

# Alcohol Dependence in a Client With a Work-Related Injury

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A holistic philosophy that recognizes the mind–body connection in human functioning forms the foundation of occupational therapy (Meyer, 1977). Because the mind and body work in unison, Meyer articulated that this link should be studied and appreciated, particularly as a fundamental truth to guide and organize occupational therapy practice. Therefore, we wondered to what extent occupational therapy practitioners are effective agents of change for their clients whose substance use interferes with rehabilitation potential. The case described in this article suggests that occupational therapy practitioners should explore substance misuse as a primary issue for intervention in some physical injury cases for which the person was referred to occupational therapy. The physical injury in some instances could actually be the symptom of a more complicated problem (Stoffel & Moyers, 1997a).

The case demonstrates application of a holistic approach to the intervention for substance use disorders in a practice area other than in a mental health setting, where most persons with substance use disorders receive professional help. The holistic approach applied in this case was guided by three main principles:

1. Each client is unique and can only be understood as a complex interaction of body, mind, and spirit.
2. Each person should assume responsibility for his or her own health.
3. Education is effective in teaching a person how to manage his or her own health (Gordon, 1982).

### Background

One of the authors provides presurgical evaluations, occupational therapy intervention, and referral and follow-up services in the office of a hand surgeon. The client who was referred to this author, a 55-year-old white female, had a long history of heavy assembly-line work, which had led to multiple hand surgeries in the past. The client was again experiencing pain and numbness bilaterally in both upper extremities and was having trouble performing her job, which involved the use of air-powered tools. Because of recurrent bilateral carpal tunnel syndrome, severe carpometacarpal arthritis of the right thumb, and the presence of an osteophyte on the left trapezoid, the client was to receive two surgeries, the second to occur 3 to 6 weeks after successful rehabilitation for the first surgery. The occupational therapist to whom the client was referred conducted a presurgical evaluation to document the baseline activity limitations and performance impairments, and then developed an intervention plan for implementation after surgery.

At the initial therapy visit after the first surgery, the client smelled of alcohol, was tearful, spoke incoherently, and had trouble walking independently from the waiting

room to the occupational therapy area. Her husband indicated that the client had been drinking regularly for the past 2 years and that the drinking was worse now that the client was on sick leave. Obviously, continued drinking during treatment could limit the options for controlling postsurgical pain (e.g., transcutaneous nerve stimulation in place of medication) (Acute Pain Management Guideline Panel, 1992), could ultimately interfere with the client's progress toward the goals of rehabilitation, could prevent implementation of the second surgical procedure, and could potentially increase the time off from work.

Because the Occupational Therapy Code of Ethics (American Occupational Therapy Association [AOTA], 1994) guides concern for the well-being of the recipients of service delivery, a potential ethical dilemma might have been created if the occupational therapist chose to ignore the client's alcohol problem. Failure to address a problem that interferes with positive outcomes not only is an ethical dilemma, but also is tantamount to admitting that occupational therapy is an ineffective service (Stoffel & Moyers, 1997b). The literature has already indicated that coercive methods designed to force the person to stop drinking fail to address the need for treatment of the substance use. Threatening to discharge the client from occupational therapy services if he or she continues to attend therapy while intoxicated not only can lead to hostile, nontherapeutic relationships between practitioners and their clients, but this threatening also is associated with poor long-term treatment results (Miller, 1995). Instead of using coercive methods to force someone to control or stop drinking alcohol, Miller and Rollnick (1991) recommended using motivational interventions. In this case, to prevent an ethical breach of practice and to facilitate successful intervention outcomes, the occupational therapist chose an intervention course, which began with acquainting the client's surgeon with the FRAMES approach to motivational interviewing (Miller, 1995). Motivational interviewing is the opposite of confrontation and therefore is consistent with a holistic philosophy. "Instead of telling clients what to do, they are asked what, if anything, they want to do" (Miller, 1995, p. 95).

### Theoretical Information

Motivational interviewing is based on a model of change developed by Prochaska and DiClemente (1982, 1986). The model for change includes six nonlinear stages:

1. precontemplation
2. contemplation
3. determination
4. action
5. maintenance
6. relapse

The stages are arranged as a continuous circle in which the person may enter or exit at any point, may progress or regress, or may remain in a given stage for an undetermined

**Table 1**  
**Stages of Change**

Stages of Change	Definition	Case Application
Precontemplation	No awareness of the problem	Attended appointment when intoxicated
Contemplation	Awareness of the problem	Blood tests indicated liver damage
Determination	Selecting the appropriate action	Menu of possible treatment resources
Action	Implementing action	Diagnosis and detoxification
Maintenance	Incorporating change in daily routines	Attended Alcoholics Anonymous meetings
Relapse	Engaging in problematic behaviors	Drank in moderation

length of time. The person also may skip stages in the change process while progressing or regressing.

Table 1 defines these six stages and outlines the client's behaviors corresponding to each stage of change. Table 2 identifies the steps in the FRAMES motivational interview process and the way in which these steps were applied in this case. During the interview, the occupational therapist and the surgeon facilitated the recovery process by offering feedback to the client, and by promoting the client's self-awareness and personal responsibility for health and lifestyle choices related to her use of alcohol (Miller, 1995).

### Clinical Course

As noted by her failure to report heavy drinking and poor judgment in attending a medical appointment while intoxicated, the client seemed to be in the precontemplation stage of change. At a minimum, therefore, the goal was to help the client understand the seriousness of the alcohol problem, thereby facilitating movement from precontemplation to the contemplation stage of change. Ideally, the goal was also to facilitate change leading to movement through the determination and action stages of change. The client needed to select and implement strategies to control alcohol use at least during the second surgery and corresponding rehabilitation to avoid potential complications. To improve the likelihood for the client to be amenable to help, empathetic and skillful feedback based

**Table 2**  
**The FRAMES Approach to Interviewing**

FRAMES	Definition	Case Application
Feedback	Information regarding drinking and its effects	CAGE (Ewing, 1984) Q/F questions (Cooney, Zweben, & Fleming, 1995) Occupational Performance History Interview (Kielhofner, Henry, & Walens, 1989)
Responsibility	Client makes decisions and takes action	Client selected treatment
Advice	Professional offers suggestions	Blood tests indicated liver damage and need to quit
Menu	List of treatment alternatives	Pamphlets, treatment materials, and outcome data
Empathy	Listening to and reflecting the client's statements and feelings	Genuine concern for poor health status
Self-Efficacy	Belief in ability to make changes	Religious faith helped client cope in the past

*Note.* Q/F = Quantity and frequency.

on irrefutable data regarding the extent of substance use and its effects was required. The surgeon ordered several blood tests to screen for the extent of injury to the liver (plasma gamma glutamyl transferase [GGT]) and hematopoietic cell lines (mean corpuscular volume [MCV]) (Persson, Magnusson, & Borg, 1990). Although reluctant, the client agreed to these tests as one precondition for implementing the second surgery.

It took several days to obtain the results of these two blood tests. Consequently, there was time for the occupational therapist not only to implement protocols for the hand rehabilitation, but also to use screening instruments, such as the CAGE (Ewing, 1984) and quantity and frequency (Q/F) questions (Cooney, Zweben, & Fleming, 1995), to determine the extent of the alcohol problem. Table 3 describes these two screening instruments in more detail and gives the results of the screening. CAGE is an acronym for: needing to *Cut* down on drinking, being *Annoyed* by someone criticizing the drinking, feeling *Guilty* about drinking, and having an *Eye-Opener* in the morning. Q/F questions are concerned with the number of days per week in which one has had a drink in the past month, number of drinks per drinking occasion, and the number of times in which one drank more than five drinks during the past month. To evaluate the impact of the client's alcohol use on occupational performance (Moyers, 1997), the occupational therapist also used the Occupational Performance History Interview (Kielhofner, Henry, & Walens, 1989).

Timing these screenings and the occupational therapy evaluation to occur immediately after the client attended therapy while intoxicated helped to ensure the cooperation of the client: She was willing to participate in the occupational therapy evaluation as a way to compensate for her previous intoxicated behavior. Because of the sensitivity of the scheduled blood tests, the client was cautioned that responses to the screening questions and to the occupational history would, in a way, be verified by the state of the organ system (Cooney et al., 1995). In other words, attempts to minimize her drinking quantity and frequency or impact on her occupational performance would be inconsistent with medical tests that gave evidence to damage related to long-term abuse of alcohol.

### FRAMES Approach

The surgeon and the occupational therapist together implemented the motivational interview. The motivational interview normally occurs in several sessions, but may be implemented in one session when necessary. The six parts of the FRAMES interview are

1. *Feedback* of personal risk or impairment;
2. emphasis on personal *Responsibility*;
3. clear *Advice* to change;
4. a *Menu* of alternative change options;
5. therapist *Empathy*; and
6. facilitation of client *Self-Efficacy* or optimism (Miller & Sanchez, 1994).

**Table 3**  
**Screening for Alcohol Problems**

Author	Instrument	Items	Case Results
Ewing (1984)	CAGE	Need to <i>Cut</i> down on drinking <i>Annoyed</i> by someone criticizing your drinking Feeling <i>Guilty</i> about drinking <i>Eye-opener</i> drink first thing in the morning to steady nerves	3 positive responses (2 positive responses indicate positive test)
Skinner (1990) Brown (1992)	Q/F Questions	Numbers of days/weeks that one has drank over the last month  Number of drinks per drinking occasion  Number of times drank more than 5 drinks during last month	Daily drinking  3-4 drinks or total of 28 drinks per week  5 or more times (15+ drinks/wk = positive test for men; 12+ drinks/wk = positive test for women)
Kielhofner, Henry, and Walens (1989)	Occupational Performance History Interview	Organization of daily living routines  Life roles  Interests, values, and goals  Perception of abilities and assumption of responsibility  Environmental influences	Drinking routines organized day  Sick role/not working. No longer socializing with friends.  Participation in valued activities limited to passive activities only  Worried about not being able to work because of hand impairment. Does not recognize effects of drinking on work performance. Sought out evaluation by hand surgeon.  Repetitive motion inherent in job tasks. Many coworkers drink after work.

Note. Q/F = Quantity and frequency.

The surgeon began the interview by sharing genuine concern regarding the client's health status and by stating that the purpose of the appointment was to discuss the alcohol problem and its impact on further hand rehabilitation and implementation of the second surgery (Miller, 1995). During the *Feedback* portion of the interview, the occupational therapist discussed how both screening instruments indicated a strong possibility of a health risk for alcohol abuse or dependence because these two screening interviews had a 90% accuracy in determining the existence of an alcohol problem (Cooney et al., 1995). Highlights of the occupational history were also reviewed, which revealed the client's withdrawal from family, friends and social activities; a daily habit pattern dominated by drinking routines; and an increase in negative interactions with coworkers, the union steward, and the foreman.

For the *Responsibility* portion of the interview, the surgeon acknowledged the client's right to decide whether to obtain further evaluation and treatment for the alcohol problem. No other person could force her to receive help. Furthermore, he acknowledged her choice in deciding when and how to stop or modify her drinking; however, it was his professional responsibility to inform her of the results of the blood tests, which revealed organ and cellular damage. The surgeon noted that the damage to the liver may be reversible and *Advised* her to stop drinking before damage to the liver was permanent and progressive (Kaplan & Sadock, 1996). The surgeon also discussed the potential danger of withdrawing from alcohol use without medical supervision because of the likelihood, especially given the state of her organ system, that she had developed alcohol dependence. Bien, Miller, and Tonigan (1993) discerned that advice from physicians often triggered positive change behaviors in smokers and problem drinkers.

The client was also advised that the current postsurgical rehabilitation for the right hand would continue. This was important in order for the surgeon and occupational therapist to avoid ethical issues related to client abandonment. However, the surgeon emphasized that therapy could only be effective when the client was sober. Because of the high risks related to the poor liver functioning, the second surgery for the left hand would be scheduled only when blood tests revealed a healthy liver after a period of abstinence from alcohol.

The occupational therapist then presented the *Menu* of varied intervention options from which the client could choose help. The menu included a range of options covered by her insurance plan, all located near her home, including: outpatient and inpatient detoxification programs, outpatient and aftercare follow-up services, private practitioners, and self-help groups. In addition to the menu, pamphlets and information sheets were provided, giving details about the options on the menu and providing general information about alcohol abuse and dependence. The occupational therapist reviewed with the client the success rates of

the various programs in helping persons to stop drinking.

Throughout the interview, both the surgeon and the occupational therapist communicated *Empathy* by listening to and reflecting the client's statements and feelings. For example, the surgeon stated that he realized that the information was difficult for the client to acknowledge as being true; therefore, he understood the client's reluctance to make changes. The occupational therapist supported the client's *Self-Efficacy* in making successful changes in the drinking behavior by highlighting to the client the effective way in which her religious faith helped her cope in the past with difficult problems, such as those encountered during the previous carpal tunnel surgeries and rehabilitation.

This first FRAMES interview was stopped at this point to avoid overwhelming the client with too much information. To promote further responsibility, the client was asked to read the provided pamphlets and materials, discuss the treatment options with her husband, and select one or more options from the menu before the next interview. Miller, Zweben, DiClemente, and Rychtarik (1992) found that allowing the client time to make decisions regarding treatment of substance use disorders results in more effective client follow-through in implementing the chosen option.

The client's desire for the second surgery motivated her to keep her next interview appointment. During the interview, the client was somewhat hostile toward both the surgeon and the occupational therapist, indicating that she may have been moving out of the decision stage and back into the contemplation stage of change. To prevent further regression, the surgeon repeated the feedback related to the medical tests, asked for the client's reaction to this information, and subsequently clarified several misunderstandings. A successful referral for the treatment of substance use disorders requires that disparities between the perceptions of the client and practitioner regarding the level of harm associated with the drinking be resolved (Thom et al., 1992). At this point, the client agreed to let the occupational therapist make an appointment on her behalf for an evaluation by a physician specializing in the treatment of substance use disorders and to let the occupational therapist ascertain the extent of the client's insurance coverage for this service. Research (Goldberg, Mullen, Richard, Psaty, & Ruch, 1991) has indicated that better follow-through by the client on referrals for treatment of substance use disorders occurs when the practitioner makes the appointment and removes any barriers, such as financial limitations, that may interfere with taking action.

## Outcomes

Use of the FRAMES approach with this case resulted in this client receiving a diagnosis of substance dependence from the physician to whom she was referred and subsequently completing an outpatient detoxification program. The client refused further treatment for alcohol dependence after detoxification, but chose to attend Alcoholics Anonymous

meetings throughout the second surgery and corresponding rehabilitation. The client returned to work and, through the occupational therapist's consultations with the client's employer, the client was assigned job tasks that better accommodated her physical limitations and greatly reduced future health risks related to cumulative trauma. Unfortunately, at her last follow-up visit, the client admitted that she was "drinking in moderation" and was doing so despite the potential return of liver and cellular damage.

## Discussion

This case required a pragmatic approach for working holistically to resolve an unanticipated problem of substance use that threatened the success of the client's physical rehabilitation plan and the outcome of returning her to work. Given that the incidence of dangerous substance use on the job ranges from 10% to 23% in the United States despite the existence of Employee Assistance Programs since the 1940s (Backer, 1987; Miller, 1995), the emergence of complications in rehabilitation related to a substance use disorder should not be surprising. Webb et al. (1994) reported that 67% of persons with problem drinking experience at least one work injury. Not only are these employees more likely to be involved in an accident, they also arrive late for work, ask to leave work early, use their sick benefits, and file claims for workers' compensation insurance more often than do employees who do not abuse substances.

Regardless of the successful surgical and rehabilitation outcomes in this case and the client's return to work, the fact that the client reverted to drinking creates a temptation to label this result as ultimately a failure. This client had progressed quickly from the maintenance stage to relapse, the sixth stage of change. According to Prochaska and DiClemente (1982), relapse does not necessarily mean that the person will return to the previous levels of drinking. Because the FRAMES model suggests ways to facilitate changes in a client's motivation to drink that match the stage of change in which the client has currently entered, progress can be assessed by criteria other than the number of days abstinent (Prochaska & DiClemente, 1982, 1986). For example, if the client had refused intervention for the substance use disorder and had only listened to the information provided in the motivational interview, this still would indicate positive change. By listening openly, the client might move from precontemplation to contemplation. In most cases, clients will need to receive feedback about the consequences of their drinking multiple times before moving successfully through the stages of contemplation, determination, and action (Miller, 1995).

Needing consistent feedback in order to stimulate movement through the stages of change or to prevent further regression supports the importance of all health professionals in taking action regarding the substance use of their clients. Consequently, to improve the outcomes of intervention, the attitudes of physicians and occupational

therapists need to be broadened to include the concepts of holism within their practices. The FRAMES approach for this client was highly successful in facilitating a positive, holistic outcome and should be implemented again during follow-up to help prevent the lapse from becoming a full-blown relapse. Through motivational interviewing, the client can be helped to move successfully out of the relapse stage and back into the maintenance stage. "In this sense, relapse is just another step in the process of change that leads to stable recovery" (Miller, 1995, p. 92). Therefore, this case successfully illustrates the importance of designing intervention that incorporates the holistic principles of understanding the client's situation as complex, helping the client through education take responsibility for his or her health, and working with physicians to broaden their approach to include holistic treatment interventions. ▲

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