy later applied for PTSD (Back et al. 2009; Coffey et al. 2005).

Strategies employ tactics to achieve a specific clinical goal. Motivational interviewing (see

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chapter "Motivational Interviewing as a Core Communication Style" is a clinical strategy to increase the patient's readiness to change his or her behavior. In MI the therapist uses various skills (i.e., asking open-ended questions or providing non-judgmental feedback) as part of the technique of reflective listening. *Strategies* are ways of employing tactics and techniques to achieve a specific clinical objective. A *treatment approach* codifies a set of clinical techniques, established through clinical trials, that organize tactics and strategies into a cohesive, internally consistent set of behavioral interventions for specific clinical problems. These are typically named "therapies" such as cognitive behavior therapy [CBT] or motivational enhancement therapy [MET] (Rosenthal et al. 2019).

Basic Concepts

Treatment Techniques Differ from Evidence: Or Consensus-Based Practices

Techniques are the main clinical procedures that clinicians use to conduct treatment (Table 1). In addition to those techniques used in evidence- and consensus-based approaches to COD, there are many techniques that are in use by clinicians for treating COD, which have not been formally examined through high-quality research or expert consensus panels. It is important to note that it is the approaches and strategies that are typically tested in clinical trials, not the core techniques. Nonetheless, many of these techniques are the content of day-to-day interactions that community psychiatrists treating COD should know. *Evidence-based practices* are those supported by research findings in making clinical and programmatic decisions about the care of patients (Rosenthal 2004). These practices typically rely upon a specific set of well-described techniques. The scope of evidence-based practices ranges from a single focused strategy or technical style (e.g., motivational interviewing, brief intervention) to a full program model that uses multiple techniques (e.g., assertive community treatment). *Consensus-based practices* are those that have clinical or expert consensus support but lack a well-documented scientific evidence base.

Engagement Strategies

Establishing and Maintaining a Therapeutic Alliance

The techniques that support the development and preservation of a therapeutic alliance are instrumental to the conduct of COD treatment (CSAT 2005). Without this alliance, which includes elements of trust, rapport, faith in the clinician's abilities, and agreement on treatment tasks and goals, it is more difficult for the clinician to obtain the most complete diagnostic and treatment-related information (Safran and Muran 2000). In general, an early and strong therapeutic alliance is predictive of a positive outcome in psychosocial treatment and decreased drug use in patients with substance use disorders (Winston and Winston 2002).

Specific clinical techniques that facilitate the development of a therapeutic or working alliance are maintaining a stance that is (1) respectful, (2) welcoming, (3) accepting, (4) warm, (5) empathic, (6) hope-inspiring, (7) confident, and (8) trustworthy. Setting appropriately frequent patient contacts, listening reflectively, setting appropriate limits, and being sensitive to the person's ethnic identity and cultural values and beliefs (Ackerman and Hilsenroth 2003; CSAT 2005; Misch 2000) are also important in building this alliance. Empathic attunement with the patient's internal state is affirmed when the clinician provides sensitive feedback and validation that enhances the patient's experience of being understood (Gabbard 2000). While these techniques are ideal, even simple interest in the patient helps build the therapeutic alliance and provide clinical benefits. In a study of recently detoxified primary care patients, care by clinicians who had more knowledge about the patient (medical history, home/work/school responsibilities, health concerns, and values and beliefs) predicted lower drug and alcohol severity on the

Table 1 Therapeutic approaches and related key techniques for COD patients

Approach	Core technique	Purpose
Motivational interviewing	Express empathy through reflective listening and acceptance	Demonstrates clinician's acceptance of patient's ambivalence to change
	Develop discrepancy between current behavior and patient's own goals	Shifts decisional balance towards change and healthier behavior
	Roll with the resistance by offering new information and perspectives	Supports the patient's autonomy and decision-making process.
	Support self-efficacy through engaging demonstration of patient's strengths and capacity to change	Supports patient empowerment to take responsibility for recovery process
Supportive psychotherapy	Form and enhance the therapeutic alliance through expression of interest, empathy and understanding, judicious self- disclosure, and purposive repair of misalliances	Increases treatment engagement and exposure through facilitated strengthening of the therapeutic alliance
	Enhance self-esteem through direct measures such as reassurance, praise, reframing, and encouragement	Decreases demoralization through improved self-efficacy and belief in possibility of change
	Improve adaptive skills through teaching, anticipatory guidance, modeling, and problem-solving	Increases personal and interpersonal functioning to improve quality of life and perceived competence
	Restore or improve psychological functioning by supporting adaptive defenses and reducing anxiety	Improves mechanisms for coping with stress, impulsivity or dysphoria and improves resilience
Cognitive behavioral relapse prevention	Conduct a functional analysis for each drug use episode to identify thoughts, feelings, and circumstances before and after drug use	Improves understanding of reasons for use and recognition of situations in which the patient is most likely to use, so the patient can avoid them when appropriate
	Provide skills training to unlearn drug abuse-associated habits and learn/relearn healthier skills (effective coping skills may never have been learned, may have decayed with reliance on substances for coping, or may have been weakened by co-occurring psychiatric disorders)	Improves patient's coping effectively with a range of substance-associated problems and behaviors
	Alter the contingencies of reinforcement. Since substance use excludes other experiences and rewards, identify and reduce drug-associated habits by substituting positive activities and rewards	Supports acquisition of healthy pleasures and movement toward more normative, socially reinforced behavior
	Teach techniques to recognize and cope with urges to use, a model for learning to tolerate other strong affects	Fosters overall management of painful affects
	Provide interpersonal skills training and strategies to help patients expand their social support networks and build enduring, drug-free relationships	Improves interpersonal functioning and enhance social supports

(continued)

Table 1 (continued)

Approach	Core technique	Purpose
Motivational enhancement therapy	Identify the patient's current stage of change	Allows therapist interventions to be *in synch* with the patient's motivational state, thus more likely to be effective
	Elicit self-motivational statements	Elicits the patient's intrinsic motivation to tip the decisional balance about change
	Use reframing to cast patient own statements about their behavior in a new light	Allows the patient to hear that problems are addressable and changeable
	Engage significant other in the recovery process by joining, normalizing, and eliciting feedback and support for the patient's intrinsic motivation for change	Allows the patient to obtain social support and collaboration for the work of recovery and promotes family cohesion
	Provide formative and summary feedback of patient statements during a session	Allows patient to hear reinforcing self-motivational statements several times during and at the end of a session
Substance abuse management module	Stop before a slip becomes a relapse; report a slip to a support person	Patient learns to practice damage control and reduce the abstinence violation effect
	Recognize warning signs and make U-turns; learn money management; remove triggers, ride out craving, and report side effects	Patient learns to avoid high-risk situations, including tolerating strong affects
	Model and role-play refusing drugs from an aggressive dealer, a friend, or relative	Patient learns to escape high-risk situations
	Identify healthy pleasures, and practice asking someone to join in	Patient learns to seek healthy pleasures, establish healthier habits and schedule, reinforce social connections
Contingency management	Arrange for regular, reliable, and valid assessment of a selected target behavior, e.g., testing for substances	Operationalizes to patient and clinician a specific and neutral means to measure behavior
	Find appropriate reinforcers and provide them after target behavior is demonstrated, e.g., sobriety, medication adherence. Add bonuses cumulatively	Applies behavioral principles in a way the patient finds rewarding, e.g., cash, vouchers, prizes, privileges
	Withhold incentives when target is missed, e.g., positive test for substance	Applies behavioral principles to shape behavior the patient agrees is unwanted
	Work with patient to establish alternative, non-risky behaviors	Expands behavioral repertoire, with positive impact on self-esteem

Twelve-step facilitation	Foster patient’s acceptance of substance dependence as an illness characterized by loss of control and chronicity	Supports patient’s adoption of a belief system conducive to engagement in twelve-step recovery
	Foster patient’s surrender to some power outside of the self, since loss of control is a reality and 12-step fellowship has helped millions with the same problem	Supports the patient’s exercise of a decision and commitment to accept external help and imparting of hope
	Foster commitment to AA: not only to show up at meetings but to engage in the AA program	Supports the patient’s ability to engage in the active and intrinsically rewarding work of recovery
	Find and use meetings that the COD patient can feel a part of, the “right” meetings	Supports the COD patient to optimize the meetings attended so that resistance is lowered
	Identifying substance use relationship to patterns of thinking, feeling, and behavior	Patients learn to identify cognitive and emotional triggers to use and to use social contacts to support sobriety

Adapted from CSAT (2005), Higgins and Petry (1999), Miller et al. (1992), Miller and Rollnick (2002), Nowinski et al. (1992), Prochaska et al. (1992), Roberts et al. (1999), Rosenthal et al. (In Press)

Addiction Severity Index and decreased odds of future substance use (Kim et al. 2007).

A critical technique to reduce the risk of a rupture in the therapeutic alliance is management of countertransference, which can lead to argumentative interactions and evoke. resistance (Miller and Rollnick 2002). This will have a negative impact on therapeutic outcomes (Winston et al. 2020). Management of countertransference through self-awareness and identification of strong reactions and biases related to the patient will prevent interference with the therapeutic work. The clinician should obtain appropriate clinical supervision to troubleshoot specific issues, in addition to participating in periodic formal supervisions and team meetings to discuss general countertransference issues (CSAT 2005).

In addition, techniques to resolve conflicts between patient and clinician are also critical to maintaining the therapeutic alliance. These are:

- Addressing the problem practically in the context of the current situation
- Clarifying misunderstandings
- Expressing sincere regret at having unwittingly impugned or patronized the patient
- Supporting the patient's ability to express disagreements in the context of an ongoing therapeutic relationship
- Maintaining flexibility in one's position or on the current tasks when the patient is becoming angry or distant (Bond et al. 1998; Safran and Muran 2000)

If budding antagonisms are not resolved by approaching the patient's complaints and concerns with a practical discussion, then the clinician may move tactfully into a discussion of the therapeutic relationship and how it has evolved (Rosenthal et al. In Press).

At times, confrontation can be an appropriate technique to demonstrate to the patient the reality of his or her minimizing, evasive, blaming, rationalizing, or denying behavior, but it must be pursued with a strong awareness on the part of the clinician that the technique is not being propelled by the clinician's negative feelings (CSAT 2005; Rosenthal 2002). Confrontation is used to point out maladaptive behaviors but should not be harsh or accusatory (Rosenthal et al. In Press). However, confrontational or uncovering techniques may exacerbate symptoms in patients with psychotic disorders, so these may be less appropriate for COD patients with more severe mental disorders (Drake and Sederer 1986). The therapeutic task concerns how to balance using confrontative techniques without being punitive and using empathic, supportive techniques without being over-responsible (enabling) or fostering regressive, dependent behavior (Rosenthal 2013).

Engaging Significant Others and Families

It is often useful to involve patients' significant others when they give consent to contact them. Teaching the family about the nature of the patient's disorders can help stabilize the family around the patient in a way that is more supportive of recovery. Family psychoeducation is a treatment strategy that uses the techniques of empathic engagement, education, continuing support, increased clinical resources during periods of crisis, social network enhancement, and improving problem-solving and communication skills (McFarlane et al. 2003). Individuals with severe mental illness have lower rehospitalization rates and decreased psychotic symptoms when their families attend psychoeducation groups. Those with persistent symptoms have lower rates of relapse to psychosis when the family is engaged in multi-family rather than single-family psychoeducational groups (McFarlane et al. 1995). When family psychoeducation techniques are properly implemented, patients have reduced relapse rates and improved recovery and families have improved sense of well-being (McFarlane et al. 2003).

Engaging significant others and families also promotes better substance dependence treatment outcomes (Higgins et al. 1994). The techniques of engaging the patient's natural supports can range from enlisting families to join in the initial assessment process (offering supplemental information, another point of view, or relevant information unavailable to the patient), up to recruiting

direct involvement of significant others or families in the ongoing treatment process. Significant others can participate in treatment by supporting adherence to program or medication schedules or as monitors of recovery behavior when they are permitted to communicate with the clinician (Galanter et al. 2002).

More specifically, therapeutic interventions with families and couples have significant positive impact upon recovery from SUD (Stanton and Shadish 1997). In cases where the patient lives or has daily contact with family or a significant other, behavioral couples therapy provides elements of increased social support for the patient's efforts to change and an incentive for sobriety. This can have a positive impact on substance use frequency and unwanted consequences of use (Powers et al. 2008). For example, in those who are being treated with disulfiram, a useful set of techniques is the creation of a contract between the patient and a significant other stating that (1) the significant other will observe the patient taking his daily dose of disulfiram; (2) record that action on a calendar; (3) the patient and spouse will then thank each other for their efforts; and (4) neither will argue or discuss the patient's drinking behavior (O'Farrell and Bayog 1986).

Facilitating Adherence to a Treatment Plan

Since COD treatment requires time, effort, and persistence on the part of the patient, understanding the rationale for treatment and having sufficient motivation to engage and continue in treatment is fundamental for a positive outcome. Education about mental illness and addictive disease is critical to that understanding. Teaching should include both the expected effects of recovery efforts and the negative social, behavioral, medical, and economic consequences of untreated disorders (see section "Providing Patient Education", below). When patients are uncertain about whether they want to make a change or doubt their ability to change, the techniques of motivational interviewing, such as reflective listening, developing perceived discrepancy between actual and ideal behavior, exploring patient's ambivalence (i.e., change talk and sustain talk), and avoiding argument (Miller and Rollnick 2013), can be used. There is significant evidence that MI is an effective intervention for SUD, especially for promoting entry to and engagement in more intensive substance abuse treatment, even when used by clinicians who are not addiction specialists (Dunn et al. 2001).

Another important adherence technique is for the clinician to assist the patient in formulating useful reminders for remembering treatment-related appointments or tasks, including medication schedules. The clinician directly addresses factors that may reduce adherence to prescribed medication, such as denial, complex medication dosing schedules, side effects, poor social support, as well as symptoms of mental illness (DiMatteo 2004; DiMatteo et al. 2000; Perkins 2002). The clinician should ask frequently about how patients are faring with medications, including beneficial effects, side effects, difficulties with the regimen, and whether they need to make adjustments with their physician (CSAT 2005).

Most people tend to have difficulty taking medications regularly, but this is especially true of patients with COD. Cognitive dysfunction, ambivalence, or a chaotic living environment all contribute, so using long-acting injectable (LAI) medications can be framed as an adherence strategy. Techniques that support the use of LAI encourage sound decision-making and include motivational interviewing, supportive skills-building interventions, giving advice, modeling adaptive behavior, and encouragement (Rosenthal et al. In Press). The following therapeutic interaction is an illustration of these:

Patient: "I don't much like taking the medications and I don't remember to take them a lot anyway. I'm usually focused on other things, but I'm getting the symptoms again, and I don't want to lose my good situation." *Expresses ambivalence about taking medications*

Clinician: "You know, we have a way for you to take the medicine in a long-acting form, so you would only need to get an injection after several weeks when you come here for visits. You

won't even have to think about it! How does that sound?" *Psychoeducation, adaptive skills*

Patient: "Tell me more."

Clinician: "We know that if your system is exposed to the medication consistently, that greatly improves the benefits over starting and stopping—the long-acting medication is a good way for you to achieve that." *Psychoeducation,*

Patient: "Feels like I'm gonna be controlled if it's in me like that, I don't know…" *Expresses ambivalence*

Clinician: "You have concerns about not being able to stop it once it is in your body, but you also said you have concerns about what the symptoms coming back will do to your recovery" *Reflective listening*

Patient: "I don't want to end up back in the hospital again."

Clinician: "So this may be a way for you to control the decision, and you would be taking steps to further your recovery." *Encouragement, supporting adaptive behavior*

Patient: "I could stop it if I didn't like it and go back to taking pills next time?"

Clinician: "That can be your choice; we'll work together on this." *Reassurance*

Patient: "Ok, I can try it"

Clinician: "So you've decided to try the long-acting medication because your desire to stay healthy has outweighed your concerns about this form of the medicine. We can look at how you do after the first dose and discuss whether you wish to continue then. I think you've made a good choice. Now, let's talk more about side effects compared to the oral version." *Summarizing, reflective feedback, empowerment, praise.*

Currently there are several long-acting injectable forms of atypical antipsychotic agents as well as long-acting injectable naltrexone for alcohol and opioid use disorder (Garbutt et al. 2005). Long-acting subcutaneous and subdermal implant preparations of buprenorphine are available for opioid use disorder as well (Rosenthal 2019).

Maintaining Engagement in Treatment

People remain in treatment when they are motivated to do so and supported in their commitment. Motivation and support can be due to several factors:

- Strong affiliation to the provider, other patients, or the program
- Decisional balance that is tipped toward recovery
- Reduction in the negative effects of the co-occurring disorders
- External forces such as family involvement or court-mandated treatment

Thus, techniques that the clinician uses to further clinical engagement focus on continuously assessing the patient's current motivational state and providing accurate feedback in the context of MI (Miller and Rollnick 2013). Staying attuned to the patient's affective state and relatedness, tracking their ability to access healthy rewards and providing interventions matched to the patient's motivational stage are also important elements. Facilitating active use of self-help strategies and engaging significant others and/or families will improve treatment retention (Meichenbaum and Turk 1987). Supportive therapy techniques can be used to reinforce the therapeutic alliance (Rosenthal et al. In Press). Praising small gains is a supportive technique that clinicians can use to bolster the patient's self-esteem and provide impetus for continuing treatment engagement (Winston et al. 2020).

Maintaining Long-Term Care

Mental illness and substance use disorders are long-term illnesses; thus, the patient may need services indefinitely (CSAT 2005). Given the numerous environmental cues and stressors in the community that pull a person toward relapse, the patient needs support for recovery in the community that is synergistic with formal treatment. One technique that acknowledges this is assis-

tance in developing a support network that espouses healthy behaviors and provides respect and acceptance. Examples include a 12-step home group and/or sponsor, engagement in a dual recovery mutual self-help group, and new friendships with persons in recovery. Such a network can support the continued development of a person's recovery, even when they are not receiving care from a provider or clinical program (CSAT 2005). However, it is important to recognize that these community support elements are not substitutes for treatment and clinical input is needed to optimize recovery.

Facilitating participation in mutual self-help groups is deemed a key technique for working with people with COD (CSAT 2005). Twelve-step facilitation (TSF) is an evidence-based clinical treatment approach designed to acquaint patients with the philosophy of AA and to encourage them to participate in this self-help activity (Nowinski et al. 1992). Research suggests that patients with alcohol dependence and low-level psychiatric severity have better outcomes with TSF than they do when treated with CBT (Project Match Research Group 1997). Techniques of TSF that support the recovery of COD patients are (1) encouraging patients to engage the programmatic aspects of AA in addition to attending meetings; (2) identifying meetings appropriate for the COD patient; (3) assistance with engagement in step work; and (4) identifying dysfunctional patterns of thinking and feeling (Nowinski et al. 1992).

COD patients may have symptoms such as social anxiety, suspiciousness, behavioral rigidity, or cognitive difficulties that will inhibit their ability to get to and engage in group meetings. The clinician should use techniques of anticipatory guidance and rehearsal to acquaint the patient with how the group works. Engagement of a significant other to accompany the patient to the group or writing down specific directions to get to the meeting can also be helpful. It will also be important to ensure that psychiatric symptoms are sufficiently stabilized to enable engagement with psychological support and motivational practices (CSAT 2005; Rosenthal 2002).

Psychosocial Treatment Strategies

Monitoring the Patient's Clinical Status

Clinicians can use subjective or objective clinical measures to monitor their patient's progress in treatment. The main areas of evaluation should be the person's motivational state, sobriety/abstinence, psychiatric symptoms, and his or her perceptions of the specificity and efficacy of the provided treatment (CSAT 2005). These assessments, whether informal or structured, should be performed with enough frequency that all progress that has a positive impact upon recovery is detected. Individualized care planning should address each person's unique characteristics. These may include genetic predisposition, addiction severity, severity of mental illness, stage of change for both mental, and substance use disorders. Culture, race, ethnicity, and living environment will also impact what the optimal combination of medications and psychosocial interventions should be. The technique of individualizing care for people with COD is also necessary to avoid a mismatch between the patient's beliefs and the clinician's interventions. The use of techniques inappropriate for the recovery stage will likely cause a highly stressed or ruptured therapeutic alliance and non-adherence to the treatment plan (Rosenthal 2013). Abstinence and sobriety should be monitored both through self-reports (e.g., checklists) and objective measures (toxicology screens, preferably random). All clinicians providing care to those with COD must know techniques to assess a person's mental status for changes in the severity of key psychiatric symptoms such suicidality (CSAT 2005). Finally, the patient's feedback about how they perceive the usefulness of treatment can provide essential information for adjusting the treatment plan. Feedback can take the form of a conversation in the context of a good therapeutic alliance or might be obtained from a standardized consumer satisfaction scale, especially as more of these service user-specific scales are developed (Greenwood et al. 2010).

Providing Patient Education

Educational techniques provide important cognitive restructuring for recovering COD patients and inform them about mental and substance use disorders, their sequelae, and treatment. For optimal impact, the clinician should understand the patient's capacity to make use of the information to support ego functioning and adaptive skills and formulate the educational plan accordingly. When a person with a substance use disorder learns that they have another, chronic mental illness, or vice versa, they may become demoralized. Imparting information along with supportive techniques, such as normalization and encouragement, can assist with the development of coping skills and improved self-efficacy (Rosenthal 2013). Typically, psychoeducation about substances focuses on different classes of drugs and their psychological and physical effects. The dangers of chronic use including pertinent medical problems and benefits of abstinence are also important topics. Current models of addiction and how drugs are used to address negative emotional states may also be included. Psychoeducation about mental disorders includes information about symptoms of relevance to the patient, their treatment, and natural history.

Psychoeducation should be framed in the context of a recovery perspective. This means active clinician-patient collaboration with person-centered planning that provides stage-specific interventions (see chapter "Person-Centered Recovery Planning as a Roadmap to Recovery. Outcomes of improved health, better self-care, increased independence, and improved self-esteem result from this process (CSAT 2005). The literature suggests that educating patients about their illness enhances the psychosocial rehabilitation of people with severe mental disorders and substance dependence (Goldman and Quinn 1988). In addition, a fact-based and non-judgmental accounting of the effects of drugs helps tip the decisional balance in favor of recovery. When teaching, the clinician must always take the patient's literacy level into account, as it may be lower than the readability level of treatment-related reading materials (Greenfield et al. 2005). In addition, since many people with COD may have cognitive or memory problems, it will be especially important for the therapist to briefly review the main points of the discussion frequently (CSAT 2005).

The cognitive behavior therapy relapse prevention technique of functional analysis uses teaching, exploration, and experiential learning. In this technique, for each substance use episode, the clinician helps the patient to identify their thoughts, feelings, and circumstances both before and after the substance use. In addition, the identification of relapse triggers is a CBT technique that helps the patient to identify sources of high risk for drug relapse from among potential high-risk situations, specific environmental cues, thought patterns, and emotions. Both the patient and the clinician learn the patient's reasons for use, whether it is to cope with interpersonal difficulties or to experience risk or euphoria.

Part of the recovery process for both substance use and mental disorders is learning new, more adaptive behavioral patterns and putting them into practice. The clinician teaches these skills, including relapse prevention skills derived from CBT (Kadden et al. 1992; Marlatt and Gordon 1985). Data from numerous clinical trials of CBT suggest a learning curve related to practice effects, so the efficacy of CBT tends to increase for some period of time after the therapeutic intervention.

Preventing Relapse

A corollary to the importance of learning new skills is that in order for them to be successful, a person must put them to use. An important technique in assisting the patient with skill acquisition is training through role-playing or rehearsal, where the clinician guides the patient through hypothetical, but typical, situations. This enables a person to practice recognizing which circumstances are high-risk and how to make U-turns away from them. Rehearsing drug refusal skills and steps to minimize the effects of a slip (quit early) can also be useful. These techniques are especially helpful to patients with severe

COD with limited social skills (Roberts et al. 1999).

Specific techniques that support relapse prevention include:

- Exploring negative consequences of continued substance use
- Enhancing the patient's ability to recognize drug cravings early on
- Identifying high-risk situations for use
- Helping the patient to develop coping strategies to avoid triggers and desires to use
- Identifying and developing activities that replace patient's needs otherwise satisfied by the substance use

Dysphoric mood is a frequently reported antecedent of relapse in people with COD, so relapse prevention techniques also focus on building adaptive skills for coping with the negative or painful mood states (Marlatt and Gordon 1985; Longabaugh et al. 1996). This may be especially helpful in patients with schizophrenia. For these individuals, abuse of substances, often stimulants, may be driven in part by negative symptoms. This is referred to as self-medication. In addition, techniques that help patients address negative thoughts are helpful, as they often accompany or trigger dysphoric states. The skills clinicians can teach patients for managing negative thoughts include thought stopping, positive self-talk, and substituting positive thoughts or feelings. CBT may hold particular promise in reduction in the severity of relapses when they occur (Kadden et al. 1992).

Medical Strategies

Managing Intoxication and Withdrawal States

Patients who are acutely intoxicated need a safe environment to sober up that also provides adequate medical monitoring of acute intoxication and withdrawal symptoms. The clinician needs to be able to understand what substances the patient has taken, in what amounts, and over what time. Depending upon the type and dose of the substance the person is intoxicated with, a treatment plan can be developed. Elements to consider include (1) level of stimulation (a low-light, low-sound environment), (2) need for reassurance, (3) safety precautions, (4) reality grounding, and (5) medical management (e.g., use of antagonists, gastric lavage, changing urinary pH, sedation).

Many patients who meet DSM-5 substance use disorder criteria will not develop physical symptoms of withdrawal after cessation of substance use (APA 2013). The substances that typically produce physical withdrawal symptoms in those with substance dependence are in the sedative-hypnotic group (e.g., alcohol, benzodiazepines, barbiturates) or the opioid group (e.g., prescription narcotics and heroin). Other substance groups (stimulants, cannabis) may produce withdrawal symptoms, but they produce fewer physiologic symptoms (e.g., blood pressure and heart rate). They are more likely to produce emotional arousal symptoms such as agitation, dysphoria, anxiety, and irritability. Medical personnel who work with COD patients must know the techniques of alleviating medical withdrawal from each class of substances and must recognize that COD may intensify the subjective symptoms of withdrawal.

Using Medication

Medications to treat traditional psychiatric illnesses are well-employed by psychiatrists, but the same is not true of the use of medications for the treatment of SUD, in spite of the fact that there are many evidence-based medications for SUD. These medications work best in combination with psychosocial approaches and are described in detail in chapter "Evidence-Based Practices for Co-occurring Addiction and Mental Illness". The text box below describes some key practical points that the community psychiatrist can use in employing pharmacology in COD.

1. Abstinence should not be a requirement to begin pharmacotherapy for a co-occurring Axis I disorder, unless there is a specific contraindication to that medicine for a particular intoxication or withdrawal state. For example, one generally shouldn't use medications during sedative-hypnotic withdrawal that lower the seizure threshold, such as antipsychotics or antidepressants.
2. Treat all treatable non-substance-related mental disorders, avoiding medications with a high abuse liability, if possible. The first choice for treating chronic anxiety shouldn't be a short-acting benzodiazepine. Try other, less risky strategies first.
3. Unless contraindicated, evidence-based medications for SUD should be used to treat SUD in patients with COD. Don't avoid treating SUD with pharmacotherapy in patients with mental disorders, as they may have an appropriate, even synergistic response (Petrakis et al. 2004).
4. Be careful in choosing and dosing medication, but don't undertreat. Cover as much ground with the fewest number of medications and minimize the schedule for dosing to once daily, if effective. Consider long-acting medication preparations for patients with high disorganization and poor social support, unstable living environments, or other chaotic elements lowering the likelihood of adherence to an oral regimen.
5. "Start low, go slow." Patients with co-occurring disorders may have increased initial sensitivity to medications and have difficulty tolerating side effects, but they may ultimately need a higher dose than patients without SUD (Kranzler et al. 1994).
6. It is best to use medications with a high safety index and low capacity for inducing delirium or seizures as those with COD may have a lower threshold for CNS side effects (Olivera et al. 1990).
7. Syndromes are less hazardous to treat than individual symptoms (e.g., insomnia, anxiety, dysphoria). When the patient communicates multiple complaints that may be independent of Axis I disorders, it is easier for the clinician to become uncertain about medication response.

Adapted from Rosenthal 2013

Reducing the Morbidity of Substance Use Disorders

New patients should have a medical screening examination in order to assess general health and to assess the medical impact of substance use. This is important because, in addition to substance-induced damage to different organ systems in the body, both patients with substance use disorders and those with severe mental disorders are less likely to engage in adequate self-care, including periodic medical examination (CSAT 2005). Because of impulsivity, and some dangerous routes of drug administration, people with COD are at high risk for sexually transmitted diseases and other infectious diseases such as HIV, hepatitis C, and COVID-19 (Wang et al. 2020). People coming to treatment are often demoralized and adopt a fatalistic posture due to the negative impact of substance abuse and mental illness (Winston et al. 2020). Treating clinicians can be supportive and use MI techniques to increase the possibility that patients will follow up with necessary medical care.

Implementing Techniques

Techniques to Convey Information to Patients

Supportive psychotherapy should always be the foundation of provider-to-patient communication

since it is based on the factors common to all psychotherapies and there are relatively few circumstances where it is not indicated (Frank 1975). This is because the techniques of supportive psychotherapy are direct measures specifically geared to maintain, restore, or improve self-esteem, adaptive skills, and psychological functioning (Rosenthal et al. In Press). This enables even difficult information to be delivered to a patient in a respectful, direct, supportive, and alliance-building fashion.

Several component techniques of supportive therapy are specifically useful in engaging with people and promoting their self-efficacy. First, the therapist's empathic attitude of acceptance, respect, and interest allows the patient to feel welcomed and supported. Next, specific supportive techniques such as teaching, encouragement, reassurance, exhortation, modeling, and anticipatory guidance can be used to enhance motivation. *Exhortation* is the use of easily understood and remembered common phrases or slogans in order to convey important concepts to persons who may be cognitively impaired or frequently distracted by cravings or impulses (e.g., "Use HALT to remember your negative mood triggers—hungry, angry, lonely or tired!"). *Modeling* is where the provider serves as an exemplar of the adaptive behavior desired in the patient. *Anticipatory guidance* is the technique whereby the provider assists the patient in foreseeing obstacles to a proposed course of action and rehearsing behaviors successfully with those obstacles (Winston et al. 2020).

People often have negative self-evaluations about their own maladaptive behavior due to COD, typically worse with more severe disorders. Individuals coming from an environment in which they feel highly stigmatized are more likely to develop self-stigma, with attendant negative impact on role function, self-esteem, morale, social and treatment engagement, and symptom severity (Brohan et al. 2011; Yanos et al. 2008). Normalization is a supportive technique protective of the patient's self-esteem by reframing what the patient thinks of their own behavior or experience as a common experience of others. However, care must be taken to avoid conflict with the MI technique of developing discrepancy (Rosenthal et al. In Press). Techniques that support patients' experiences of self-efficacy should be implemented because empowerment and expanded areas of social contact are associated with lowered self-stigma (Brohan et al. 2010, 2011). These supportive techniques include (1) use of experience-based praise (finding and declaring something the patient will experience as praiseworthy) (Rosenthal et al. In Press); (2) reassurance and encouragement (Rosenthal et al. In Press); (3) identification of patients' strengths and capacity to change (Miller and Rollnick 2002); and (4) cognitive restructuring. This last technique comes from CBT in which clinician and patient examine and challenge the validity of self-stigmatizing beliefs that are due to cognitive distortions or dysfunctional attitudes (Yanos et al. 2008).

Within a supportive context, the techniques of MI (CSAT 1999; Miller and Rollnick 2013) should be implemented for people with COD to elicit change in cognitions and behaviors. Thus, while building a therapeutic alliance, the provider imparts information that is likely to motivate the patient toward healthier decisional process.

Increasing the Validity and Impact of Feedback Provided to Patients

In order to affect the decisional balance between a patient's tendency to continue to use substances and their countertendency to stop, accurate information must be supplied in a non-threatening and non-demeaning fashion. This will add to the patient's knowledge base and beliefs about the negative consequences of substance use. Therefore, the MI technique of providing feedback is useful, as valid information assists the patient in developing the discrepancy between present behavior and personal values or goals (Miller and Rollnick 2002). The highest quality information often takes the form of concrete personal measures generated by objective methods, which the patient can then read and discuss with the provider. These typically take the form of checklists, urine toxicity screens, and laboratory

reports. For example, for those with severe COD, feedback consisting of graphical representations of their nicotine dependence and those in a control group of nonsmokers comparing expired breath carbon monoxide and money spent on cigarettes might be effective for engagement in smoking cessation treatment (Steinberg et al. 2004).

In addition, more general normative data about alcohol and substance abuse from national sources such as the federal Substance Abuse and Mental Health Services Administration (SAMHSA) can be used for more general feedback (SAMHSA.gov). For example, going online to the SAMHSA website, where five standard drinks at a sitting for men (four for women) is defined as an episode of "heavy drinking," can be a useful form of feedback. Conversely, hearsay and common myths tend not to have the same motivational impact, as they are more easily questioned and refuted. An additional source of useful feedback can be presented in the form of other patients' responses and stories related to their use of substances or non-adherence to medication. For example, a particular strength of mutual-help peer groups is that members get to hear others share the negative consequences of drinking and drug use in a supportive and like-minded group. Similarly, in a program-based recovery group, senior members, with clinical oversight, can offer new members information based on their own experience, about the whys and wherefores of early recovery (Rosenthal 2002).

Using Techniques to Help Address the Social Consequences of Co-occurring Illnesses

COD have direct effects on functioning that are the obvious foci for evaluating the efficacy of our treatments. However, there are also a range of negative social consequences of co-occurring disorders, including lowered self-esteem and motivation. There may also be disempowerment and alienation from families, the workforce, and systems of care. Clinical techniques must enable clinicians to evaluate the people in ecologically valid terms, not just in terms of symptoms and function in the clinic setting. There are techniques that support and empower people in the face of stigma, that help them better negotiate organizations, and those that address disenfranchisement. Techniques that improve the patient's safety are also important. For example, homelessness may be a mediator of risk for relapse to substance abuse, which in turn leads to exacerbation of mental illness (Boisvert et al. 2008; Kertesz et al. 2005). Interpersonal, teaching, and management skills can be used to defuse conflict between a client and a landlord who is threatening eviction, thus potentially reducing the risk of relapse.

Making an Appropriate and Effective Referral

In order to make "good referrals that stick," providers must implement techniques to properly assess the patient, to network with other agencies, and create alliances with other providers and provider groups.

A useful technique in creating a network of care for COD patients is the crafting and execution of a structured reciprocal agreement, which binds together the care of an identified patient between separate provider systems. Reciprocal agreements can be powerful networking tools for supporting interagency cooperation and flow of patients across treatment settings. These agreements create a pathway for patients to move between levels of care without the usual stress about placement out of one's domain. For example, a community service provider treating a patient with COD who frequently expresses suicidal ideation can enter into an agreement with a hospital-based program to assess patients for hospitalization on an as-needed basis, provided the community-based program agrees to take the patient back into treatment post-discharge. This may give the community provider greater security to work with higher-risk patients. Knowing that the hospital will easily accept the patients in crisis reduces apprehension of working with patients who have histories of instability. This

anxiety-reducing agreement implemented at the institutional level fosters the formation of a working alliance between the provider systems.

Summary and Future Directions

Although infrequently studied, the individual treatment techniques underlying engagement, psychosocial, and medical treatment strategies are the basic and necessary clinical armamentarium for clinicians who wish to treat patients with COD. Most of the techniques described for engagement are generalizable to work with non-COD clinical populations. Similarly, techniques supporting strategies that focus on the transfer of clinical information are also more broadly generalizable. There are probably many effective techniques in use that will not gain wide dissemination unless packaged and tested to generate a proper evidence base. Future research should examine practice-based as well as hypothesis-driven designs to discover what clinical advances have been generated in the treatment setting.

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