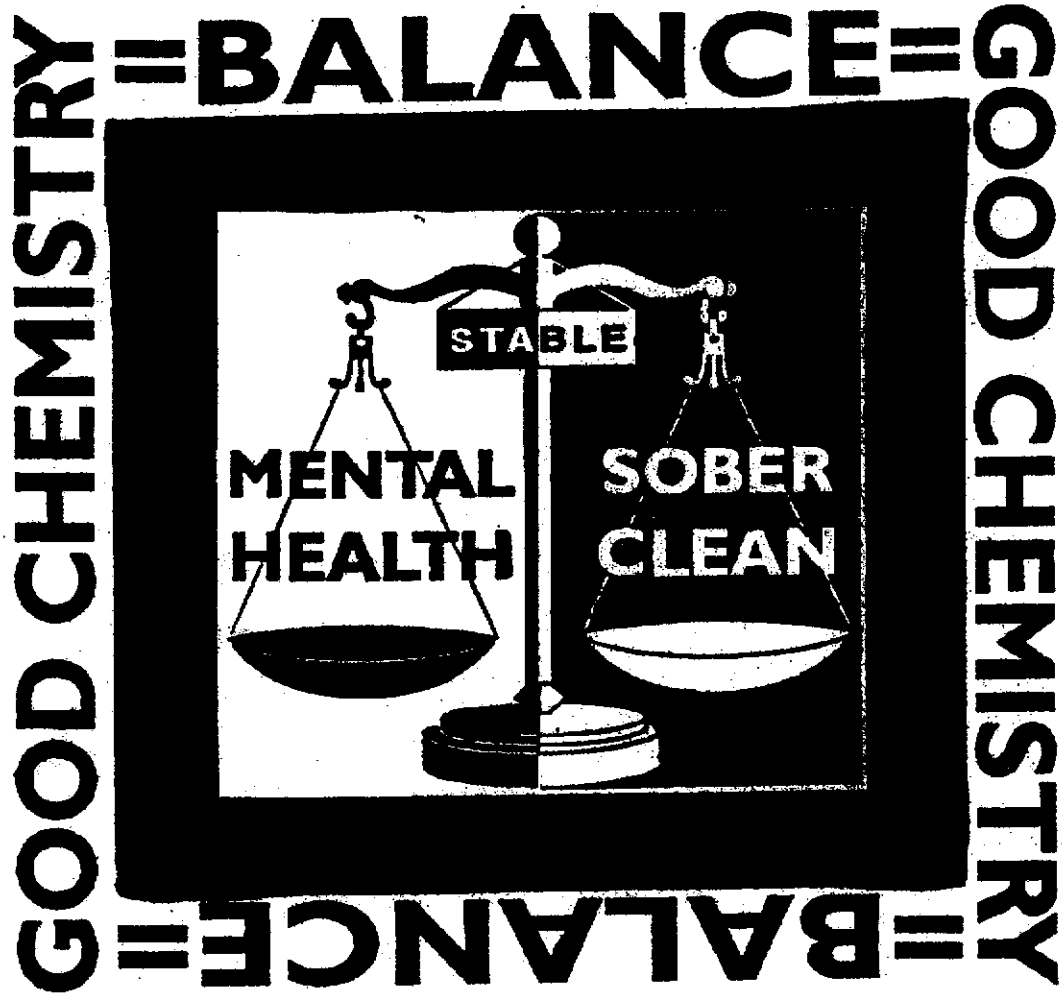
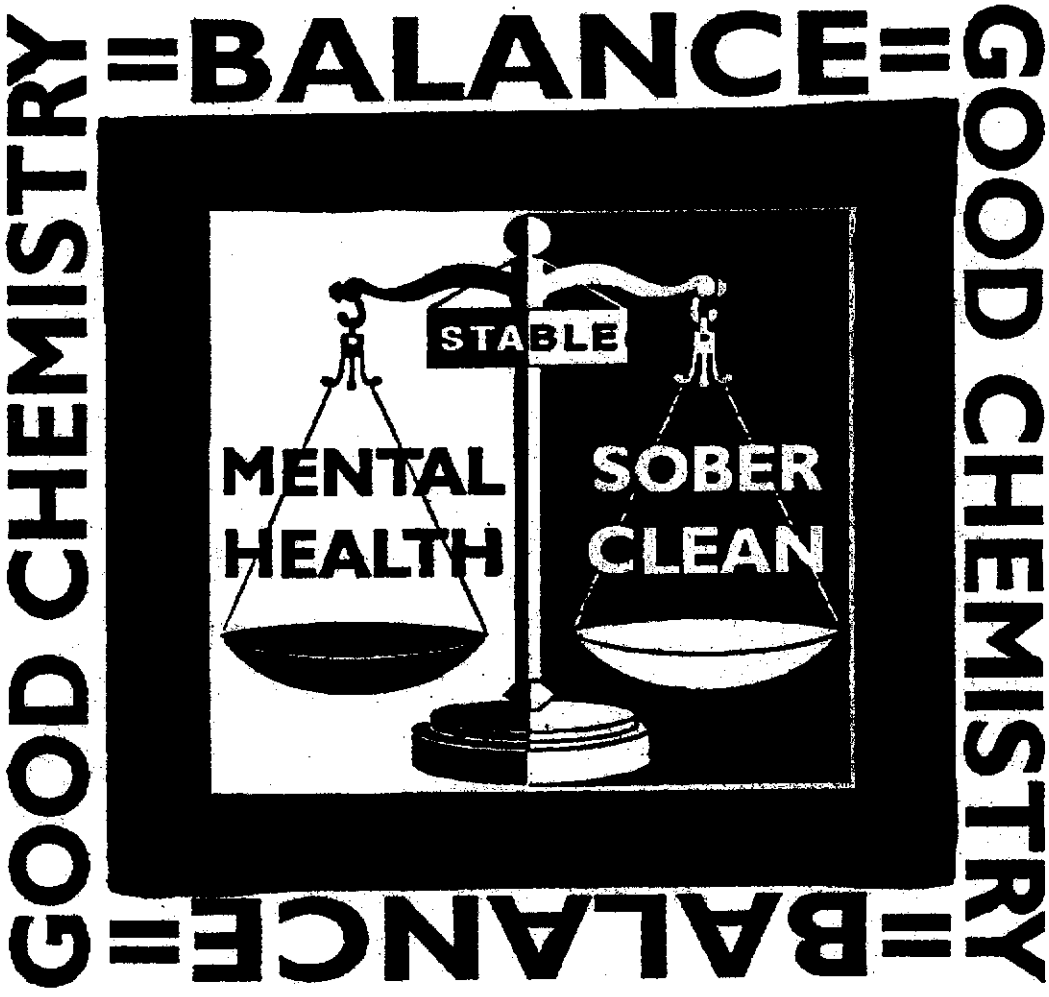


Good Chemistry Groups ™
Co-Leader Manual



Good Chemistry Groups ™
Co-Leader Manual

GOOD CHEMISTRY GROUPS
CO-LEADERS MANUAL

Written by: Deborah K. Webb, Ph.D., LCSW, LPC, LCDC

This manual is the official guideline for Good Chemistry Groups. Good Chemistry Groups are professionally co-facilitated therapy groups for adults (18 years of age or older) who have mental illnesses and chemical dependence or abuse disorders (whether they are active or in remission). As a Good Chemistry Certified Professional or Para-Professional, you may quote this manual, word for word, during groups. Or, as you feel more confident with the information, you may paraphrase the same ideas (see the summarized version of each session, for your convenience, too). However, you are expected to always use the manual's questions to stimulate group processing and discussions, and you may not change the format of the groups. One of the most important attributes of excellent Good Chemistry co-leaders is the ability to encourage and facilitate the natural discussions and processing done by the group, while at the same time, keeping the group focused on the session topic for the day.

Before you start a Good Chemistry Group, you and at least one reliable co-leader must agree to attend all meetings (and not be absent at the same time). It is vital to consistently offer the group at least once per week once it has been initiated, no matter who changes jobs, is ill, is on vacation, et cetera. As you develop several Good Chemistry meetings for your community, it is helpful to have a roster of co-leaders that fill-in for each other, as needed. One of the best benefits of establishing Good Chemistry Groups is the opportunity to network with other co-leaders.

It is important for leaders and participants to express genuine respect for each other, even when they disagree. In general, co-leaders must ensure the Good Chemistry Group experience is a pleasant and safe one by not allowing intoxicated, belligerent, agitated, or delusional individuals to dominate groups. Therefore, at times, one co-leader may have to exit the group with an unstable participant and offer them help on a one-to-one basis while the other co-leader continues the group. You are responsible for making all needed linkages and referrals after each group, as well as all necessary documentation.

As for the meeting format, please ask participants to raise their hands when they want to speak, tolerate only one person speaking at a time (no side conversations), and keep outside interruptions to a minimal (no formal breaks or refreshments during

the meeting). Hold each group for precisely (and no longer than) one hour (unless the participants are seriously impaired, such as those on an extended care unit of a state hospital, where 15 to 30 minutes may be the maximum attention span).

In addition, all meetings must be called "Good Chemistry Group." You may add an adjective to distinguish one meeting from another such as the "Drop-In Center Good Chemistry Group." You may not use any portion of this manual without proper attribution to the Author, Dr. Webb. You may not change the content or order of the sessions or format of the groups.

Furthermore, regarding Michael Bricker's copyrighted STEMSS materials, you may use them for "non-profit personal and professional use" including "the right to duplicate and disseminate such copies, so long as the Author's copyright is acknowledged." However, again, you cannot "alter the content, use any portion without proper attribution, or derive personal profit from their use without further release from the Author in writing. Such use is reserved under Copyright law" (Bricker, 1992).

Regarding other supporting materials, you must write each author for a copy of his/her suggested articles, handouts, et cetera. You may not copy or distribute his/her materials without written permission.

As Good Chemistry develops over the years, Dr. Webb will be suggesting changes in the model as well as suggesting various new reference materials. If you are interested in receiving such updates, it is your responsibility to provide your current e-mail address to Dr. Webb. Debbie Webb's address is P.O. Box 3073, Austin, Texas, 78764-3073; her cell phone is: (512) 799-9358; & her e-mail address is: debbiewebb@aol.com

Thank you for your interest in and dedication to assisting and offering true solution-based hope to those who must face multiple challenges on a daily basis.

THIS SIGNED CERTIFICATE VERIFIES THAT

_____

HAS SATISFACTORILY COMPLETED

CO-LEADER TRAINING (BEGINNER'S LEVEL)

OF

GOOD CHEMISTRY GROUPS:

A THERAPY GROUP MODEL

FOR

INDIVIDUALS WITH MENTAL ILLNESSES &

SUBSTANCE USE DISORDERS (COPSD)

ON THE _____ DAYS OF _____, _____.

_____

Deborah K. Webb, Ph.D., LCSW, LPC, LCDC
Dual Diagnoses Consultant
Continuing Education Coordinator
P.O. Box 3073
Austin, Texas 78764-3073

MAINTAINING THE INTEGRITY OF GOOD CHEMISTRY GROUPS

Maintaining the integrity of this therapy model is very important. This is a copyrighted manual and program. Therefore, you may not train groups of persons or make unlimited copies of this manual without prior permission from Dr. Debbie Webb. Those who infringe on this copyright should expect legal action to be taken by Dr. Webb. However, *GC* Co-Leaders who are licensed professionals (not para-professionals), especially those who have received certification from Dr. Webb to lead these *GC* Groups, and others with necessary qualifications, may, on occasion, see the need to train (one on one) and supervise other Good Chemistry Co-Leaders. If you want to do so, you must do the following:

1) choose only a qualified professional to train and supervise making sure she or he has a positive and hopeful attitude about serving persons with dual diagnoses (para-professionals can only assist professionals who lead *GC* Groups);

2) have the person contact Dr. Webb at debbiewebb@aol.com and ask for an electronic copy of the *GC* Manual;

3) if at all possible, co-lead all sessions with the trainee, yourself, to ensure their questions are answered;

4) write to Dr. Webb at debbiewebb@aol.com if you or your referred trainee have any questions that need to be answered at the start, or any time thereafter;

5) stay in touch because the *GC* Co-Leader's Manual is updated on a consistent basis;

6) also stay in touch because there will be a Good Chemistry website someday where you can download the *GC* Manual in pdf format. ☺ Thanks!

Good Chemistry Therapy Groups
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1. Set Group Guidelines and Make Introductions (p. 6-7)

2. Read STEMSS 6-Step (M. Bricker, 1987, 1991) (p. 7-8); Or
   Dual Recovery Anonymous Steps (Copyright T. Hamilton, 1994) (p. 9)

3. Read Good Chemistry Do's and Don'ts (Webb, 1990) (p. 10-11)

4. Read Good Chemistry Mottos (Webb, 1990) (p. 12-13)

Sessions One Through Nine by Deborah K. Webb, PhD, LCSW, LPC, LCDC:

Session One: "The Signs And Symptoms Of Mental Illness, Alcoholism, Drug Addiction, and Substance Abuse." (p. 15-21)

Session Two: "How the Illnesses Overlap and Interact: Mental Illnesses And Substance Abuse, Dependence Or Use" (p. 22-25)

Session Three: "It is Dangerous to Mix Substances with Medications" (p. 26-31)

Session Four: "Taking a Closer Look at the Dangers of Mixing Medications with Alcohol, Marijuana and Cocaine" (p.32-42)

Session Five: "Exploring Alcoholics Anonymous and Other 12-Step Programs" (p. 43-51)

Session Six: "The Official AA Policy Regarding Medications" (p. 52-56)

Session Seven: "Recognizing Cues and Triggers That Lead To Relapse. Preparing Solutions" (p. 57-64)

Session Eight: "It is Important to Ask for Extra Help When I Need It." (p. 64-69)

Session Nine: "It is Important to Stay Involved in Treatment." (p. 70-74)

INTRODUCTION FOR ALL GOOD CHEMISTRY MEETINGS:
(Note: This should take approximately 15 minutes of a one hour group.)

Say: "Good Chemistry is a group for those of us who have mental illness(es), substance abuse & dependence. It is not meant to take the place of AA or any other twelve-step program, but to supplement them. The first Good Chemistry group was started in Austin, Texas in October of 1990 by Dr. Debbie Webb & a small group of men & women who have dual diagnoses. The early members found out how important it is for us to have a safe place to come and discuss common problems with others who really understand and face the same challenges. The scales of balance were chosen as the symbol of our groups because having 'Good Chemistry' means having balance in our mental, physical, spiritual and emotional life." Welcome to our meeting!

Good Chemistry Meeting Format:

Say: "We start our groups the same way every time we meet. First we take turns reading the STEMSS 6-Steps; then we read together, as a group, the Good Chemistry Do's and Don'ts, and Mottos. During most of our meeting, we explore various recovery topics in depth, sharing knowledge and solutions to our problems. One of the best, most important things we share is hope for our recovery! We know that even though it is harder to manage two or more illnesses than only one, it IS possible! By regularly attending Good Chemistry Groups, and other recovery programs, we have discovered the power of totally investing ourselves in our own recovery. We are willing to do whatever it takes to stay mentally, physically, spiritually and emotionally stable! For example, most of us willingly take carefully prescribed medications, every day. We also do whatever it takes to not drink alcohol or abuse drugs anymore. We know good health does not "just happen." Instead, we accept the fact that we must work hard every day to stay sober, clean, & stable! At Good Chemistry Groups, each of us can expect to receive positive support and encouragement as we work dual programs of recovery."

Say: "It is important for us to treat each other with dignity and respect, even when we disagree about something. As adults, we always take turns when we talk, strive to keep our language "clean," recognize everyone is entitled to her or his own opinion, and don't carry on side-conversations during group. We share our personal experiences with mental illnesses, substance use and dependence. We tell each other what works for us. Tips on how to become and stay clean, sober and stable are always welcomed. We also

promise to keep everything we hear at this meeting confidential so that all of us can speak openly and honestly. After group is over, we encourage new members to stay for a few minutes and get to know us better. Thanks for choosing to attend a Good Chemistry Group!"

STEMSS:

Say: " Okay, please look at the first page of the handouts. Ask: What does S,T,E,M,S,S stand for?" (correct answer is: Support Together For Emotional And Mental Serenity And Sobriety.) Say "That's right."

Ask: "Who developed the STEMSS six steps?" (Correct answer is Michael Bricker.)

Say: "Michael Bricker adapted the twelve steps of AA into the six steps of STEMSS in order to address the needs of people with dual diagnoses of mental illness and substance abuse or dependence. Each week, we take turns reading these."

Ask: "Who wants to read number one?" (Someone reads number one.) Say: "Thank you" or "that's right," etc.

Ask: "Who will read number two?" (someone reads number two.)
Say: "Thank you" or "notice how each step builds on the one before it."

Ask: "Who will read number three?" (Do the same for the rest of the steps). Say: "Thank you" (or make a short, relevant comment after each person participates).

(Use the same process if you choose to have your GC group read the Dual Recovery Anonymous 12 Steps on weeks when you are studying 12-Step programs. See GC Sessions 5 & 6.)

STEMSS

Support Together for Emotional and Mental Serenity and Sobriety

1. I admit and accept that my mental illness is separate from my chemical dependency, and that I must work a "double recovery" Program.

2. As a result of this acceptance, I am willing to accept responsibility for my Life and help for my recovery.

3. As a result of this acceptance I came to believe that, with help and understanding, Recovery is possible.

4. As a result of this belief, I accept the fact that medical management must play a large part in my Recovery process. This may include prescribed medications taken as directed.

5. As part of this Recovery process, I accept the fact that I must maintain a lifestyle free from all "recreational" chemicals...including alcohol and drugs.

6. In following these Steps throughout my life, I will reach my goals and help others to begin the Recovery process.

NOTE: These Steps are designed to complement (not replace!) those of Alcoholics & Narcotics Anonymous.

Michael G. Bricker
Consultation in Recovery from
Addiction and Mental Illness
322 Main St. (Newburg)
West Bend, WI 53095

The Twelve Steps of Dual Recovery Anonymous

1. We admitted we were powerless over our dual illness of chemical dependency and emotional or psychiatric illness - that our lives had become unmanageable.

2. Came to believe that a Higher Power of our understanding could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of our Higher Power, to help us to rebuild our lives in a positive and caring way.

4. Made a searching and fearless personal inventory of ourselves.

5. Admitted to our Higher Power, to ourselves, and to another human being, the exact nature of our liabilities and our assets.

6. Were entirely ready to have our Higher Power remove all our liabilities.

7. Humbly asked our Higher Power to remove these liabilities and to help us strengthen our assets for recovery.

8. Made a list of all persons we had harmed and became willing to make amends to them all.

9. Made direct amends to such people wherever possible, except when to do so would injure them or others.

10. Continued to take personal inventory and when we were wrong promptly admitted it, while continuing to recognize our progress in dual recovery.

11. Sought through prayer and meditation to improve our conscious contact with our Higher Power, praying only for knowledge of our Higher Power's will for us and the power to carry that out.

12. Having had a spiritual awakening as a result of these Steps, we tried to carry this message to others who experience dual disorders and to practice these principles in all our affairs.

From a book by Tim Hamilton & Pat Samples (1994). *The Twelve Steps and Dual Disorders: A Framework of Recovery for Those of Us with an Emotional or Psychiatric Illness.* Hazelden Educational Materials: Center City, Minnesota 55012-0176. For more information contact the Dual Recovery Anonymous Central Service Office, P.O. Box 8107, Prairie Village, Kansas 66208.

Good Chemistry Do's and Don'ts:

Say: "Now please turn to the next handout called the Good Chemistry Do's and Don'ts. Ask: What does MICAA stand for?" (The correct answer is mental illness, chemical abuse and addiction). Ask: "Who developed the Do's and Don'ts, Mottos & Good Chemistry Groups?" (The correct answer is
Debbie Webb.)

Say: " Each week, we read the Do's and Don'ts together, out loud. Let's all read, together, at the same pace, and really listen to what we are saying." Say: "Number one," (and then set the pace of the reading) and then say: "Number two," (and so on, through number eight).

(Note: Please see instructions for Mottos, next.)

GOOD CHEMISTRY DO'S AND DON'TS

MICAA (MENTAL ILLNESS, CHEMICAL ABUSE & ADDICTION)

1. DON'T BUY ALCOHOL OR DRUGS FOR MYSELF OR OTHERS.

2. DON'T "HANG OUT" WITH PEOPLE WHO USE OR DEAL.

3. DON'T GIVE OTHERS MY MEDS.

4. DON'T GO TO LIQUOR STORES, BARS OR PLACES THAT MAKE ME WANT TO USE.

5. DO TAKE MY MEDICATIONS AS PRESCRIBED.

6. DO DISCOVER MY OWN CUES: RECOGNIZE AND AVOID THINGS AND SITUATIONS THAT MAKE ME WANT TO USE.

7. DO LEARN TO HAVE "NATURAL HIGHS" AND "GOOD CHEMISTRY" BY SOCIALIZING AND DOING FUN THINGS WITHOUT USING.

8. DO PARTICIPATE IN PLENTY OF HEALTHY ACTIVITIES LIKE GOING TO AA MEETINGS, CHURCH, SHOPPING, PLAYING OR WATCHING SPORTS, AND LISTENING TO MUSIC (WHATEVER MAKES ME FEEL GOOD WITHOUT USING).

12

Good Chemistry Mottos:

Say: "Now please turn to the Good Chemistry Mottos handout. Let's read these together like we did the Do's and Don'ts. Say: "Number one," and then "Number two," (and so on through number seven).

GOOD CHEMISTRY MOTTOS

MICAA (MENTAL ILLNESS, CHEMICAL ABUSE & ADDICTION MOTTOS)

1. I CHOOSE AN ALCOHOL AND DRUG-FREE LIFESTYLE FOR MY OWN GOOD PHYSICAL AND MENTAL HEALTH.

2. I CHOOSE TO TAKE MY PRESCRIBED MEDICATIONS FOR MY OWN GOOD MENTAL HEALTH.

3. I WILL NOT ENABLE MYSELF OR OTHERS TO DRINK AND DRUG.

4. I WILL POINT THOSE HAVING PROBLEMS TO APPROPRIATE HELPERS.

5. I BELIEVE IN BEING A "GOOD SAMARITAN" BY REACHING OUT TO AND HELPING THOSE IN NEED.

6. I CAN MAKE A POSITIVE DIFFERENCE IN THE LIVES OF OTHERS WHEN I VALUE MY OWN LIFE AND SOBRIETY.

7. IT IS OKAY TO DISCOVER AND NURTURE THE POSITIVE PARTS OF MYSELF SO THAT I CAN CONTINUE TO GROW AND BE HEALTHY.

Ask: "Who wants to say something about the STEMSS, Do's and Don'ts, or Mottos that we just read?" Or ask: "Have any of these things come up this past week?" Or "Which one of these is your favorite or means the most to you today?" (Let anyone briefly express his/her comments, and encourage the group to discuss what is brought up, and to give each other constructive feedback.)

Say: "One big reason we're here is to learn how to successfully manage the symptoms of all our illnesses." Ask: "Has anyone experienced any mental illness symptoms or substance problems lately that we can discuss?" (Note: Remember, this is your chance to incorporate the information about symptoms and diagnoses [Session One] into every meeting, as needed. Please have your *DSM IV* handy.)

(When discussion dies down) say: "The floor is now open for any other things you may want to briefly bring up, before we go on to the topic for today." (Remember, unless this is a research group, you have the occasional option of continuing with the on-the-spot group topic instead of introducing the topic for today; just make sure what you process has to do with mental health and substance abuse or dependence, and stay solution-oriented.)

Dual Diagnoses Topic for Today's Meeting:
(Note: This information and most importantly the processing and discussions it stimulates among attendees should take approximately 45 minutes of a one hour group.)

Say: "Okay, now it is time for us to move on to our dual diagnoses discussion topic for today. Our topic is: ...". (Turn to next consecutive session, announce session title/topic and begin.)

Session One, Summarized Version
Good Chemistry

(Necessary reference: Diagnostic and Statistical Manual of Mental Disorders IV-R or The Quick Reference to the Diagnostic Criteria from the DSM-IV-R. Alternative references: Channing Bete materials. (To facilitate finding materials in the DSM rapidly, highlight the names and page numbers of the most common diagnoses in the diagnostic index in the back of your book, before class: schizophrenia; schizoaffective disorder; bipolar disorder; major depression; dysthymia; anxiety; substance use disorders: dependence; abuse.)

Topic: Signs and symptoms of mental illnesses and chemical dependency.

Questions to facilitate discussion:

1. "How many of us know our diagnoses and are willing to share them with the group?" (Call on all members that raise their hands and allow them the time to give their diagnoses plus discuss them briefly, if they want.)

2. "How many of us have ever wondered how a psychiatrist or other professional comes up with a diagnosis?" The answer is that the professional uses a book.

3. "What's the name of this book used to determine diagnoses?" (If anyone knows, praise them and say "That's right!"). (Hold up a copy of the Diagnostic and Statistical Manual, DSM-IV-R, or the Quick Reference to the Diagnostic Criteria from the DSM-IV-R, and announce the name. What's special about this book is that it fully describes the signs and symptoms of each illness. One person rarely has all the symptoms of any disorder.

4. "Which mental health diagnosis do we want to look up first?" (Look up the first example a group member gives, such as "schizophrenia" and read the highlights from it.)

5. "Has anyone has had any of these symptoms before?"

6. "How does it help us to know a lot about our own mental illness?" (Discuss this for awhile.)

7. Nicotine and caffeine are also drugs. "How many of us are 'addicted to' cigarettes or coffee?" (Discuss how legal drugs like nicotine, caffeine and alcohol can impair our health.)

8. "Who's tried to quit smoking? Was it easy? Did you have any problems?"

9. "Which other chemical dependency diagnosis do we want to look up now?" (Look up the first example a group member gives, such as "alcohol dependence" and read the highlights from it.)

10. Regarding alcohol: "All right, who can relate to what I've been talking about? Who cannot drink half a beer, sit it down, and just walk away, or pour the rest down the drain, as if it were no big deal?" "How did you figure out that you were an alcoholic?" "When did you start believing you really had a problem?" (Group processing. Do likewise with other drugs.)

11. "Who knows what vulnerability' to substances is?" (Some people with mental illnesses have bad results when they use even small amounts of substances, such as one beer or one joint.)

12. "Has anyone here today ever had problems after using small amounts?"

13. When a person has a mental illness, what the person really has is fragile brain chemistry, often called an imbalance. Substances make the imbalance even worse while carefully prescribed medications make it better. "So, even though mental illness and chemical dependency cannot be 'cured,' can a person ever hope to successfully manage and balance both illnesses and be healthy?" (The answer is yes!)

"I hope you have enjoyed getting to know more about diagnoses and the way they are based on symptoms. To learn even more, please ask provider to let you look at the DSM anytime you have questions or want to learn more."

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session One, Full Text Version
Good Chemistry

(Necessary reference: *Diagnostic and Statistical Manual of Mental Disorders IV* or *The Quick Reference to the Diagnostic Criteria from the DSM-IV.* Alternative references: Channing Bete materials. (To facilitate finding materials in the *DSM* rapidly, highlight the names and page numbers of the most common diagnoses in the diagnostic index in the back of your book, before class: schizophrenia; schizoaffective disorder; bipolar disorder; major depression; dysthymia; anxiety; substance use disorders: dependence; abuse.)

Say: "Our topic for today is mental illness, alcoholism, drug addiction, and substance abuse. We will fully explore the signs and symptoms of these illnesses.

First of all, it is very important for us to know what illnesses we have."

Ask: "How many of us know our diagnoses and are willing to share them with the group?" (Call on all members that raise their hands and allow them the time to give their diagnoses plus discuss them briefly, if they want.)

(When they have all finished:)
Say: "Thank you very much. Now, let's talk about this even more. How many of us have ever wondered how a psychiatrist or other professional comes up with a diagnosis?" The answer is that the professional uses a book.

Ask: "What's the name of this book used to determine diagnoses?" (If anyone knows, praise them and say "That's right!"). (Hold up a copy of the *DSM-IV* or the *Quick Reference to the Diagnostic Criteria from the DSM-IV*, and announce the name.

Say: "It's usually just called the *DSM*. What's special about this book is that it fully describes the signs and symptoms of each illness. One person rarely has all the symptoms of any disorder. Like a cookbook, the *DSM* tells how many symptoms from each category must be present for a person to receive a certain diagnosis."

Say: "Let's look up some of the diagnoses that were shared with the group a few minutes ago and read about them. Ask: Which one do we want to do first?" (Look up the first example a group member gives, such as "schizophrenia" and read the

highlights from it.)

Ask: "How many of us have this diagnosis?" (Call on those who raise their hands.) Ask: "Have you ever experienced any of the symptoms we just read?" (Let them discuss symptoms.)

Say: "Okay, let's go on to another diagnosis now." (Continue this exercise until everyone's mental health diagnoses have been at least briefly covered.)
Say: "Those of us who have mental illnesses are not alone. Mental illnesses are common. About one out of every three people we know will have a mental illness during their lifetime." Ask: "How does it help us to know a lot about our own mental illness?" (Discuss this for awhile.)

Say: "Now it is time to explore the symptoms of chemical dependency and substance abuse problems. Let's start with substance dependence. A person can be dependent on a variety of substances, such as alcohol, marijuana, nicotine, speed, heroin or cocaine. Let's use nicotine as our first example."

Say: "Let's look at how many of us are 'addicted to' or 'dependent' on cigarettes, which contain a legal but very addictive drug for a lot of people. We know that some people try or 'use' a few cigarettes but never get 'hooked.' They can throw brand new cigarettes in the trash can and just walk away! However, for many of us, when we tried cigarettes, we got 'hooked' on the drug called nicotine that the cigarette smoke rushed to our brains when we inhaled. At first, like others, we may have started using cigarettes to change the way we feeling such as nervous. However, as we used over and over and became 'hooked' or addicted, we found we couldn't stop smoking without a hard struggle, if at all." Ask: "Does anyone relate to what I'm saying? Is anyone here addicted to nicotine? Who's tried to quit smoking (or chewing)? Was it easy? Did you have any problems? Tell us all about those problems, please." (When processing dies down, say): "In general, I think that we all agree that persons who have lots of problems giving up cigarettes are addicted to cigarettes."

Say: "Okay, now let's use alcohol as our next example. What is dependence on alcohol commonly called?" (Wait to see if anyone says "alcoholism," or if not, give them the answer.) Just like some people could care less about cigarettes while others get totally 'hooked' on them, some people don't care for alcohol while others can't stop using by themselves. Those of us who can relate to not being able to easily stop drinking alcohol probably have some kind of diagnosable alcoholism or alcohol abuse disorder. Chances are that we have already noticed that not everyone is the same as us

when it comes to drinking, and we've worried about how much we drink when we drink alcohol of some sort. We already know something that a lot of other people don't know. Many people don't even realize that alcohol is a powerful drug and that it can hurt them, especially if they also have a mental illness! They think that drinking beer or wine coolers is no more harmful than drinking soda pop or water! They are fooled by the liquid form of this drug called alcohol. When they hear the word 'drug,' they think of all kinds of pills and dope, instead. However, those of us that are alcoholics certainly know the difference. We know what it feels like to be 'hooked' on beer, wine, malt liquor, vodka or whatever and that alcohol is no less powerful of a drug than any other drug including heroin and cocaine!" Ask: "All right, who can relate to what I've been talking about? Who cannot drink half a beer and just walk away or pour the rest down the drain as if it were no big deal?" "How did you figure out that you were an alcoholic?" "When did you start believing you really have (or had) a serious problem?" (Group processing.)

Say: "What makes this even more complicated is that according to Dr. Jellinek, there seem to be many different kinds of alcoholism so everyone's symptoms may be a little different. Let's look at how the *DSM* defines alcohol dependence. (Read the criteria and let group discuss it.) "Just like the fact that millions of people have mental illnesses, millions of people are addicted to alcohol and other forms of drugs. And, if we have a mental illness, we are four times more likely to also have a problem with alcohol and other drugs. It's a very hard fact of life."

Say: "There is one more problem that those of us with mental illnesses must also consider when we talk about chemical dependence and abuse. It's called 'vulnerability' to substances. Doctors such as Kenneth Minkoff and Bert Pepper have pointed out the phenomenon of substance vulnerability in persons who have mental illnesses. According to the Merriam-Webster dictionary (1974), vulnerable means 'capable of being wounded or susceptible to wounds.' Some people with mental illnesses are injured or negatively affected by mere use of even small amounts of substances. For example, if we are substance vulnerable, we might only have to drink one beer or smoke one joint to become mentally unstable, and maybe even wind up in a mental hospital!" Ask: "Has this ever happened to anyone here today?" (Discuss.) Say: "We'll talk more about how our illnesses overlap and interact with each other next time. The point is, many persons are very vulnerable to even small amounts of substances so we need to know if we are one of those persons. "

Say: "We talked a lot about our illnesses today. It all may sound fairly hopeless, but we still have hope. In Good Chemistry, we talk about use of substances as being a

health issue, not a moral issue. We are not 'bad' people because we have illnesses. We are just common people who are tired of being sick and who are trying to get healthy. With the only exception being our mental health medications, the fact is, no matter how much or how little any of us use alcohol and other drugs, we know that using is simply not good for our health. Alcohol and other drugs mess up the balance of our brain chemistry and work against our medications. Together, we look for ways to achieve better health."

Say: "When a person has a mental illness, what the person really has is fragile brain chemistry, often called an imbalance. Substances make the imbalance even worse while carefully prescribed medications make it better. Therefore, to choose to take medications appropriately and to choose not to use drugs or to drink alcohol in any form is to choose good health through good brain chemistry. Of course, if we are still using, we may need help to safely detoxify our brains and bodies off of alcohol and other drugs before we regain our ability to choose health over sickness."

Ask: "Here's a very important question that each of us must ask ourselves: Even though my mental illness and my substance dependence cannot be 'cured,' can I ever hope to successfully manage them so I can be healthy?" (The answer is yes!) Say: "The main goals of Good Chemistry Groups are for each of us to learn and share with each other how we successfully manage all of our illnesses and become the captains of our own treatment teams!"

Say: "I hope you have enjoyed getting to know more about diagnoses and the way they are based on symptoms. To learn even more, please ask your counselor, social worker, nurse or doctor to let you look at the *DSM* anytime you have questions or want to learn more."

Toward the end of group, Say: "We only have a few more minutes left today." Ask: "Does anyone have any final comments they want to make?"

Closing Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First, I am going to hand out GC and/or AA chips to members, as earned. Desire chips for anyone who expresses the desire to become or stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips for anyone who has been sober, clean & mentally

stable for 1 month, 2 months, 3 months [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, as Good Chemistry members we realize that it is extremely important for each of us to know and accept all of our own illnesses. Even though it can be scary and painful at first, we know that it is necessary for us to scientifically convince ourselves 'beyond the shadow of a doubt' that we do indeed have two or more serious illnesses. As we finally acknowledge our illnesses and 'come to grips' with them, instead of denying and fighting against their existence, we finally have enough energy, motivation, and 'know-how' to successfully manage our illnesses and improve the quality of our lives. On a daily basis we pay attention to our own symptoms and ask for help when we need it; we carefully take appropriately prescribed medications; and we do not drink any form of alcohol or use any other kinds of drugs. We also attend Good Chemistry groups, 12-Step meetings and other therapies, as recommended by appropriate helpers such as treatment professionals. This is what 'recovery' and 'being the captain of our own treatment team' is all about."

Say: "Our meeting is now officially over. For those of you that want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back; it works if you work your programs!"

Session Two, Summarized Version
Good Chemistry

(Suggested references: "The twelve parallels between chemical dependency and mental illness" by Bricker, 1989; or Minkoff handout; or Evans & Sullivan handout.)

Topic: Mental illnesses and chemical dependency have a lot in common.

Questions to facilitate discussion:
1. Last time, we discussed how mental illnesses and chemical dependency are probably caused by fragile, unbalanced brain chemistry. "Can we make the balance better by taking carefully prescribed medications and by not using any alcohol or other drugs?" (Yes!)

2. "Is chemical dependency a mental illness?" (Yes, according to the DSM-IV-R!)

3. "What are more descriptive words for mental illnesses?" (Neuro-biological disorders or NBD.)

4. Coping with a mental illness and a substance abuse problem at the same time is like cooking several pots of food on the same stove at one time. To be successful, you must continue stirring all the pots on the stove." "If you only stir one pot, and ignore the rest, what will happen to the others?" (The others will burn up!) Likewise, it is not easy to have to manage more than one illness at a time, but it <u>is</u> possible, and the <u>results are good</u>!"

5. Having hope for ourselves is very important! Let's focus on our successes for a little while today. "Who has been clean, sober & stable for awhile and would be willing to talk about it?" (Let everyone who is willing share their successes. Thank them!)

6. "What do mental illnesses and substance dependence have in common?"
(Let the group members process this based on their own experiences.)

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Two, Full Text Version
Good Chemistry

(Suggested references: "The twelve parallels between chemical dependency and mental illness" by Bricker, 1989; or Minkoff handout; or Evans & Sullivan handout.)

Say: "Our topic for today is how the illnesses of mental illness and substance abuse or dependence interact plus how these illnesses are alike, or overlap. This includes mental illnesses interacting with substance abuse, dependence or use.

Say: If you will please recall, the last time this group met, we (summarize last group) touched on the example of a person using even a small amount of alcohol or marijuana, such as one beer or one joint, and then becoming mentally unstable, and even winding up in a mental hospital. For some people it takes just a little use and for others it takes a lot more, but the bottom line is that everyone's mental health is negatively affected by use of alcohol and other drugs. Last time, we also discussed how mental illnesses are probably caused by fragile, unbalanced brain chemistry. We can make the balance better by taking carefully prescribed medications and by not using any alcohol or other drugs."

Say: "It is important to realize how much overlap or common ground there is between mental illness and substance abuse problems. Most importantly, because the illnesses have a lot in common, they can be successfully treated at the same time. Besides, since they interact as much as they do, if we only treat or pay attention to one illness and not the other, we risk getting sick again."

Say: "In Good Chemistry, we often use this example: coping with a mental illness and a substance abuse problem at the same time is like cooking several pots of food on the same stove at one time. To be successful, you must continue stirring and minding all the pots."

Ask: "If you only stir one pot, what will happen to the others?" (Let them answer.) (If no one answers, Say: "The others will burn up.") "Likewise, it is not easy to have to manage more than one illness at a time, but it is possible, and the results are good!"

Say: "We're all here to help each other stay clean, sober and stable. I know it's possible, it can be done, because I've seen so many Good Chemistry members

successfully manage both illnesses." (Ask them to say out loud, as a group): "Since others can manage multiple illnesses, so can I!" "I have hope for myself!"

Say: "Having hope for ourselves is very important! Let's focus on our successes for a little while today." Ask: "Who has been clean, sober & stable for awhile and would be willing to talk about it?" (Let everyone who is willing share their successes.) Say: "That was great. Thank you!"

Say: "Now, let's talk about how much mental illnesses and substance abuse or dependence have in common and how much they make each other worse when left untreated. Who would like to share with us, based on experience, how much mental illness and substance abuse interact or overlap?" (Let the group members process this based on their own experiences.)

(If you want, use the following handouts or similar ones to stimulate their ideas and discussions: Bricker; Minkoff or Evans & Sullivan. If you do use a handout: Say: "Let's take turns reading a few of these ideas and then launch into our own discussion. We may not always agree with the handout or each other, but that's okay." Ask: "Who will read number one?" Do the same for some or all of the handout. Remember to Say: "Thank you" after each person shares or reads.)

Toward the end of group, Say: "We only have a few more minutes left today." Ask: "Does anyone have any final comments they want to make?"

Closing Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First, I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable."

Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug the recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean & mentally stable for 1 month, 2 months, 3 months [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, it is important for us to remember that mental illnesses and chemical dependency do have a lot in common and can interact. Thankfully, we have the hope of 'recovery' because when we manage both illnesses at the same time, we can be healthy."

Say: "Our meeting is now officially over. For those of you that want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back! It works if you work your programs!"

Session Three, Summarized Version
Good Chemistry

(No necessary references.)
Topic: It is dangerous to mix substances with medications.

Questions to facilitate discussion:

1. It is important for us to warn and remind each other about the damage done by mixing alcohol and other drugs with our medications. One thing is for sure: It is definitely dangerous to mix medications with all street drugs, many over the counter drugs, and, of course, alcohol. **"Does mixing medications with alcohol or drugs change the strength and effectiveness of our medications?" (Yes!)** Some combinations make the mental health medication too strong. For example, mixing some medications with alcohol will make me feel as if I took too much medication or drank a lot. However, with other combinations, it will feel as if I washed all the benefits of the medications out of my system and I might start experiencing mental illness symptoms such as feeling paranoid, hearing voices, or feeling very depressed again.

2. **"How many of us remember being told by our doctor or other provider about the dangers of mixing drugs and alcohol with our medications?"** (Give them plenty of time to process this question. New attendees may have never heard this warning before.)

3. "Not everyone understands that persons with mental illnesses have fragile brain chemistry and that drugs and alcohol can spoil the brain chemistry balance we so earnestly seek. Persons who are <u>not</u> mentally ill may make the mistake of judging what's okay for us by what's okay for them. A friend or loved one may offer us a beer without thinking, not realizing that it may hurt us." **"Has this ever happened to you?"** (Let them fully discuss this.)

4. "In fact, even professionals sometimes make the mistake of telling us 'social drinking' is safe and okay, but it is not! Even a small amount can hurt a person who has a mental illness. **"Has anyone ever been told by a well-meaning but uninformed professional that "one or a few drinks won't hurt?"** (Let them process such ill-advice.)

5. Good Chemistry philosophy simply states that alcohol and other non-prescribed drugs do not benefit us and can hurt our wholistic health. **"How many of us can remember having bad experiences or close calls by mixing our medications with alcohol and other drugs, even over-the-counter meds, and are willing to share those experiences with the group?"** (Call on all members that raise their hands and facilitate group processing.) Some people have overdosed and some have died this way. That is why some doctors are not willing to prescribe medications to dually diagnosed individuals unless they are sober and clean.

6. Some of us were already aware of the dangers of mixing meds with alcohol and other drugs. Thus, we may have chosen to skip our meds whenever we used. **"Who has skipped meds when drinking or drugging?"** (Give them time to raise their hands.) The good news is that we did not kill ourselves with an overdose or negative interaction. **"However, this was not a perfect solution, either, was it? What were the problems caused by stopping and starting medications every time we used and what price did we have to pay for this behavior? Who is willing to share with us?"** (Let as many members share, as possible.)

7. "Going off of meds, having the effectiveness of meds changed by drugs and alcohol, or taking meds off and on are several of the main reasons a lot of dually diagnosed people go back into mental hospitals, again and again." **"So, what is the logical, simple solution to these problems?"** (Give them time to answer.) (Staying on medications and off alcohol and other drugs helps keep us stable, clean and sober, a winning combination!")

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Three, Full Text Version
Good Chemistry

Say: "Our topic for today is that **it is dangerous to mix substances with medications.** As we all know, mental health medications are powerful, psychoactive substances that must be used carefully and only in the exact prescribed amounts.

Most people at Good Chemistry meetings take medications or "meds" as we often call them. Please think back to when you first started taking medications. In fact, we may remember signing a form saying we understood the possible side effects of our medications, such as having a dry mouth. Ask: "How many of us remember having our doctor, nurse, caseworker or pharmacist explain medication side effects for us to watch out for and report?" (Give them time to raise their hands and discuss side effects, if they want.) Say: "Most mental health professionals have been doing a fairly good job of informing people about side effects to medications because it is part of our job."

Say: "Some of us were shown a more complete list of side effects in this book called the Physicians Desk Reference or 'PDR' (Display PDR). The PDR and the writings of dual diagnoses experts such as our founder, Dr. Debbie Webb, and others such as Dr. Bert Pepper, Ms. Hilary Ryglewicz, and Ms. Kathleen Sciacca also list the dangers of mixing medications, drugs and alcohol. It is important for us to warn and remind each other about the damage done by mixing alcohol and other drugs with our medications. One thing is for sure: It is definitely dangerous to mix medications with all street drugs, many over the counter drugs and, of course, alcohol. First of all, the mixture of medications with alcohol or drugs changes the strength and effectiveness of medications. Some combinations make the mental health medication too strong. For example, mixing some medications with alcohol will make me feel as if I took too much medication or drank a lot. However, with other combinations, it will feel as if I washed all the benefits of the medications out of my system and I will lose all the benefits from the medication and might even start experiencing mental illness symptoms again such as feeling paranoid or hearing voices.

Ask: "How many of us remember being told about the dangers of mixing drugs and alcohol with our medications?" (Give them plenty of time to process this question. New attendees may have never heard this warning before.)

Say: "Not everyone understands that persons with mental illnesses have fragile brain chemistry and that drugs and alcohol can spoil the brain chemistry balance we so earnestly seek. Persons who are not mentally ill may make the mistake of judging what's okay for us by what's okay for them. For example, a friend or loved one may offer us a beer without thinking." Ask: "Has this ever happened to you?" (Let them fully discuss this.)

Say: "In fact, even professionals sometimes make the mistake of telling us 'social drinking' is safe and okay, but it is not! Some mental health professionals do not know the risks of drinking and drugging, even in small amounts, so they think that unless a person is an addict or alcoholic that using a little bit won't hurt. But, even a small amount certainly can hurt a person who has a mental illness."

Say: "Other professionals have not received a formal education about substance abuse or addiction, yet. It is not a required subject in many colleges and universities. So, they may accidentally overlook addiction or not understand that a person with alcoholism or addiction cannot safely use any amount of alcohol or drugs." Ask: "Can anyone here today relate to this? Has anyone ever been told by a well-meaning but uninformed professional that "one or a few drinks won't hurt?" (Let them process such ill-advice.)

Say: "Drinking alcohol and doing drugs is contrary to the Good Chemistry goal of achieving and maintaining balanced mental, physical, spiritual and emotional health. Good Chemistry philosophy simply states that alcohol and other non-prescribed drugs do not benefit us but can indeed hurt our wholistic health; so alcohol and un-prescribed drugs are not a part of our formula for grasping long-term good health."

Ask: "How many of you can remember having bad experiences or close calls by mixing your medications with alcohol and other drugs, even over-the-counter meds, and you are willing to share those experiences with the group?" (Call on all members that raise their hands and facilitate group processing.) Say: "Many people have overdosed and some have died this way, even with over-the-counter meds. That is why some well-informed doctors are not willing to prescribe medications to dually diagnosed individuals unless they are in recovery which means unless they are sober and clean."

Say: "Now let's look at another angle to this situation. Some of you were already aware of the dangers of mixing meds With alcohol and other drugs. Thus, you may have chosen to not take your medications whenever you used or abused substances. Ask: Who has skipped meds when drinking or drugging?" (Give them time to raise their

hands.)

Say: "Well, the good news is that you did not harm yourself with an overdose or negative interaction. Ask: However, this was not a perfect solution, either, was it? What were the problems caused by stopping and starting medications every time you used and what price did you have to pay for this behavior? Who is willing to share with us?" (Let as many members share, as possible.)

Say: "Going off of meds, having the effectiveness of meds changed by drugs and alcohol, or taking meds off and on are several of the main reasons a lot of dually diagnosed people go back into mental hospitals, again and again."

Ask: "What is the logical, simple solution to these problems?" (Give them time to answer.) Say: "Staying on medications and off alcohol and other drugs helps keep us stable, clean and sober which is a winning combination!"

(Toward the end of group:) Say: "We only have a few more minutes left today." Ask: "Does anyone have any final comments they want to make?"

Closing Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First, I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean & mentally stable for 1 month, 2 months, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups, or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, remember that it is important for us to continually ask ourselves: Is drinking and drugging really worth the risk of becoming mentally unstable or feeling overdosed and sick? I don't know about you, but I want to feel healthy! I encourage you to join me as I say "With help from my Higher Power, today I choose to do whatever it takes to be healthy including taking medications exactly as they are

prescribed and by not drinking alcohol or taking any other drugs."

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back! It works if you work your programs!"

Session Four, Summarized Version
Good Chemistry

(Required reference: D. Webb's *GC* Handout: "Warning: Psychiatric Medications Interact with Alcohol and Other Drugs.") (Suggested reference: excerpts from Dr. Bert Pepper and Hilary Ryglewicz's [1989]: "Interactions between some prescribed medications, alcohol and street drugs.")

Topic: *A* closer look at the dangers of mixing medications with alcohol, marijuana, and cocaine.

Questions to facilitate discussion:

1. Let's review and discuss the Good Chemistry handout: **"WARNING: PSYCHIATRIC MEDICATIONS INTERACT WITH ALCOHOL AND OTHER DRUGS,"** (Webb, 2000). You are welcome to keep a copy of this handout if you want one. As I read the names of various types of medication, such as anti-psychotics and antidepressants, please listen for the name of your medication(s). Then we will read the interactions of each medication with alcohol, marijuana, and cocaine.

2. (Briefly read one medication type at a time, trade names, interactions with alcohol, marijuana, and cocaine.) **"Who is taking this type of medication?"** (Make sure you cover a medication of interest to each attendee. Facilitate group processing of this information, answer questions, and encourage reactions to the information based on members personal experiences with alcohol and other drugs.)

3. **"So, do various medications interact differently with alcohol, marijuana, and cocaine? "** (Let group discuss.)

4. **"Do you think it is dangerous to mix medications with alcohol and other drugs?"** (Let group discuss.)

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Four

GOOD CHEMISTRY HANDOUT:

WARNING: PSYCHIATRIC MEDICATIONS INTERACT WITH ALCOHOL AND OTHER DRUGS

Most people with mental illnesses take prescribed medications because medications offer relief from the symptoms of schizophrenia, major depression, bipolar disorder, schizoaffective disorder, anxiety and other illnesses. Medications may also be used to treat other medical illnesses such as high blood pressure or diabetes. Scientists think these medications work by changing the availability of neurotransmitters, such as dopamine and serotonin, at the cellular level in the brain. These are the chemicals which allow neurons to carry information.

I must ask myself: **"Do I take any medications?"** (yes or no)

If yes, I do take medications, it is very important for me to know and remember the following **warning: it is dangerous to mix psychiatric medications with alcohol and other drugs and substances.** This also includes over the counter medications and medications prescribed by multiple doctors who do not know we are seeing more than one doctor).

A. If I have schizophrenia or a thought or psychotic disorder, I may be taking one of the following medications:

ANTIPSYCHOTICS/NEUROLEPTICS

Trade name	Generic name
THORAZINE	CHLORPROMAZINE
CLOZARIL	CLOZAPINE
PROLIXIN	FLUPHENAZINE
PROLIXIN D	FLUPHENAZINE D (INJECTABLE)
HALDOL	HALOPERIDOL
HALDOL D	HALOPERIDOL D (INJECTABLE)
LOXITANE	LOXAPINE
SERENTIL	MESORIDAZINE
MOBAN	MOLINDONE
ZYPREXA	OLANZAPINE
TRILAFON	PERPHENAZINE
SEROQUEL	QUETIAPINE
RISPERDAL	RISPERIDONE
MELLARIL	THIORIDAZINE
NAVANE	THIOTHIXENE
STELAZINE	TRIFLUOPERAZINE
GEODON	ZIPRASIDONE

DANGEROUS INTERACTIONS OF ANTIPSYCHOTIC MEDICATIONS (SEE ABOVE) WITH ALCOHOL AND OTHER DRUGS:

MEDICATION WITH ALCOHOL: alcohol is a central nervous system depressant. When used with one of the above medications, the strength of the medication is increased (synergistically potentiated) which further depresses the central nervous system and can cause anything from drowsiness (sedation) to breathing problems, respiratory failure, liver damage, seriously low blood pressure, a coma and death.

MEDICATION WITH MARIJUANA: when marijuana is used with one of

the above medications it can cause nausea, stimulation and/or psychosis.

MEDICATION WITH *COCAINE*: cocaine lowers the convulsive threshold and so can the above medications, so life-threatening seizures may result. also, cocaine can make the medication less effective leading to psychosis.

B. If I have **MAJOR DEPRESSION**, I may be taking one of the following medications:

ANTIDEPRESSANTS

Trade name	Generic name	
ELAVIL	AMITRIPTYLINE	(AKA: TRIAVIL)
ASENDIN	AMOXAPINE	
WELLBUTRIN	BUPROPION	
CELEXA	CITALOPRAM	
NORPRAMIN	DESIPRAMINE	
SINEQUAN	DOXEPIN	
PROZAC	FLUOXETINE	
TOFRANIL	IMIPRAMINE	
LUDIOMIL	MAPROTILINE	
REMERON	MIRTAZAPINE	
SERZONE	NEFAZODONE	
PAMELOR	NORTRIPTYLINE	
PAXIL	PAROXETINE	
ZOLOFT	SERTRALINE	
DESYREL	TRAZODONE	
SURMONTIL	TRIMIPRAMINE	
EFFEXOR	VENLAFAXINE	

ANTI-MANIC MEDICATIONS:

Trade name	Generic name
LITHIUM	
ESKALITH	
TEGRETOL	CARBAMAZEPINE

VALPROIC ACID	DEPAKENE
DEPAKOTE	DIVALPROEX
LAMICTAL	LAMOTRIGINE

MAO (MONOAMINE OXIDASE) INHIBITORS

Trade name	Generic name
NARDIL	PHENELZINE
PARNATE	TRANYLCYPROMINE

DANGEROUS INTERACTIONS OF ANTIDEPRESSANT MEDICATIONS (SEE ABOVE) WITH ALCOHOL AND OTHER DRUGS:

MEDICATION WITH ALCOHOL: antidepressants and alcohol can interact and cause serious reactions such as a high blood pressure crisis, exaggerated intoxication (antidepressant drugs potentate the effects of central nervous system depressant drugs including alcohol and barbiturates), seizures and death.

MAO INHIBITORS WITH ALCOHOL AND CERTAIN FOODS: interaction of MAO inhibitors and the following products are likely to cause a high blood pressure crisis which can lead to death. Therefore, it is absolutely necessary to completely avoid beer, wine, alcohol-free beer, reduced-alcohol beer, reduced-alcohol wine, and other products containing tyramine such as aged cheese like cheddar and camembert, pickled herring, sardines, yeast extract and chicken livers. Foods high in tryptophan (broad beans) and excessive amounts of caffeine can also cause a blood pressure crisis.

MEDICATION WITH MARIJUANA: antidepressants used with marijuana can cause drowsiness (sedation).

MEDICATION WITH COCAINE: antidepressants mixed with cocaine can cause exaggerated and lengthy intoxication and psychosis.

MEDICATION WITH AMPHETAMINES: antidepressants combined with amphetamines (sympathomimetic drugs) can cause a high blood pressure crisis which can lead to death because of circulatory collapse or intracranial bleeding.

MEDICATION WITH OTHER MEDICATION: it is important to not use decongestants and over the counter cold or hay fever preparations, or local anesthetics containing sympathomimetic amines (such as epinephrine or norepinephrine) because tricyclic antidepressants can potentiate the effects of catecholamines and cause a blood pressure crisis.

ALCOHOL WITHDRAWAL:

Trade name	Generic name
LIBRIUM*	CHLORDIAZEPOXIDE
VALIUM*	DIAZEPAM
ReVia	NALTREXONE (NARCOTIC ADDICTION)

* = potentially addictive

ANXIETY DISORDERS: (ANXIOLYTICS)

Trade name	Generic name
XANAX*	ALPRAZOLAM
ATIVAN*	LORAZEPAM
BuSpar	BUSPIRONE
LIBRIUM*	CHLORDIAZEPOXIDE
KLONOPIN*	CLONAZEPAM
TRANXENE*	CLORAZEPATE
VALIUM*	DIAZEPAM
EQUANIL*	MILTOWN (AKA: MEPROBAMATE)
SERAX*	OXAZEPAM
COMPAZINE	PROCHLORPERAZINE
STELAZINE	TRIFLUOPERAZINE
VISTARIL	HYDROXYZINE (AKA: ATARAX)

* = potentially addictive

ADHD: ATTENTION DEFICIT HYPERACTIVITY DISORDER

Trade name	Generic name
ADDERALL*	AMPHETAMINES (NARCOLEPSY TX TOO)
CYLERT	PEMOLINE
DEXEDRINE*	DEXTROAMPHETAMINE (NARCOLEPSY)
RITALIN*	METHYLPHENIDATE (NARCOLEPSY)

* = potentially addictive

EPILEPSY: (SEIZURE DISORDER)

Trade name	Generic name
TEGRETOL	CARBAMAZEPINE (AKA: EPITOL)
KLONOPIN*	CLONAZEPAM
DEPAKENE	VALPROIC ACID
DEPAKOTE	DIVALPROEX SODIUM (VALPROIC ACID)
VALIUM*	DIAZEPAM
DILANTIN	PHENYTOIN
FELBATOL	FELBAMATE
NEURONTIN	GABAPENTIN
KLONOPIN*	CLONAZEPAM
LAMICTAL	LAMOTRIGINE
MYSOLINE	PRIMIDONE
PHENOBARBITAL*	

* = potentially addictive

INSOMNIA (SLEEP DISORDER)

Trade name	Generic name
AMBIEN	ZOLPIDEM TARTRATE
DALMANE*	FLURAZEPAM
DORAL*	QUAZEPAM
HALCION*	TRIAZOLAM
ProSom*	ESTAZOLAM
RESTORIL*	TEMAZEPAM

* = potentially addictive

OBSESSIVE-COMPULSIVE DISORDER (OCD)

Trade name	Generic name
ANAFRANIL	CLOMIPRAMINE
PROZAC	FLUOXETINE
LUVOX	FLUVOXAMINE
PAXIL	PAROXETINE
ZOLOFT	SERTRALINE

OTHER MEDICATIONS FOR PSYCHOTROPIC USES:

Trade name	Generic name
CATAPRES	CLONIDINE
NEURONTIN	GABAPENTIN
CYLERT	PEMOLINE
CALAN	VERAPAMIL
ADDERALL	DEXTROAMPHETAMINE
LUVOX	FLUVOXAMINE
SYNTHROID	LEVOTHYROXINE
INDERAL	PROPRANOLOL
EPROLIN	VITAMIN E
SURMONTIL	TRIMIPRAMINE

MEDICATIONS FOR THOSE WITH ALCOHOLISM OR DRUG ADDICTION:

Trade name	Generic name
ANTABUSE	DISULFIRAM
ReVia	NALTREXONE (AKA: NALOXONE)

MEDICATIONS USED TO TREAT SIDE EFFECTS:

Trade name	Generic name
COGENTIN**	BENZTROPINE (ANTICHOLINERGIC)
ARTANE**	TRIHEXPHEIDYL (ANTIPARKINSON MED)
BENADRYL**	DIPHENHYDRAMINE (ANTIHISTAMINE)

** = Some persons may abuse this drug

References:

1) Physicians Desk Reference;
2) The PDR Pocket Guide to Prescription Drugs;
3) Hansen's Book;
4) "Interactions between some prescribed medications, alcohol and street drugs" by Dr. Bert Pepper & Hilary Ryglewicz (1989).
5) Austin Travis County MHMR Center Formulary (2001).

*** PLEASE NOTE: MEDICATIONS THAT PERSONS WITH ALCOHOLISM OR DRUG ADDICTION MAY HAVE TO AVOID (BECAUSE THEY HAVE THE POTENTIAL FOR ABUSE AND CROSS-ADDICTION) ARE DENOTED WITH AN ASTERISK.**

Session Four, Full Text Version
Good Chemistry

(Required reference: D. Webb GC Handout: "Warning: Psychiatric Medications Interact with Alcohol and Other Drugs.") (Suggested references: Physician's Desk Reference; Hansen's book; excerpts from Kathleen Sciacca's [1989]: "Groups of commonly prescribed psychotherapeutic drugs;" and excerpts from Dr. Bert Pepper and Hilary Ryglewicz's [1989]: "Interactions between some prescribed medications, alcohol and street drugs.")

Say: "In our last meeting, we considered the dangers of mixing our medications with drugs and alcohol. Today we will take a closer look at the dangers of mixing specific medications with three commonly used drugs including alcohol, marijuana and cocaine."

Say: "Let's start by reviewing and discussing excerpts from dual diagnoses expert, Kathleen Sciacca's (1989) paper called: 'Groups of commonly prescribed psychotherapeutic drugs.' I am going to name the type of medication, such as anti-psychotic and briefly read the trade names of the medications of this type while everyone listens for the name of his or her medication(s). Then we will read the interaction of each person's medication with alcohol, at the bottom of each section. Please listen for the name of the medications you are taking. By the way, you are welcome to keep a copy of this handout for educational purposes, if you want to. And, if you wish to study and discuss this paper in more detail, please set up a time with a Good Chemistry Co-leader after our meeting today."

(Briefly read each medication type, trade names and the interaction with alcohol sections concerning this medication. Ask: "Who is taking this type of medication?" (Make sure you cover a medication of interest to each attendee, if at all possible. Facilitate group processing of this information, answer questions, and encourage reactions to the information based on member's personal experiences with alcohol.)

Say: "Now, let's read selected passages from the paper called 'Interactions between some prescribed medications, alcohol and street drugs' by dual

diagnoses experts Dr. Bert Pepper and Hilary Ryglewicz (1989). Let's read each section and then process the information based on our own personal experiences."

(Again, facilitate group processing of this information, answer questions, and encourage reactions to the information based on member's personal experiences with alcohol.)

(Toward the end of group:) Say: "We only have a few more minutes left today." Ask: "Does anyone have any final comments they want to make?"

Closing Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First, I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean & mentally stable for 1 month, 2 months, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups, or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, we believe our solution is to take medications, as prescribed, and don't drink and drug. Of course, it is much easier to say than to do, but it is possible! Over the last several years, many Good Chemistry members have said that after coming to this meeting, they finally realized how important it is to quit mixing alcohol and drugs with their meds. If you are still mixing substances, please feel free to ask us for help after this meeting. We understand what you are going through, we will not judge you, and we are willing and able to help you!"

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back! It works if you work your programs!"

Session Five, Summarized Version
Good Chemistry

(*Remember, it is a requirement for all GC Co-Leaders to attend at least two different kinds of open 12-Step meetings before co-leading this session!)

(Necessary references:1) Alcoholics Anonymous, Fourth Edition, New and Revised by Alcoholics Anonymous World Services, Inc. (2001); 2) The Twelve steps and dual disorders: A framework of recovery for those of us with addiction & emotional or psychiatric illness by Tim Hamilton and Pat Samples (1994) (especially see page 99: "The Twelve Steps of Dual Recovery Anonymous;" 3) Plenty of current copies of your community's schedules of AA, NA, CA, & Al-Anon meetings.) (Additional suggested references: 1) Various twelve-step literature and chips available from your local intergroup; 2) For hours outside of GC group, only: various AUDIO tapes [especially recommend "Big Book Discussion: The Big Book Comes Alive!" by Charlie P. & Joe McQ.;Dicobe Tapes, Inc.] & various recovery-oriented VIDEO TAPES/DVD's [especially recommend "My name is Bill W."].)

Topic: Exploring Alcoholics Anonymous and other 12-Step programs."

Questions to facilitate discussion:

1. Some of us have gone to 12-Step meetings before. I'm going to especially need help from those of us with 12-Step experience today. **"How many of us have ever attended any kind of twelve-step meeting, such as Alcoholics Anonymous or "AA," Narcotics Anonymous or "NA," Cocaine Anonymous or "CA," Al-Anon or Emotions Anonymous or "EA," et cetera?** (Give them time to raise their hands and don't forget to raise your own hand.)

2. There are hundreds of different kinds of 12-step meetings held all over the world every day. **Ask: "How many different kinds of twelve-step meetings can we name?"** (Let them answer: AA; NA; CA; OA; EA; GA OR ACOA; AL-ANON; AL-ATEEN; GA; SLAA; ETC.") The original twelve step program, Alcoholics Anonymous, has been adapted to address many problems.

3. (Hold up a copy of Alcoholics Anonymous.) **"Who knows the name of this book?**

(This is the book called Alcoholics Anonymous, or the 'Big Book,' written in 1935 by the first members of AA. It tells all about the program of Alcoholics Anonymous and the twelve spiritual steps they recommend following to gain serenity and sobriety.

4. (Hold up The Twelve Steps and Dual Disorders.) **"Who knows the name of this book?"** This 1994 book is called The Twelve Steps and Dual Disorders and it adapts the original 12 steps of AA to include substance addictions and mental or emotional illnesses. If you don't have these books, you may want to save up some money and buy them. Each one costs about $6 or $7. Let's pass around this book and read the twelve steps of dual recovery anonymous on page 99." (Pass around the book. Have copy with enlarged print handy for whoever needs it.) **"Does anyone want to comment on or discuss any of these steps before we move on?"** (Let them process the steps.)

5. One of the important things we can learn from AA is that it is very important for us to show respect for others at Good Chemistry and AA meetings by not repeating what we hear others say and by not telling anyone else who we saw at our meetings. **We call this keeping information confidential and protecting each other's what?** (Anonymity.)

6. AA and other 12 step programs do not allow cross-talk. **"What is "cross-talk?"** (Let them answer.) 'Cross-talk' means responding directly to what each person says while or after they talk. During 12-step meetings we are not supposed to cross-talk. However, we can stay after the 12-step meeting and exchange ideas, ask questions, and share friendship and support with others.

7. **"So, is it okay to "cross-talk" at Good Chemistry Groups?"** (Let them answer.) Say: "Yes, 'cross-talk' or 'group processing' is okay and an important part of all Good Chemistry groups because they are therapy groups, not 12 step meetings."

8. **"How do I introduce myself at a 12 step meeting when I want to talk?"** (Give them time to answer.) When I want to talk, I raise my hand and wait until the chairperson calls on me. I give my first name only , and then talk. For example, a person might say "I am _____ and I'm in dual recovery."

9. (Hold up a 12-step schedule and pass around copies.) Here are AA schedules for our community. I also have schedules for other kinds of 12-step meetings in our area, and a current Good Chemistry Group schedule. Please take whatever you need.

10. We know 12-step meetings are not perfect. Some of us may have even had some

bad feelings about 12-step meetings, while others have good feelings. This is a safe place to discuss your experiences, good or bad. We are not here to bash or defend twelve-step meetings but instead, to honestly discuss them.
"With that in mind, what are some problems we may have faced at twelve-step meetings and what are some good points we have discovered about twelve-step meetings?" (Give them time to discuss. Be careful not to be defensive.) Remember, we may choose to get a lot out of twelve-step meetings, regardless of any drawbacks or shortcomings.

11. **"Who is willing to share with us which 12-step groups, in our area, seem most receptive to persons with dual or multiple diagnoses?** (Let them answer, in detail.)

12. If we decide to attend 12-step meetings and we want to work the steps, we may want someone else, who has already worked the steps, to be our guide. **"What is that special person called?"** (A 'sponsor.') For dually diagnosed persons, it is very important to find a sponsor who understands and accepts mental illness and the appropriate use of recovery-safe medications. We may have to ask several people to sponsor us before we find the right person. We can start with a 'temporary sponsor' and then find a more long-term sponsor, over time. **Say something like this to a potential sponsor: "Confidentially, I want you to know that I have been diagnosed with a mental illness as well and I have to take recovery-safe medications to stay stable. Are you okay with that?" (If he or she says yes, say): "Here's my phone number. When can we get started?" (If he or she says no, say): "Thanks anyway. See you later." Try asking another person.)**

13. **It can be scary when you ask someone to be your sponsor. They may say no for many reasons.** For example, because they are already sponsoring several others, they may not have worked all the steps themselves, they may not have a year clean and sober, they may be opposed to taking medications, or for various other reasons. It takes courage to keep asking persons to be our sponsor until someone finally says yes, but it is worth it. **"Do you ask a man or a woman to be your sponsor?"** By tradition, men ask men and women ask women to be their sponsors. This helps many keep romantic feelings out of working their steps.
We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Five, Full Text Version
Good Chemistry

(Necessary references:1) Alcoholics Anonymous, Third Edition, New and Revised by Alcoholics Anonymous World Services, Inc. (1976); 2) The Twelve steps and dual disorders: A framework of recovery for those of us with addiction & emotional or psychiatric illness by Tim Hamilton and Pat Samples (1994)(especially see page 99: "The Twelve Steps of Dual Recovery Anonymous;" 3) Enough Current Schedules Of Your Community's AA, NA, CA, & Al-Anon meetings to give everybody one.) (Additional suggested references: 1) Various twelve-step literature available from your local intergroup; 2) For hours outside of GC group, only: various AUDIO tapes [especially recommend "Big Book Discussion: The Big Book Comes Alive!" by Charlie P. & Joe McQ.: Dicobe Tapes, Inc.] & various VIDEO TAPES [especially recommend "My name is Bill W." & "Twelve Steps."]) (*Remember, it is a requirement for all GC Co-Leaders to attend at least two different kinds of open 12-Step meetings before co-leading this session!)

Say: "Our topic for today is exploring Alcoholics Anonymous and other 12-Step programs."

Ask: "First of all, how many of us have ever attended any kind of twelve-step meeting, such as Alcoholics Anonymous or "AA," Narcotics Anonymous or "NA," Al-Anon or Emotions Anonymous or "EA?" (Give them time to raise their hands and don't forget to raise your own hand.) Say: Some of us have gone to meetings before. I'm going to especially need your help with today's meeting.

Say: There are hundreds of different kinds of 12-step meetings held everyday all over the world. Ask: "How many different kinds of twelve-step meetings can we name?" (Let them answer: AA; NA; CA; OA; EA; GA OR ACOA; AL-ANON; AL-ATEEN; GA; SLAA; ETC.") Say: "That's right. the original twelve step program, Alcoholics Anonymous, has been adapted to address many problems."

(Hold Up Alcoholics Anonymous,) and say: "This is the book called Alcoholics Anonymous, also called the 'Big Book.' This book was written in 1935 by the first members of AA. It tells all about the program of Alcoholics Anonymous and the twelve spiritual steps they recommend following to gain serenity and sobriety. (Hold up The Twelve steps and dual disorders,) and say: "This book came out in 1994. It is called

"The twelve steps and dual disorders" and it adapts the original steps of AA to include substance addictions and mental or emotional illnesses. If you don't have these books, you may want to save up some money and buy them. Each one costs about $6 or $7. Let's pass around this book and read the twelve steps of dual recovery anonymous on page 99." (Pass around the book. Have copy with enlarged print handy for whoever needs it.) Ask: "Does anyone want to comment on or discuss any of these steps before we move on?" (Let them process the steps.)

Say: "Okay, let's talk about some of the key concepts of 12-step meetings. All meetings are said to be 'anonymous.' Ask: "What does anonymous mean?" (Let them answer.) Say: "Yes, it means most persons in twelve step programs only use their first names so that they may speak truthfully and confidentially in meetings, without the fear of gossip or being identified. So, we can learn from AA that it is very important for us to show respect for others at Good Chemistry and AA meetings by not repeating what we hear others say and by not telling anyone else who we saw at our meetings."

Say: "At the beginning of each 12-step meeting, a member who has some sober and clean time volunteers to chair the meeting. People take turns chairing meetings so we should not expect to have the same person chairing each time we attend. Importantly, chairpersons are always people in recovery for alcoholism or drug addiction, but many are not helping professionals. They come from every walk of life. That is why chairpersons and others at 12-step meetings do not "cross-talk."

Ask: "Who is willing to tell us what "cross-talk" is? (Give them time to answer.) Say: (That's right.) 'Cross-talk' means responding directly to what each person says while or after they talk. During AA and other 12-step meetings we are supposed to keep the focus on ourselves and so we are only supposed to talk out loud to share our own 'experience, strength and hope' without giving any direct responses, advice or opinions to others. However, everyone is welcome to stay after 12-step meetings and exchange ideas, ask questions, and share friendship and support with others."

Ask: "Is "cross-talk" okay at Good Chemistry meetings?" (Let them answer.) Say: "Yes, 'cross-talk' or 'group processing' is okay and even encouraged at all Good Chemistry meetings! That is one way GC and AA are different. It is okay to respond to others during GC meetings because our meetings always have two professionally trained co-leaders who make sure that our 'cross-talk' remains pleasant, safe and therapeutic, so please feel free to share anytime!"

Ask: "Who knows how people at AA meetings introduce themselves when they want to talk?" (Give them time to answer.) Say: "(That's right) When persons want to talk, they let the chairperson know by raising their hands and then waiting to be called on for their turn. When they are chosen, the person gives their first name only and openly shares their illness(es) by saying "My name is Chris and I'm an alcoholic." Say: "Being honest with others in the safety of a confidential group can be a really 'freeing' experience. It is nice to feel wholly understood and accepted as we are instead of facing prejudice and stigma from those who do not understand or share our illnesses. Let's grasp this positive experience now by taking turns saying out loud "My name is _____ and I'm in dual recovery." (Let whoever wants to take a turn. I usually say "I am _____ and I'm in Al-Anon or I'm a Good Chemistry Co-Leader:)

Say: Sometimes so many people want to talk at a 12-Step meeting that the meeting runs out of time before everyone gets a turn. When that happens, a person is encouraged to stay after the meeting and invite someone immediately after the closing prayer to talk with them for a few minutes. In fact, it is a great idea to stay and socialize with others after any meeting including GC meetings. However, some of us may be shy and so it may be hard for us to start a conversation with someone else. Let's take a few minutes to practice this friendship skill. Ask: "Who will volunteer to role-play pretending to tell someone else your first name and starting a friendly conversation?" (Choose the first one to volunteer and have them offer someone a handshake and say something like "Hi! My name is _____. What's your name? It's nice to meet you...!" Thank them for role-play.)

(Hold up a 12-step schedule) and say: "Here's an AA schedule for our community. We have schedules for all kinds of 12-step meetings in our area. I also have current Good Chemistry schedules for you. (Pass them around.) Please ask for other schedules such as Cocaine Anonymous, Narcotics Anonymous, and Al-Anon after group, if you like. We hope everyone here today learns so much about 12-step meetings today that we all feel comfortable when we attend 12-step meetings in the future."

Say: "We know 12-step meetings are not perfect. Some of us may have even have some bad feelings about AA or other 12-step meetings. If that is the case, this is a safe place to discuss your experiences. We are not here to bash or defend twelve-step meetings but instead, to honestly discuss them. With that in mind, what are some good points you have discovered about twelve-step meetings?" (Give them time to answer. Examples may include: support; fellowship; hope, etc.) Say: "Okay, thank you. Ask: What, if any, are the problems you may have faced at twelve-step meetings?" (Give them time to answer. Examples may include: cliques; prejudice against medications; it

hurts if sponsors relapse, etc.) Say: "Remember, you can get a lot out of twelve-step meetings if you want to, regardless of any drawbacks or shortcomings."

Say: "You are likely to find that some twelve-step members will be more open-minded about your mental illness and appropriate need for recovery-safe medications than others. Ask: "Who is willing to share with us which 12-step groups, in our area, seem most receptive to persons with dual or multiple diagnoses? (Let them answer, in detail.)

Say: "Remember, Good Chemistry is a wholistic program that helps us seek a mental, physical, spiritual and emotional balance. Therefore, Good Chemistry fully supports and encourages all of us to attend 12-step meetings and work the 12 spiritual steps, as well as continuing to attend Good Chemistry meetings."

Say: "When we attend 12-step meetings and decide that we want to work the steps, we may want someone who has already worked the steps to be our guide. That special person is called a 'sponsor.' For dually diagnosed persons, it is very important to find a sponsor who understands and accepts mental illness and the appropriate use of recovery-safe medications. We may have to ask several people to sponsor us before we find the right person. We can start with a 'temporary sponsor' and then find a more long-term sponsor, over time."

Say: "It can be scary when you ask someone to be your sponsor. They may say no because they are already sponsoring several others, they may not have worked all the steps themselves, they may not have a year clean and sober, they may be opposed to taking medications, or for various other reasons. It takes courage to keep asking persons to be our sponsor until someone finally says yes, but it is worth it. By tradition, men ask men and women ask women to be their sponsors. This helps many keep romantic feelings out of working their steps."

Ask: "Who will role play with me about how to ask someone to be a sponsor? (After a same-sex person volunteers), say: "I will play a person who wants a sponsor and you will play the potential sponsor. You may say yes or no to me, okay? Are you ready?" Say: "Hello, my name is _____. I've been coming to AA meetings for the last four weeks and I want to start working the steps. I've heard you talk in meetings and I like what you have to say. Would you consider sponsoring me?" (If he or she says no, politely ask): "Could you suggest someone else for me to ask?" (If he or she says yes, say): "Confidentially, I want you to know that I have been diagnosed with a mental illness as well and I have to take recovery-safe medications to stay stable. Are you okay with that?" (If he or she says yes, say): "Here's my phone number. When can we get

started?" (If he or she says no, say): "Thanks anyway. See you later." Try asking another person.)

(Toward the end of group:) Say: "We only have a few minutes left today." Ask: "Does anyone have any final comments, questions or concerns they want to make about 12-step meetings?"

Closing Good Chemistry meeting:

(When you have about five minutes left say:) "We have had a good group today, but now it is time for us to close. First, I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or to stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips for anyone who has been sober, clean & mentally stable for 1 month, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, Good Chemistry groups have a lot to offer us and so do 12-step meetings. Check them out! If anyone wants more information about meeting schedules or where to buy the books we used today, just ask me after group and I'll be happy to share the information and schedules with you."

Say: "Our meeting is now officially over. For those of us who want to, we can end our meeting like our friends at AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional], and then swing your joined hands and enthusiastically say:) "Keep coming back! It works if you work your programs!"

(Co-leader note: Research groups should always use the above lesson. However, there are alternatives for this session in other situations, as follows: This is the only session where you may elect to show the "Twelve steps" video and then discuss it; you may also offer to set up a supervised educational presentation of the "My name is Bill W." Movie or "Joe & Charlie" tapes plus discussion for a time outside of group. Also, in the future,

if your group matures and you have the same long-term attendees who understand the basic information contained in this session about 12-Step meetings, you may elect to substitute a "Big Book" meeting for this session by studying one chapter [a step] out of 'The twelve steps and dual disorders,' but only after you start the GC meeting with the usual GC introduction, substitute in 'The twelve steps of dual recovery anonymous' found on page 99 of Hamilton & Samples' book (instead of the STEMSS), but make sure you cover the GC Do's & Don'ts, and GC Mottos. At a later date, you may want to substitute a "Speaker Meeting" for this session by asking one of the members with at least one year of clean, sober and stable time to tell his or her own personal story with an emphasis on recovery and how he or she has stayed clean, sober and stable [but do the STEMSS, GC Do's & Don'ts, & GC Mottos first]).

Session Six, Summarized Version
Good Chemistry

(Necessary reference, the pamphlet: "The *AA* Member-Medications & other Drugs" by Alcoholics Anonymous World Services, Inc., 1984; enough for everyone.)

Topic: The official *AA* policy regarding medications. *AA* is not against meds.

Questions to facilitate discussion:

1. As you will see in this pamphlet, *AA* as an organization is not against the appropriate use of medications. (Hold up pamphlet. Read the paragraph on page 4 out loud. "*AA* is a program for alcoholics who seek freedom from alcohol. It is not a program against drugs. However.... 'pill problem'.") Despite this, some people will tell us to get off of medications. They are simply wrong when they tell those of us who have dual disorders to get off medications. **"Who has had someone tell them to get off meds and what did you do?"** (Process.)

2. A related question is **"Who goes back to the hospital every time I stop taking my meds?"** (Process.)

3. Pass out multiple copies of the pamphlet "The *AA* Member-Medications & Other Drugs.") Again, this is *AA* Conference Approved material. We want to provide you with your own copy so that you can carry it with you. The next time you have someone challenges your use of medications, give them this pamphlet and ask them to read it. In it, they will learn that when people tell others to stop taking medications, they are inappropriately "playing doctor."

4. Please turn to page 5. **"Who wants to read all of page 5 to the top of page 6, please?"** (Complete reading.) **"Now, who will read the rest of page 6, please?"** (Complete reading and discuss.) **"Who will share with us what you just got out of pages 5 and 6?"**

5. The rest of this pamphlet has personal stories in it, like those found in the back of the Big Book. The first three stories on pages 8 through 12 give us examples of three people who have used medications inappropriately. Then on page 13, the doctors who

wrote this pamphlet clearly state that some of us with other illnesses as well as addiction, such as mental illnesses, need to use medications. The last three stories on pages 13 through 18 tell us the stories of people who use medications appropriately."

6. **"Who will read Sally's story on page 8?"** (Next time, do Randall's on page 9; or Ann's on page 11.) **"Who is willing to share or give feedback about this story?"** (Let group process this story but do not run out of time before you get to the next parts.)

7. **"Now, who will read this page 13 for us?"** (Complete reading and discuss.)

8. Now for stories about people who use meds the right way! **"Who will read Fran's story on page 15?"** (Or the next time Julie's story on page 16; or, Barry's story on page 17.) (Complete reading and discuss.)

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Six, Full Text Version
Good Chemistry

(Necessary reference: "The AA Member-Medications & other Drugs" by Alcoholics Anonymous World Services, Inc., 1984; enough for everyone.)

Say: "Our topic for today is the official AA policy regarding medications. As you will see in this pamphlet later today, AA as an organization is not against the appropriate use of medications. (Hold up pamphlet. Read the paragraph on page 4 out loud. "AA is a program for alcoholics who seek freedom from alcohol. It is not a program against drugs. However.... 'pill problem'.") Despite this wonderful pamphlet written in 1984 by a group of doctors who are AA members, it is still possible for us to run into AA members, even sponsors, who will encourage us as mentally ill substance abusers to stop taking all medications. They might say something like 'You are not clean and sober until you are off all drugs including medications;' or 'Your medications are just a crutch;' or 'Trust your higher power and work your program and you won't need medications.' Regardless of how they say it or imply it, they are wrong when they tell those of us who have dual disorders to get off of our medications. They are wrong when they assume that what works for them as a singly diagnosed substance dependent person is enough for those of us with dual or multiple disorders. We are not judging or bashing them. In fact, they think they are helping us, but they are misguided. All persons, including AA members, family members, church members, and friends who advise us to give up our medications do not understand our mental illness and what we must do to manage it."

Say: "As we often say in Good Chemistry, one of our greatest goals is to be the Captain of our own treatment team. Because we have two or more illnesses to deal with, we cannot afford to listen to people who do not understand that medications are designed to make us feel normal, not high. Ask yourself: "Who is it that goes back to the hospital every time I stop taking my meds, me or him or her?" Ask: "Who wants to share your personal experiences concerning this common problem?" (At this point, encourage group members to discuss their relevant experiences.)

(When discussion dies down, proceed as follows: pass out the pamphlets "The AA Member-Medications & Other Drugs.") Say: "Again, this is AA Conference Approved material. We want to provide you with your own copy so that you can carry it with you. The next time you have someone challenge your use of medications, please give them

this pamphlet and ask them to read the whole thing. In it, they will learn as we have that when people tell others to stop taking medications, they are inappropriately playing doctor."

Say: "Please turn to page 5." Ask: "Who wants to read all of page 5 to the top of page 6, please?" (Complete reading.) Say: "Thank you. Now, who will read the rest of page 6, please?" (Complete reading.) Say: "Thank you. Let's discuss what has just been read. Ask: "Who will share with us what you just got out of pages 5 and 6?" (Encourage discussion and add your own comments, if you like.)

Say: "The rest of this pamphlet has personal stories in it, much like those found in the back of the Big Book we looked at last time called Alcoholics Anonymous. The first three stories on pages 8 through 12 give us examples of three people who have used medications inappropriately. Then on page 13, the doctors who wrote this pamphlet clearly state that some of us with other illnesses as well as addiction, such as mental illnesses, need to use medications. The last three stories on pages 13 through 18 tell us the stories of people who use medications appropriately."

Say: "Today, let's read one story from the first section, where meds are used inappropriately. Please turn to page 8. Who will read Sally's story?" (Or the next time you do this lesson, Randall's on page 9; or Ann's on page 11.) Then say: "Thank you." Ask: "Who is willing to share or give feedback about this story?" (Let group fully discuss this story and what it reminds them about.)

Say: "Okay, now for the best part. Please turn to page 13. Who will read this page for us?" (Complete reading.)

Ask: "What do you think about what was just read?" (Give them plenty of time to process it fully.) Ask: "Okay, now who will read Fran's story on page 15?" (Or the next time you do this lesson, Julie's story on page 16; or, Barry's story on page 17.) (Complete reading.) Say: "Thank you."

Ask: "What do you think about this story?" (Let them process it fully, until only five minutes remain in the hour.)

Closing Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First, I am going to hand out Good Chemistry and/or AA

chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable. " Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time and initiate a round of applause.) Say "Other chips are for anyone who has been sober, clean, and stable for 1 month, 2 months, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips as earned Co-Leaders are eligible as well!" (Note: Key chains and necklaces which hold chips and/or GC buttons, cups, or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, it is important for us to not let others "play doctor" with us. We must take ultimate responsibility for our own programs of recovery as the Captain of our own treatment team. We must not let others, including dentists and doctors who are not psychiatrists, or even psychiatrists who don't understand addiction, give us any addictive medications. At the same time, we must not let well-meaning but misinformed others, even loved-ones, tell us to get off of our recovery-safe medications."

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming, and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back, it works if you work your programs!"

Session Seven, Summarized Version
Good Chemistry

(Required reference: *GC Cues & Triggers* handouts, and pens, for everyone.)

Topic: Recognizing our own cues and triggers that could lead to relapse, and preparing solutions ahead of time.

Questions to facilitate discussion:
1. **"Who can define what 'relapse' and 'having a slip' are?"** According to the Merriam-Webster dictionary (1974), relapse is 'A recurrence of illness after a period of improvement;' and relapsing is defined as a 'slip back into a former condition (as of illness) after a change for the better.'

2. **"Who can relate to this because we have had relapses in the past?"** (Process.)

3. Like we state in the Do's and Don'ts each week, we must be able to recognize and avoid things and situations that make us want to use, stress us out, or make us want to stop taking our meds. Such situations or things are called 'cues and triggers.' According to the Merriam-Webster dictionary (1974), a cue is a signal and a trigger is a mechanism used to set off or initiate something. Cues are signals, similar to traffic signals, which we learn to unconsciously recognize and obey. We don't really have to think about it. We just know that a 'green light means 'go,' red means "stop,' and yellow means proceed with caution. **"What drug and alcohol cues and triggers have been tempting you? What do you have to learn to consciously avoid?"** (Process, such as, for some, just walking past a liquor store or bar can be a temptation.)

4. (Pass out handout.) It may be helpful to make a list of our own cues and solutions to help us avoid temptations and know when to ask for help. **"Who will read each of the cues listed?" "Which ones bother you?"** (Check them off and jot down your best solutions!)

5. **"Who will share his/her cues and best solutions?"** (Process.)
We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

GOOD CHEMISTRY: WARNING SIGNS OF MENTAL ILLNESS & SUBSTANCE ABUSE RELAPSE:

CUES, TRIGGERS & MY SOLUTIONS

HANDOUT: SESSION SEVEN

Here are some cues and triggers that other dually diagnosed people have shared at Good Chemistry meetings. Which of these have I experienced? What others can I identify? This sheet is for me to keep. I will check all that apply and write down my solutions!

1. **ISOLATION**: My solution is to: _____

_____.

2. **BOREDOM**: My solution is to: _____

_____.

3. **LONELINESS**: My solution is to: _____

_____.

4. **COMPULSIVE & IMPULSIVE BEHAVIOR**: My solution is to: _____

_____.

5. **LACK OF A SPIRITUAL PROGRAM**: My solution is to: _____

_____.

6. **STRESS**: My solution is to: _____

_____.

7. HAVING AN "I DON'T CARE" ATTITUDE: My solution is to: _____

_____.

8. TELLING MYSELF THAT IT'S OKAY TO KEEP ON DRINKING OR DRUGGING:

My solution is to:_____

_____.

9. DRINKING & THEN HAVING A MENTAL ILLNESS RELAPSE, TOO:

My solution is to: _____

_____.

10. FEELING TIRED, DEPRESSED, MOODY &/or OVERLY EMOTIONAL:

My solution is to: _____

_____.

11. THINKING ABOUT THE PAST: My solution is to: _____

_____.

12. THINKING I'M WELL AND STOPPING MEDICATIONS:

My solution is to : _____

_____.

13. STOPPING ATTENDANCE AT GOOD CHEMISTRY GROUPS, AA OR OTHER HELPFUL MEETINGS: My solution is to: _____

_____.

14. **NOT SLEEPING ENOUGH OR SLEEPING WAY TOO MUCH**: My solution is to:

_____.

15. **FEELING ANGRY**: My solution is: _____

_____.

16. **NOT EATING RIGHT**: My solution is: _____

_____.

17. **HOLIDAYS**: My solution is: _____

_____.

18. **ANNIVESARIES/DATES THAT MAKE ME SAD**: My solution is:

_____

_____.

19. **SEEING CHILLED ALCOHOL IN A CONVENIENCE STORE**:

My solution is: _____

_____.

20. **HANGING OUT IN MY OLD NEIGHBORHOOD**:
My solution is: _____

_____.

21. **SEEING MY 'DEALER'** on the streets: My solution is:

_____

_____.

22. **GETTING PRESECRIBED DRUGS, AT AN EMERGENCY ROOM, THAT I'M LIKELY TO ABUSE:** My solution is: _____

_____.

23. **BEING AROUND FAMILY MEMBERS OR FRIENDS WHO USE:**

My solution is: _____.

MY OTHER CUES & TRIGGERS and SOLUTIONS ARE:

24. _____

_____.

25. _____

_____.

26. _____

_____.

27. _____

_____.

28. _____

_____.

29. _____

_____.

30. _____

_____.

Session Seven, Full Text Version
Good Chemistry

(Required reference: *GC Cues & Triggers Handout.*)

Say: "Our topic for today is **recognizing cues and triggers that lead to relapse and preparing our own solutions**. Let's start by defining relapse." Ask: "What is relapse?" (Let group members define relapse as best they can.) Say: "According to the Merriam-Webster dictionary (1974), relapse is defined: 'A recurrence of illness after a period of improvement;' and relapsing is defined: 'to slip back into a former condition (as of illness) after a change for the better.' Ask: How many of you can relate to this because you have had relapses in the past? (let them raise their hands.) Obviously, this topic affects your lives. As you know, you can have relapses of your mental illness as well as with your substance abuse or dependence problems. Professionals call this acute exacerbations of illnesses or psychotic episodes."

Say: "Of course, this raises a very important question that is dear to our hearts: Can anything be done to help prevent relapse of mental illnesses and substance abuse or dependence? The answer to this question is a resounding yes! We are going to examine in detail, today, how each of us can prevent our own relapses!"

Say: "First of all, like we talk about in the Do's and Don'ts each week, we must be able to recognize and avoid things and situations that make us want to behave in unhealthy ways such as using drugs and alcohol or stopping mental health medications. Such situations or things are often called cues or triggers. According to the Merriam-Webster dictionary (1974), a cue is a signal and a trigger is a mechanism used to set off or initiate something. Many things can trigger negative behaviors. For example, for many of us, just walking past a liquor store or bar can trigger the behaviors of going in, buying a bottle, and then drinking alcohol. Later today, each of us will identify our most common triggers to using drugs and alcohol as well as to becoming actively mentally ill.

Say: "Since cues are signals, just as we have learned to recognize the traffic signals of green, yellow and red lights and thus when to proceed safely and when to proceed with caution or stop, we can also learn to recognize our own substance abuse and mental illness cues so that we will know when we are behaving or considering behaving in ways that may jeopardize our sobriety, cleanness, or mental stability. In fact, when we carefully evaluate our last few relapses, we are able to identify patterns of triggers

and cues that came before our actual relapses. Because our goal is now mental health and being sober and clean, we must carefully look at our patterns in the past and learn from them. And, we cannot stop here. As it is in the traditional AA approach, we must focus on solutions."

Say: "After we become aware of our own particular cues and triggers, each of us must have already prepared healthy solutions which we can then choose to follow. To be aware of our own cues and triggers is to have valuable knowledge of ourselves. And, if we use our knowledge, we can be successful at staying sober, clean and stable."

Say: "At Good Chemistry, we have found it to be helpful to make a list of our own and carry it around with us, complete with our own solutions for each cue and trigger. Therefore, I will now share some cues and triggers that other dually diagnosed people have shared at Good Chemistry meetings in the past. (Pass out handout.) They include: isolation; boredom; loneliness; compulsive and impulsive behavior; lack of a spiritual program; stress; having an I don't care attitude; telling myself that it is okay to drink or drug; drinking and then having a mental illness relapse, too; feeling tired, depressed, moody, and overly emotional; thinking about the past; thinking meds are not important and stopping them; stopping attendance at twelve-step meetings and Good Chemistry meetings ; staying up for days or sleeping way too much and so on." (See handout.)

Say: "First, we are going to take a few minutes to read this handout and check off all those that apply. (Pass out pens.) While we are doing this, we will share our answers with the group is we want to. Most importantly, we will identify and prepare our own solutions and write them down, as well. I will be encouraging you to share your ideas with others. (Fill out the handout and process solutions for the rest of the session until you have five minutes left.)

Closing Good Chemistry meeting:

(When you have about five minutes left say:) "We have had a good group today, but now it is time for us to close. First I am going to hand out GC and/or AA chips to members, as earned. Desire chips are for anyone who expresses a desire to become or stay clean, sober & stable. Ask: "Does anyone want a desire chip today? (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean and stable for 1 month, 2 months, 3 months [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned.

Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups, or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, it is important for each of us to know as much as we can about what cues and triggers make our recovery shaky and what our solutions are, in advance so we can avoid relapse."

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time." Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say:) "Keep coming back; it works if you work your programs!"

Session Eight, Summarized Version
Good Chemistry

(Required: Give clients helpful materials from your agency during this session, such as agency business cards with phone numbers to call in case of a crisis. Refrigerator magnets also work well!)

Topic: It is important to ask for extra help when I need it.

Questions to facilitate discussion:

1. Many of us fear relapsing back into abusing substances and having mental illness symptoms because they may have been painful, embarrassing, and even life-threatening experiences in the past. **"Who can relate to the fear of having a relapse?"** (Process.)

2. It is important for us to have powerful answers and solutions in mind while we are healthy so that we will know what to do the next time we feel sick. <u>One very good solution is to promise ourselves that the next time I feel really bad, I will turn to someone I trust, tell them what's going on with me, and ask for extra help</u>. **"Has anyone here made this promise to ourselves?"**

3. It is important to plan in advance for emergencies and temptations . **"Who has a mental health and sobriety 'survival plan' to share with us today?"**

4. **"How many of us have ever thought about hurting ourselves? and How many of us have ever gone ahead and tried to hurt ourselves?"** (Give time for group members to <u>raise their hands</u>, <u>only</u> [beware 'war stories]). As we can see, we need to know that self-destructive thoughts and behaviors are common symptoms of mental illnesses and the use of substances, so that we won't be surprised or feel weak or embarrassed if and when they happen to us. We must plan ahead so that we already know what to do when we have destructive thoughts.

5. **"Please ask yourself right now: Who are the persons I will ask for extra help when I really need it?** For example, it might be my friend, my counselor, my rabbi or minister? How about my doctor, my parent, or a Hotline counselor? Don't forget about your Good Chemistry friends! We are all here to help one another!) **"Who is willing to**

share who they will contact for help?" (Process and reinforce solutions.)

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Eight, Full Text Version
Good Chemistry

(Required: Give clients helpful materials from your agency during this session, such as agency phone numbers to call in case of a crisis. Refrigerator magnets work well!)

Say: "The topic for our session today is '**It is Importance to Ask for Extra Help When I Need It.**' Like all humans beings, those of us who have mental illnesses (neurobiological disorders) and substance abuse or dependence disorders have good days and bad days. In fact, it can be very scary when we have a bad day because it may play into our fear of becoming ill again, or 'relapsing.' Many of us fear relapsing back into abusing substances and into have mental illness symptoms because they may have been painful, embarrassing, and even life-threatening experiences in the past. It is natural that when we have made a strong commitment to our mental, physical, spiritual and emotional health, especially when we are successfully managing all of our illnesses at one time, that we don't want anything to take our health away from us!

Ask: "Can anyone relate to having the fear of relapse? Who would be willing to share about her or his own fears about getting ill again?" (After each comment say:) "Thank you for sharing..." and ask "Who wants to respond to what he/she just shared?" (Thank each person who participates by name and then ask:) "Who else has ever been afraid of relapsing?" (Make appropriate comments concerning what is shared, invite the comments of other group members and co-leaders, and facilitate the group's processing of all comments.)

Say: "It is important for us to have powerful answers and solutions in mind while we are healthy so that we will know what to do the next time we feel sick. One very good solution is to promise ourselves that the next time I feel really bad, I will turn to someone I trust, tell them what's going on with me, and ask for extra help. For example, if we think to ourselves: 'I'm at the end of my rope,' and we lose our hope, we need to be willing to let someone else know so that they can reach out to us and help us pull through the bad time or crisis. In Good Chemistry we believe in being a 'Good Samaritan;' thus, we reach out to those in mental, physical, spiritual, and emotional need and point them to appropriate helpers. It's the same thing as throwing a drowning woman a life preserver or using a long stick to pull a man out of quick sand. Most of us would do these heroic deeds without thinking twice. And, if we were the one drowning or sinking in sand, we would eagerly accept help. But, some of us might hesitate or wait

too long before we ask others for help related to our illnesses. We need to remember that psychological and/or addictive pain may sink any of us into the depths of despair and threaten our lives, as well. Part of recovery is having a plan, just in case!" Ask: "Does anyone want to share their mental health and sobriety 'survival plan' with us?"

(When discussion is finished) Say: "It is good for all of us to know about crisis theory. The good news is that even the worst crises will start to be resolved within a few hours to three or more days. When we let the right people know we need extra help and receive support, we can 'hang on' until we feel better and the crisis is resolved. However, we will not receive timely help if we 'play games' and just expect others to anticipate and know what we need. Quick help can turn a crisis around quickly and prevent us from losing much ground. However, late intervention may allow us to relapse into the symptoms of all our illnesses and even cost us our lives! A person without help may psychologically 'paint themselves into a corner' and start to believe: 'This pain will never go away' or 'I can't stand it.' Such thoughts without help can lead to self-harm." Ask: "How many of us have ever thought about hurting ourselves?" (Give time for group members to raise their hands, only.) Ask: "Okay, now how many of us have ever gone ahead and tried to hurt ourselves?" (Give time for group members to raise their hands, only [beware 'war stories]).

Say: "It is vitally important for all of us to know that self-destructive thoughts and behaviors are common symptoms of mental illnesses and the use of substances so that we won't be surprised or feel weak or embarrassed if they happen to us, and so that we will already know what to do. We will immediately tell someone we trust and ask for help! In Good Chemistry we believe that each of us has his or her own Higher Power who empowers other people such as helping professionals, family or friends to help us when we ask for help. We also believe that beneficial medications carefully prescribed by our doctors are gifts from our Higher Power. Ask: "Please ask yourself right now: Who are some of the persons I could ask for extra help when I really need it? For example, it might be my friend, my counselor, my rabbi or minister? How about my doctor, my parent, or a Hotline counselor? Don't forget about your Good Chemistry friends! We are all here to help one another!" (Toward the end of group:) Say: "We only have a few more minutes left today." Ask: "Who is willing to share his or her answer to the question: "Who will I ask for help the next time I need it?"
Say: "That sounds like a good plan... Thank you for sharing."

Closing a Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but

now it is time for us to close. First I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean, & mentally stable for 1 month, 2 months, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, when we honestly share our fears and problems with others, they lose their power over us. Today, we were reminded that we really aren't so different from anyone else and that others can help us if we let them. Together, we are stronger and can come up with better solutions to our problems."

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to seeing you again next time. Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say: "Keep coming back! It works if you work your programs!"

Session Nine, Summarized Version
Good Chemistry

(There is no necessary reference for this session.)

Topic: It is important to stay involved in treatment.

Questions to facilitate discussion:

1. Long-term illnesses such as mental illnesses (or neurobiological disorders) and addiction to substances, sometimes called "chronic" illnesses, cannot be "cured" with a short course of medications. Instead, to manage chronic illnesses, we may need to take medications on a daily basis for the rest of our lives.

2. Likewise, when those of us who are addicts or alcoholics stop taking drugs or drinking and become sober and clean, we are not "cured" and we do not have the luxury of just "forgetting about" our illnesses. Instead, we must remain alcohol and drug free for the rest of our lives to manage our illnesses.

3. Many of us have tried to deny our illnesses to ourselves and others. We have postponed the important recovery work of accepting our illnesses. When we fight against the truth, that we do have illnesses, we hurt ourselves and others. For years, we may have wasted a lot of time and energy trying to prove we could "drink socially" and "function without prescribed medications." **"Who can share about how hard it is, but also how important it is to finally accept and work on managing our illnesses?"** (Let the members process this for as long as they are willing. Thank each one. Make sure acceptance and the value and freedom found only in recovery is highlighted.)

4. Sometimes knowing scientific facts can help. Two researchers named Stein and Test have proven that if we have mental illnesses and want to stay in recovery, we must stay involved in mental health treatment. We need to continue seeing our doctor, caseworker, case manager, or nurse and taking our medications, as prescribed.

5. Likewise, the reason Alcoholics Anonymous and other 12-Step organizations encourage us to "Keep coming back!" is because through years of surveying members, they have found if we want to stay clean and sober, we must keep attending meetings

and receive ongoing support from others who understand and value sobriety.

6. Now you have some scientific reasons to stay involved in treatment. At Good Chemistry, we believe that accepting ongoing treatment 'with open arms' is better than dropping out and returning to our mentally ill, intoxicated state of mind. **"Who intends to stay involved with treatment, long term?"** (Process and reinforce.)

We've had a good group today but now it is time for us to close. (Hand out chips. Officially close group. Let those who want to say the serenity prayer.)

Session Nine, Full Text Version
Good Chemistry

(There are no necessary references for this session.)

Say: "The topic for our session today is '**It is Important to Stay Involved in Treatment.**' In Good Chemistry, we understand that at first it is not easy to accept having long-term illnesses such as mental illnesses and substance abuse or dependence. They would probably be easier to accept if they were short-term curable illnesses such as an infection. For example, it is not very hard to accept the need to take only ten days worth of medications for an infection. In fact, it feels pretty good to throw away an empty antibiotic bottle at the end of ten days and not have to think about the infection anymore. However, long-term illnesses such as mental illnesses (or neurobiological disorders) and addiction to substances, which are sometimes called "chronic" illnesses, cannot be "cured" with a short course of medications. Instead, just to manage chronic illnesses, we may need to take medications on a daily basis for the rest of our lives. Likewise, when those of us who are addicts or alcoholics stop taking drugs or drinking and become sober and clean, we are not cured and we do not have the luxury of just "forgetting about" our illnesses. Instead, we must remain alcohol and drug free for the rest of our lives just to manage our illnesses. Many of us have tried to postpone accepting our illnesses by denying they exist. But, when we fight against accepting our illnesses we fight against the inevitable truth and we hurt ourselves and others. For years, we may have wasted a lot of mental and physical energy and risked our very lives by trying to prove we could "drink socially" and "function without prescribed medications." Ask: "Can any of us share about how hard it was, but also how important it was for us to finally accept our illnesses?" (Let the members process this for as long as they are willing. Thank each one. Make sure acceptance and the value and freedom found only in recovery is highlighted.)

(When discussion has died down, say:) "Sometimes knowing scientific facts can help us. For example, two researchers named Stein and Test have proven that if we have mental illnesses and want to stay in recovery, we must stay involved in mental health treatment such as continuing to see our doctor, caseworker, case manager, or nurse and taking our medications, as prescribed. Similarly, the reason Alcoholics Anonymous and all other Twelve-Step organizations encourage us to "Keep coming back!" is because through years of collecting surveys they have found that if we have chemical abuse or

dependence disorders and we want to stay in recovery, we must keep attending meetings and receive ongoing support from others who understand and value sobriety. Very importantly, since we at Good Chemistry have mental illnesses and substance disorders, it is even more urgent that we understand and accept our need for staying involved in ongoing services and treatment. Based on her own research (1994), our founder, Dr. Debbie Webb believes that continuing to attend Good Chemistry groups may be part of our solution and personally invites all of us to keep coming! Say: If anyone would to read some of this research I've mentioned for yourself, please see me after group."

Say: "Now you have some scientific reasons to stay involved in treatment. At Good Chemistry, we believe that accepting ongoing treatment 'with open arms' is better than our eventual alternative: dropping out and returning to our mentally ill, intoxicated state of mind." Ask: "Who will share with us from your own experience and journey toward acceptance of your need for ongoing treatment?"

Closing a Good Chemistry meeting:

(When you have about five minutes left:) say: "We have had a good group today, but now it is time for us to close. First I am going to hand out Good Chemistry and/or AA chips to members, as earned. Desire chips are for anyone who expresses the desire to become or stay clean, sober & stable." Ask: "Does anyone want a desire chip today?" (Anyone is eligible. Present one chip at a time, shake hands with or hug recipient and initiate a round of applause.) Say: "Other chips are for anyone who has been sober, clean, & mentally stable for 1 month, 2 months, 3 months, [GC bronze chip requirement includes attending at least 6 GC meetings], 6 months, 9 months, 1 year, 18 months, 2 years, and so on." Ask: "Has anyone earned any of these other chips today?" (Present chips, as earned. Co-Leaders are eligible, as well!) (Note: Key chains and necklaces which hold chips and/or GC buttons, cups or T-shirts make nice, long-lasting reinforcers.)

Say: "In summary, whether or not we get into and stay in a state of recovery has a lot to do with whether or not we are willing to accept our illnesses and stay in all the types of treatment we need, including Good Chemistry groups. I strongly encourage you to 'be a winner' by planning to stay involved in treatment from now on."

Say: "Our meeting is now officially over. For those of us who want to, we can now end our meeting like our friends in AA do, with the Serenity Prayer, which is optional. For those of us who do not want to do this, thank you for coming and we look forward to

seeing you again next time. Ask: "Does anyone want to lead the Serenity Prayer?" (Join hands in a circle and recite the Serenity Prayer [optional] and then swing your joined hands and enthusiastically say: "Keep coming back! It works if you work your programs!"

THE TWELVE PARALLELS
BETWEEN CHEMICAL DEPENDENCY AND MENTAL ILLNESS

1. Both are physiological diseases with a strong genetic/heredity component.

2. Both are physical/mental/spiritual diseases which result in global affliction of the person.

3. If left untreated, the course of both illnesses is progressive, chronic, incurable, and potentially fatal.

4. Denial of the disease process(es) and non-compliance with attempts to treat are cardinal symptoms of the disorder.

5. Both diseases manifest loss of control in behavior, thought and emotions. Both are often seen by self and others as a "moral issue."

6. Both diseases afflict the whole family as well as all relational systems.

7. Growing powerlessness and unmanageability lead to feelings of guilt, shame, depression and despair.

8. Both are diseases of vulnerability and isolation; the victim is exquisitely sensitive to psychosocial stressors.

9. Both the primary symptoms of each disease AND the loss of control in behavior/thought/emotions are reversible with treatment.

10. Recovery consists of:
    - stabilization of the acute disease
    - rehabilitation of body, mind and spirit
    - launching upon an on-going program of recovery

11. The risk of relapse in either disease is always high, and will inevitably trigger a relapse in the other.

12. The only hope for life-long recovery lies in working our Program(s) ONE DAY AT A TIME.

S T E M S S
Support Together for
Emotional and Mental
Serenity and Sobriety

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Michael G. Bricker
Consultation in Recovery
from Addiction and
Mental Illness

322 Main St. (Newburg)
West Bend, WI 53095
(414) 675-2841

PARALLELS: PSYCHOSIS AND ADDICTION

Alcoholism / Addiction Disease	Major Mental Illness Disease
1. A biological illness	1. A biological illness
2. Hereditary (in part)	2. Hereditary (in part)
3. Chronicity	3. Chronicity
4. Incurability	4. Incurability
5. Leads to lack of control of behavior and emotions	5. Leads to lack of control of behavior and emotions
6. Affects the whole family	6. Affects the whole family
7. Symptoms can be controlled with proper treatment	7. Symptoms can be controlled with proper treatment
8. Progression of the disease without treatment	8. Progression of the disease without treatment
9. Disease of denial	9. Disease of denial
10. Facing the disease can lead to depression and despair	10. Facing the disease can lead to depression and despair
11. Disease is often seen as a "moral issue," due to personal weakness rather than biological causes	11. Disease is often seen as a "moral issue," due to personal weakness rather than biological causes
12. Feelings of guilt and failure	12. Feelings of guilt and failure
13. Feelings of shame and stigma	13. Feelings of shame and stigma
14. Physical, mental, and spiritual disease	14. Physical, mental, and spiritual disease

SELECTED COMPARISONS OF RECOVERY AND MENTAL HEALTH MODELS

Recovery Model	Mental Health Model
Disease process	Syndrome concept
Biopsychosocial/spiritual factors	Biopsychosocial factors
	Some attention to philosophical issues
Chronic condition	Chronic condition of many major disorders
Relapse issues	Relapse issues
Genetic/physiological component	Genetic/physiological component in many disorders
Chemical use primary	Psychiatric disorder primary
Out of control	Ineffective coping
Denial	Poor insight
Despair	Demoralization
Family issues	Family issues
Social stigma	Social stigma
Abstinence early goal	Stability early goal
Recovery long-term goal	Rehabilitation long-term goal
Powerless	Empowerment
No use of mood altering chemicals	Psychotropic meds used
Education about illness	Education about illness
Halfway houses, ALANO clubs	Group homes, day treatment
Sponsors	Case manager/therapist

Evans, Katie & Sullivan, J. Michael (1990). Dual Diagnosis: Counseling the Mentally Ill Substance Abuser. The Guilford Press, pg. 25.

Selected Comparisons of Recovery and Mental Health Models cont'd

Recovery Model	Mental Health Model
AA, Al-Anon, self-help groups	Support groups
Concrete action	Behavior change
Self-examination and acceptance	Awareness and insight
Label self as alcoholic/addict	See self as whole person with a disorder
Practice of communication and social skills	Practice of communication and social skills
Slogans, stories, affirmations	Positive self-talk, imagery
Stepwork	Psychotherapy
Use of spiritual concepts	Use of existential, transpersonal concepts
Family therapy	Family therapy
Group and individual work	Group and individual work
Continuum of care	Continuum of care
Nutrition, exercise, growth as value	Wellness concepts

Evans, Katie & Sullivan, J. Michael (1990). Dual Diagnosis: Counseling the Mentally Ill Substance Abuser. The Guilford Press, pg. 25.

STEMSS AND 12 STEP RECOVERY PROGRAMS: A COMPARISON

CORE CONCEPT	STEMSS	GENERAL 12-STEP RECOVERY PROGRAM
	Support Together for Emotional and Mental Serenity and Sobriety	Alcoholics/Narcotics Anonymous, OA, etc.
Acceptance	1. I admit and accept that my mental illness is separate from my chemical dependency, and that I have a dual illness.	1. We admitted we were powerless over our addiction-that our lives had become unmanageable.
Surrender	2. As a result of this acceptance, I am willing to accept help for my illnesses.	3. Made a decision to turn our will and our lives to the care of God as we understood Him.
Hope	3. As a result of this willingness, I came to believe that, with help and understanding, recovery is possible.	2. Came to believe that a Power greater that ourselves could restore us to sanity.
Need for BOTH medication and therapy	4. As a result of this belief, I accept the fact that medical management must play a large part in my recovery program.	4-11. Includes all the remaining recovery steps as worked through in therapy and AA/NA Program participation.
Abstinence	5. As part of this recovery Program, I accept the fact that I must maintain an alcohol and drug* free lifestyle.	1. We admitted we were powerless over our addiction-that our lives had become unmanageable.
Recovery as the key to the FUTURE	6. In following these steps throughout my life, I will reach my goals and help others to begin the recovery process.	12. Having had a spiritual awakening as a result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

* "drug" in this context refers to recreational chemicals, not prescribed medications.

Note that the STEMSS and 12-Step Recovery models are complementary, and designed to be used together. By "working" both Programs simultaneously, they offer the Promise of recovery from both chemical dependency and chronic mental illness. Working together, they offer experience, strength and hope for the "doubly-troubled."

Michael G. Bricker
Consultation in Recovery from
Addiction and Mental Illness

322 Main St. (Newburg)
West Bend, WI 53095
414-675-2841

Good Chemistry© Empowerment:

Ways to Successfully Manage My Illness

(About my Mental Illness): After I have been carefully evaluated and prescribed medications:

I have chosen to take the medications, faithfully, exactly as prescribed. My choice followed by my action is what manages my mental illness every day. The medications are a very important therapeutic tool I have chosen to use.

Other tools I may have chosen to utilize include attending Good Chemistry© meetings and working the Do's and Don'ts, appointments and other MHMR programs, sleeping enough, eating right, exercising, socializing with clean, sober, and stable friends doing healthy activities, etc.

(About my substance abuse or addiction): After I have been carefully detoxified off of all alcohol and other drugs (except appropriately prescribed and carefully taken medications):

I have chosen to not drink and not drug. My choice followed by my action is what manages my alcoholism and drug addiction every day. I have a choice after having used the very important therapeutic tool of physical detoxification.

Other tools I may have chosen to utilize include attending Good Chemistry© meetings and working the Do's and Don'ts, Mottos and STEMSS, going to Twelve-Step meetings and working the twelve steps with a sponsor, going to my doctor and caseworker appointments and other MHMR programs, sleeping enough, eating right, exercising, socializing with clean, sober, and stable friends doing healthy activities, etc.

I know that positive self-affirmations are important, therefore, I say positive things to myself every day, such as:

"Good mental, physical, spiritual and emotional health is within my reach! With the help of my Higher Power and by choosing to use all the tools I have been given, I am successfully managing my illnesses and being healthy!"

The CAGE Questionnaire
Ewing & Rouse (1970)

1. **Have you ever felt that you should Cut Down on your drinking?**

2. **Have people Annoyed you by criticizing your drinking?**

3. **Have you ever felt Guilty about your drinking?**

4. **Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (Eye Opener)?**

Scoring: For those you think are ddx, an affirmative answer to one or more questions indicates a need for referral of the client for a more thorough screening or full assessment by staff versed in assisting persons who are ddx. * (For those who you think may only have CD, two or more affirmative answers call for referral for more screening or assessment.)
*** Kathleen Sciacca (1986)**

MICHIGAN ALCOHOLISM SCREENING TEST (MAST)

0. Do you enjoy a drink now and then? Yes No

1. Do you feel you are a normal drinker? (By normal, we mean you drink less than or as much as most other people). Yes No

2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening? Yes No

3. Does your wife, husband, a parent, or other near relative ever worry or complain about your drinking? Yes No

4. Can you stop drinking without a struggle after one or two drinks? Yes No

5. Do you ever feel guilty about your drinking? Yes No

6. Do friends or relatives think you are a normal drinker? Yes No

7. Are you able to stop drinking when you want to? Yes No

8. Have you ever attended a meeting of Alcoholics Anonymous (AA)? Yes No

9. Have you gotten into physical fights when drinking? Yes No

10. Has your drinking ever created problems between you and your wife, husband, a parent, or other relative? Yes No

11. Has your wife, husband (or other family members) ever gone to anyone for help about your drinking? Yes No

12. Have you ever lost friends because of your drinking?Yes No

13. Have you ever gotten into trouble at work or school because of drinking? Yes No

14. Have you ever lost a job because of drinking? Yes No

15. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking? Yes No

16. Do you drink before noon fairly often? Yes No

17. Have you ever been told you have liver trouble? Cirrhosis? Yes No

18. After heavy drinking have you ever had Delirium Tremens (D.T.'s) or severe shaking, or heard voices or seen things that really weren't there? Yes No

19. Have you ever gone to anyone for help about your drinking? Yes No

20. Have you ever been in a hospital because of drinking? Yes No

21. Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem that resulted in hospitalization? Yes No

22. Have you ever been seen at a psychiatric or mental health clinic or gone to a doctor, social worker, or clergyman for help with any emotional problem, where drinking was part of the problem? Yes No

23. Have you ever been arrested for drunk driving, driving while intoxicated, or driving under the influence of alcoholic beverages? Yes No

(If yes, How many times? _____)

24. Have you ever been arrested, or taken into custody, even for a few hours, because of other drunk behavior? Yes No

(If yes, How many times? _____)

MICHIGAN ALCOHOLISM SCREENING TEST *KEY*

0. Do you enjoy a drink now and then? Yes (0) No **Points for "Yes"= 0**

1. Do you feel you are a normal drinker? (By normal, we mean you drink less than or as much as most other people). Yes No (2) **Points for "No" = 2**

2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening? Yes(2) No

3. Does your wife, husband, a parent, or other near relative ever worry or complain about your drinking? Yes(1) No

4. Can you stop drinking without a struggle after one or two drinks? Yes No(2)

5. Do you ever feel guilty about your drinking? Yes(1) No

6. Do friends or relatives think you are a normal drinker? Yes No(2)

7. Are you able to stop drinking when you want to? Yes No(2)

8. Have you ever attended a meeting of Alcoholics Anonymous (AA)? Yes(5) No

9. Have you gotten into physical fights when drinking? Yes(1) No

10. Has your drinking ever created problems between you and your wife, husband, a parent, or other relative? Yes(2) No

11. Has your wife, husband (or other family members) ever gone to anyone for help about your drinking? Yes(2) No

12. Have you ever lost friends because of your drinking?Yes(2) No

13. Have you ever gotten into trouble at work or school because of drinking? Yes(2) No

14. Have you ever lost a job because of drinking? Yes(2) No

15. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking? Yes(2) No

16. Do you drink before noon fairly often? Yes(1) No

17. Have you ever been told you have liver trouble? Cirrhosis? Yes(2) No

18. After heavy drinking have you ever had Delirium Tremens (D.T.'s) or severe shaking, or heard voices or seen things that really weren't there? Yes(2; 5=DT) No

19. Have you ever gone to anyone for help about your drinking? Yes(5) No

20. Have you ever been in a hospital because of drinking? Yes(5) No

21. Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem that resulted in hospitalization? Yes(2) No

22. Have you ever been seen at a psychiatric or mental health clinic or gone to a doctor, social worker, or clergyman for help with any emotional problem, where drinking was part of the problem? Yes(2) No

23. Have you ever been arrested for drunk driving, driving while intoxicated, or driving under the influence of alcoholic beverages? Yes(2) No

(If yes, How many times? _____)

24. Have you ever been arrested, or taken into custody, even for a few hours, because of other drunk behavior? Yes(2) No

(If yes, How many times? _____)

Scoring System: In general, five points or more would place the subject in an "alcoholic" category. Four points would be suggestive of alcoholism, three points or less would indicate the subject was not alcoholic.

Programs using the above scoring system find it very sensitive at the five point level and it tends to find more people alcoholic than anticipated. However, it is a screening test and should be sensitive at its lower levels.

START TIME: _____ CO-LEADERS: _____

STOP TIME: _____ _____

LOCATION OF GROUP: _____

DATE OF GROUP: _____

GOOD CHEMISTRY© VOLUNTARY SIGN-IN SHEET

IN/OUT?	NAME (PLEASE PRINT)	TIME IN	TIME OUT
	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		
	8.		

SAMPLE LETTER

Date
Address
Address

phone number

Dear Jane,

Hi! We missed you in the Good Chemistry group last week and this week, so I just wanted to send you a line and tell you so! Thanks for calling to tell me that you missed me while I was on vacation. I had a really good time, and was ready to come back to work.

I'm concerned that you may still be having a hard time staying sober. If that is true, I want to encourage you to "hang in there" and reach out for any support and help you may need. If you should need detox, I'm sure it could be arranged. I hope your health is okay. Well, take care and I hope to see you again real soon. Remember, we have meetings seven days per week and you are cordially invited to attend any of them! Here is the most recent Good Chemistry schedule.

Sincerely,

Co-leader's name

Lifetime Prevalence of Dual Disorders: Substance Use Disorders and Mental Illnesses

Excerpt taken from Regier, et al., 1990, Table 3, pages 2516-2517:

	% Co-Occurring
Mental Illness	**Any Substance Use Disorder (Dependence & Abuse)**
Bipolar I	**61%**
Schizophrenia	**47%**
Major Depression	**27%**
Dysthymia	**31%**
Panic Disorder	**36%**
Obsessive-Compulsive Disorder	**33%**
Any Anxiety Disorder	**24%**
Phobia	**23%**
Antisocial Personality Disorder	**84%**

Regier, D.A., Farmer, M.E., Rae, D.S., Locke, B.Z., Keith, S.J., Judd, L.L., & Goodwin, F.K. (1990) Comorbidity of Mental Disorders With Alcohol and other Drug Abuse: Results From the Epidemiologic Catchment Area (ECA) Study, JAMA, November 21, Vol. 264, No. 19, 2511-2518.

ADDITIONAL REFERENCES & REQUIRED SUPPLIES:

1. Current Schedules for all Twelve-Step meetings in your area (AA, Al-Anon, CA, NA, etc.) **(Handouts.)**

2. Book: **Alcoholics Anonymous (The "Big Book")**, by Alcoholics Anonymous (World Services) Fourth Edition, 2001 and phamplet: **(required for GC Session 6) "The AA Member & Medications"** (1984), AA World Services, P-11.

3. Perhaps some Good Chemistry one year bronze "chips," (if more are made).

4. A variety of AA "chips" **(for use at the end of each GC Group).**

5. The Information Exchange, Inc. Bert Pepper, M.D., Executive Director, 151 S. Main St., Ste. 212, New City, New York 10956; 914-634-0050. (TIE-LINES, films, booklets, etc.)

6. To be placed on Hazelden mailing list or place an order, call 1-800-257-7800 (Chemical Dependency/ Recovery books, films, etc.) Hazelden does offer quantity discounts.

7. To be placed on the Channing L. Bete Co., Inc. mailing list or to place an order call 1-800-628-7733 (Scriptographic booklets concerning many topics including major mental illnesses, chemical dependency, and dual diagnosis)

8. Book: The Twelve Steps and Dual Disorders by Tim Hamilton and Pat Samples. (96 page paperback; order #1519A; Hazelden; ~$6.95; Step study for Dual Recovery Anonymous); **for use with GC lessons 5 & 6).**

9. Workbook: The Twelve Steps and Dual Disorders by Tim H. (Hazelden order # 1553; ~$5.00)

10. Video: My Name is Bill W. starring James Woods as Bill W. and James Garner as Dr. Bob; Hallmark presentation (for television). (2 hours; great for staff and consumer orientation to the history of AA) Available for order through Blockbuster Video and others for ~$79. **(Quick orientation to history of AA and Big Book for staff.)**

EXPERIMENTAL AND QUASIEXPERIMENTAL STUDIES OF DUAL DIAGNOSES TREATMENTS

Study/ Design	Treatments	Sample	Measures	Results	Notes
Blankertz & Cnaan, 1994 Quasi-experimental	Two residential models: (1) psychosocial (holistic or organic) rehabilitation, (2) traditional therapeutic community (TC) modified for those with mental illness	89 homeless subjects who had received treatment for at least 60 days and who had exited the program; most had schizophrenia and were young, African American males, and unmarried; mean age was 33 and mean education was 11.7 years; all described as having substance abuse problems based on information contained in ASI and urine testing; all lived in urban area; about half had criminal convictions	Client self reports including Addiction Severity Index (ASI) and homeless functional assessment, client records, urine test prior to exit, staff reports	More subjects in psychosocial program (29%) than therapeutic community (8%) successfully exited treatment; 22 abstinent in psychosocial program and 20 not, which was better than in TC, 6 and 31, respectively Differences in treatment approach seemed to better explain differences in outcomes than client characteristics or amount of program use	Study conducted over 3 years 176 subjects had at least one assessment but analyses limited to those who stayed in treatment at least 60 days and exited program Authors say that even if clients were not "successful" they at least experienced warmth, care, and concern
Bond et al., 1991 Quasi-experimental	Two experimental treatments: (1) assertive community treatment (ACT) with emphasis on home and community visits (2) reference groups (RG) with focus on group treatment and standard mental health care were compared with standard mental health treatment	97 subjects, 79% male, 70% had schizophrenia or schizoaffective disorder, two-thirds were white, mean age 31.5 years, 97% not married; most receiving government benefits and 27% had had legal involvement; extent of substance abuse unclear but described primarily as chronic alcohol abuse	Client self reports and staff reports, including standardized instruments, and hospital admission data	More ACT (65%) and RG (83) subjects than standard treatment subjects (40%) remained engaged in treatment at 18 months ACT and control subjects had fewer hospital days compared to prior year; RG subjects had fewer hospital admissions Few differences between groups on outcomes such as alcohol use or life satisfaction	Only 66% of subjects randomly assigned actually participated

Study/ Design	Treatments	Sample	Measures	Results	Notes
Burnam et al., 1995 Experimental	Three treatments used: (1) Social model residential program providing integrated mental health and substance abuse treatments, through encouragement of abstinence, 12-step group attendance, and use of process oriented groups, case management, individual counseling, medication management, community activities, and independent living skills in "small, structured, therapeutic environments" (2) Community-based nonresidential program using same social model approach. Both intended to be 3 months of intensive treatment followed by 3 months of additional services/activities (3) Control group free to access community services	276 homeless adults (most men, unmarried, in their 30s and 40s with high school education); about equal numbers had mood or thought disorders; all were substance dependent	Client self report and items from SCL-90, ASI, and Alcohol Dependence Scale	Client engagement difficult Both experimental groups improved significantly on alcohol use, illicit drug use, depression/anxiety, self-esteem, housing situation, but not on psychotic symptoms, mania, or anger/hostility; gains eroded over time Clients participating in additional services (such as AA but not substance abuse treatment) had better outcomes; however, these clients may have been doing better from the beginning Only statistically significant difference between the 3 groups was that experimental groups	40% assigned never attended the experimental treatments; 49% stayed in residential program at least 2 weeks compared with 36% of non-residential; successful completion was 24% and 8%, respectively Clients found at follow-up: 79% at 3 months, 76% at 6 months, 70% at 9 months, with 58% participating in all 3 follow-ups Authors suggest that experimental treatments may have been too intense for clients in early stages of treatment and that less intensive (lower demand) treatment may be more useful for engagement They also suggest longer-term interventions that include housing

Study/ Design	Treatments	Sample	Measures	Results	Notes
Jerrell & Ridgely, 1995 Experimental	Three treatments used: (1) 12-step recovery (aimed at getting clients to use AA) (2) Behavioral skills training (weekly psychoeducational groups focused on self-management skills, including relapse prevention) (3) Intensive case management ("fairly intensive assistance" with housing, personal relationships and other matters)	132 subjects, 75% male, 70% white, 76% with schizophrenia, and described as having secondary or co-occurring substance abuse or dependence, who had completed 12 to 18 months of treatment	Client self reports, including standardized instruments and observations of trained paraprofessional interviewers	Greatest number of positive outcomes reported for the behavioral skills group, particularly in independent living and immediate social relations Case management subjects had higher global satisfaction with life and mental health status Several psychiatric symptoms lower for case management subjects than for 12-step, but behavioral skills group also improved in these areas and also on substance abuse symptoms compared with 12-step Differences on many other outcome variables not significant Authors concluded that all 3 interventions had some positive effect and that clients can be engaged in treatment	Authors' enthusiasm about results tempered by lack of significance on a number of outcome variables (e.g. life satisfaction and social adjustment) Authors suggest that combining the 3 interventions may provide better results Study conducted over 24 months

Study/ Design	Treatments	Sample	Measures	Results	Notes
Lehman et al., 1993 Experimental	All subjects offered usual community mental health services (psychosocial day treatment, outpatient services, and supported housing if needed) Experimental subjects also received intensive case management and "Being Sober Group," which met 5 hours per week and addressed substance abuse and mental illness, self-help group participation, and socialization	54 subjects, ages 18 to 40, mostly male and African American; most had thought disorders; rest had bipolar disorder or major depression; all had lifetime substance dependence, but about half did not have this diagnosis in 30 days before study	Alcohol, drug, and psychiatric functioning as measured by ASI, Quality of Life Interview, and days of psychiatric hospitalization	Both groups had considerable involvement in community mental health services Difficult to engage experimental subjects in additional services Neither group showed substantial improvement on outcome variables Experimental group did not do better on outcome variables (ASI measures, life satisfaction, and days hospitalized) than control group	Authors suggest that treatment may not have been well matched to clients' level of readiness (treatment was designed for clients ready to actively engage while those in study were considered to be in earlier stage of treatment process) Both treatment conditions were substantial and there is no minimal intervention with which to compare results

Study/ Design	Treatments	Sample	Measures	Results	Notes
Webb, 1994 Quasi-experimental	Both groups received intensive, residential services from assertive community treatment-like teams Experimental group also received "Good Chemistry" (weekly dual diagnosis psychoeducation/process groups)	70 subjects, 74% male, 53% had schizophrenia, 50% substance abusers, 50% substance dependent, 80% white, 13% African American, 6% Hispanic	Client records and staff reports	Experimental subjects more likely to complete (engage in) 3 months of residential treatment than controls, i.e. they were more likely to be "treatment successes" than premature discharges; no differences in use of screenings by psychiatric stabilization unit or times or days in psychiatric hospitals Both groups had fewer times and days in hospital 3 months after discharge than they did 3 months before entry into the study	Results for psychiatric hospitalization are consistent with those of most studies of ACT-like services
Webb & DiNitto, 1997 Experimental	All subjects received traditional inpatient chemical dependency treatment Experimental subjects also received "Good Chemistry" Groups (structured therapeutic process groups containing a psychoeducational segment on a dual diagnoses topic, facilitated by a dual diagnoses professional and an individual in dual recovery)	97 subjects, 53% female, average age 33 (range from 18 to 56 years old); 59% white, 28% African American, 13% Hispanic; average education 11.2 years; 75% had mood disorders, 10% had thought disorders, 12% had mood and thought disorders, 3% had PTSD; all were substance dependent (mostly alcohol or cocaine and mostly polysubstance dependent)	ASI and other client self reports, urinalysis in some cases, collateral reports, hospital records	Subjects in both groups improved on most outcome variables, except legal Experimental subjects attended self-help groups more often and had better drug domain outcomes on ASI but did not do better than control group on medical, legal, alcohol, psychiatric, or family-social functioning or on collaterals' reports of functioning	Follow-up participation was 47% at 30 days, 55% at 60 days, 54 % at 90 days with 70% participating in at least one follow-up; 80% of collaterals participated in at least one follow-up Authors suggest that barriers limiting access to inpatient treatment should be removed

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TABLE 5
IMPROVEMENT FOR THE TOTAL SAMPLE
Webb & DiNitto Study on Dual Diagnoses (1997)
ADDICTION SEVERITY INDEX COMPOSITE SCORE (MEAN)

	MEAN SCORE (SD)								
Variable	**baseline**		**follow-up**		**t**	**d**	**p**	**eta2**	**Power**
MEDICAL	.44	(.36)	.28	(.38)	2.73	66	.008*	.10	.85
ALCOHOL	.36	(.27)	.15	(.21)	5.67	65	.000**	.33	1.00
DRUG	.18	(.12)	.06	(.08)	6.95	65	.000**	.43	1.00
LEGAL	.13	(.16)	.12	(.18)	.25	64	.805	.001	.13
SOCIAL	.34	(.20)	.17	(.19)	5.83	64	.000**	.35	1.00
PSYCHIATRIC	.56	(.25)	.33	(.24)	6.63	64	.000**	.41	1.00

* significant at the .01 level
**significant at the .001 level

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The Effectiveness of an Integrated Treatment Approach for Clients With Dual Diagnoses

Diana M. DiNitto
The University of Texas at Austin

Deborah K. Webb
Austin Travis County Mental Health Mental Retardation Center

Allen Rubin
The University of Texas at Austin

Objective: A randomized experiment tested the effectiveness of adding a psychoeducationally oriented group therapy intervention, Good Chemistry Groups, to standard inpatient chemical dependency services for clients dually diagnosed with mental and substance dependence disorders. Method: Ninety-seven clients were randomly assigned to an experimental group (n = 48) and a control group (n = 49). Outcome variables included drug and alcohol use, participation in self-help support group meetings, incarceration days, psychiatric symptoms, psychiatric inpatient admissions, compliance with prescribed psychotropic medication plans, and composite scores on the Addiction Severity Index. Results: No significant treatment effects were found on any of the outcome variables. The findings were generally consistent with those of prior controlled studies. Conclusion: Good Chemistry Groups did not add to the effects of standard treatments for dually diagnosed clients. Practitioners should continue to develop and evaluate alternative integrated treatment approaches that might prove to be more effective than this one.

Epidemiological studies have found widespread comorbidity of mental and substance disorders (Grant, 1995; Kessler et al., 1996; Regier et al., 1990). Their findings support the need for integrated treatment approaches for people who have these two disorders, after many years in which mental health and chemical dependency services were provided by separate entities with limited cooperation between the two fields (Daley, Moss, & Campbell, 1987; DiNitto & Webb, 1998).

Authors' Note: Correspondence may be addressed to Diana DiNitto, School of Social Work, The University of Texas at Austin, Austin, TX 78712; e-mail: ddinitto@mail.utexas.edu. The authors gratefully acknowledge the Hogg Foundation for Mental Health, Austin, Texas, and the Lois and Samuel Silberman Fund, New York, New York, for their financial support of this research. Without invaluable assistance from Thom Mead, Peggy Thweatt, Frank Hood, Suzanna Farmer, and Debra Morrison-Orton, this study would not have been possible.

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The integrated approaches that have been developed vary in terms of the specific service modalities provided, but they share several common assumptions about how to improve upon the traditional, nonintegrated approaches of the past. Among the most important of these assumptions is that clients can and should work on recovery from both disorders simultaneously. In addition, traditional chemical dependency services may have been too harshly confrontational for individuals with mental disorders. These individuals are less able to handle the stress and implied rejection of confrontation and thus may become more vulnerable to decompensation. Most traditional chemical dependency programs also insisted that clients abstain completely from drugs and alcohol in order to remain in the program. The mental disorders of dually diagnosed clients suggest the need for a softer, more incremental approach that allows clients to remain in the program even if they are not fully abstinent. In the past, traditional chemical dependency services tended to discourage the use of any mind-altering substances, including prescribed psychotropic medications, which are deemed necessary in the treatment of certain mental disorders. Traditional inpatient chemical dependency programs also may have been too rigid in insisting on one set duration of inpatient care and may have lacked the flexibility needed to permit clients with mental disorders to stay longer, as needed, until they were stable. Traditional inpatient chemical dependency services also may have lacked sufficient provisions for the extensive degree of aftercare and follow-along needed by dually diagnosed clients. Traditional mental health services, on the other hand, may not have offered sufficient outreach, housing, or attention to substance abuse issues (Drake et al., 1998; Drake, Yovetich, Bebout, Harris, & McHugo, 1997).

The foregoing problems in separate treatment programs may be lessening as practitioners in these programs learn more about the prevalence and needs of people with dual diagnoses. Consequently, many separate, traditional programs may be more accurately viewed today as "partially integrated." The specific service modalities in separate or partially integrated programs are now often similar to those in fully integrated programs. For example, both may utilize common mental health interventions such as psychoeducational groups, intensive case management, assertive community treatment, behavioral skills training, residential and community support programs, and psychosocial rehabilitation services. Likewise, both separate and fully integrated chemical dependency programs may utilize such interventions as residential and community support programs, case management, 12-step recovery programs, and other forms of group therapy (Blankertz & Cnaan, 1994; Bond, McDonel, Miller, & Pensec, 1991; Burnam et al., 1995; Jerrell & Ridgely, 1995; Lehman, Herron, Schwartz, & Myers, 1993; Webb, 1994).

Because of the similarities in the general types of services offered, it is not always clear, in operational terms, what exactly differentiates the fully integrated programs described in the literature. One key way that fully integrated programs appear to be differentiated in their attempt to avoid the problems associated with separate treatment is by staffing these programs with service providers who have training and experience in both fields and who understand the need to base treatment on integrated principles. Thus, clinicians in integrated programs may be more likely to recognize and treat both disorders simultaneously rather than thinking that the chemical dependence is merely a symptom of the mental disorder or that the mental disorder (depression, e.g.) is merely a symptom of the chemical dependence.

The empirical literature on the effectiveness of integrated programs is at best uneven in methods and outcomes. A few controlled studies have used experimental designs; others have used quasi-experimental designs. Some controlled studies have compared integrated approaches to traditional approaches, whereas others have compared alternative integrated approaches to one another. (Other studies used no experimental or quasi-experimental controls and therefore are not included in the following brief review of previous studies.)

A quasi-experimental study by Bond and his colleagues (1991) assessed the effectiveness of two integrated treatment approaches—assertive community treatment (ACT) and reference group treatment. Clients in the study had a diagnosis of schizophrenia, but the extent of their substance use problems was unclear. Although findings suggested that the integrated treatment approaches might enhance remaining engaged in treatment and might lessen hospitalization, little evidence was found to support their superior efficacy (as compared to traditional community mental health center services) on other outcome indicators such as alcohol use or life satisfaction.

In a more recent evaluation of the ACT team approach, Drake and his associates (1998) compared the effectiveness of ACT and standard case management (SCM). Both the ACT and the SCM programs were integrated regarding dual disorders. The main difference was that the ACT practitioners provided more direct services themselves, in addition to case management brokerage roles, than did the SCM practitioners. Although the outcomes favored the ACT approach on some measures, the statistically significant results were of marginal clinical significance. Moreover, on most outcome measures the two groups had equivalent outcomes.

Webb (1994) used a retrospective, quasi-experimental design to evaluate the effectiveness of adding a psychoeducational group geared to chemical dependency and mental illness to ACT mental health services that included residential, psychosocial rehabilitation, community support, and intensive case management components. Although clients receiving the psychoeducational component were more likely to complete residential treatment, none of the findings on other outcome indicators supported the superior effectiveness of adding the psychoeducational component.

Blankertz and Cnaan (1994) conducted a quasi-experimental study that compared two types of residential treatment for clients who were dually diagnosed (most with schizophrenia) and homeless. One utilized a psychosocial rehabilitation model; the other more closely resembled a traditional therapeutic community for drug addicts modified to assist those with mental illness. Although there was at least one follow-up on 176 clients in the study, results are reported only for the 89 who remained in treatment at least 60 days and had exited the program. The findings indicated statistically significant albeit modest support for the effectiveness of the psychosocial program regarding abstinence and staying in treatment.

Jerrell and Ridgely (1995) conducted a clinical trial to compare the effectiveness of three integrated service modalities—12-step recovery, behavioral skills training, and intensive case management—with clients who had severe mental illness (mostly schizophrenia) and substance use disorders. The greatest number of positive outcomes were found for the behavioral skills group (particularly improvements in independent living and immediate social relations), but the limited differences on the many outcome variables tested did not appear to be clinically significant.

Lehman and his colleagues (1993) used an experimental design to evaluate the effectiveness of adding intensive case management and involvement in a Being Sober Group to a routine package of community mental health and psychosocial rehabilitation services for dually diagnosed clients with lifetime substance dependence, most of whom had a thought disorder. The study team encountered difficulty in engaging clients in the added services, and findings failed to support their efficacy.

Burnam and her associates (1995) conducted a randomized experiment to evaluate the effectiveness of a residential program and community-based nonresidential program, both of which provided integrated mental health and substance abuse treatment for homeless adults with severe mental illness and substance dependence. The outcomes studied were substance use, mental illness symptoms, and housing arrangements. The experimental groups were compared to a control group who received no intervention but were permitted

to utilize other community services. The only variable on which either experimental group had a better outcome than the control group was alcohol use at the 3-month follow-up, and this gain eroded over time.

Drake and his associates (1997) utilized a quasi-experimental, nonequivalent control group design to compare the effects of an integrated and a standard approach to providing a package of mental health treatment, substance abuse counseling, and housing services for dually diagnosed homeless persons. The key difference between the two groups was not in the type of services provided but in their level of integration (although exactly what "level of integration" meant was not explicated operationally). Drake et al. emphasized the positive nature of their findings regarding days institutionalized, days in stable housing, and pre to post progress regarding substance abuse. However, substance abuse differences between the two groups were not statistically significant.

The foregoing studies provide limited and inconsistent empirical support for the superior efficacy of integrated treatment. Most of the studies had mixed results; positive results were of a modest magnitude. This implies a continued need to develop and evaluate innovative, integrated approaches for persons with dual diagnoses. Also, the studies done so far have focused primarily on male clients whose major mental illness is schizophrenia. Conceivably, their results may have been different had their samples included a greater proportion of female clients or of dually diagnosed clients whose mental illness is a severe mood disorder. Moreover, all the controlled studies summarized above have tested interventions implemented in the context of mental health service agencies. None of the interventions were implemented in the context of chemical dependency service programs.

The following study addressed these gaps by testing the effectiveness of a psychoeducationally oriented, dual diagnoses group therapy approach called Good Chemistry Groups. The study sample had nearly equal numbers of male and female clients, most of whom had a major mental illness or mood disorder and who were receiving inpatient chemical dependency services. The hypothesis tested in this research was as follows:

> *Hypothesis*: Adding the dual diagnoses Good Chemistry Groups treatment approach to the standard inpatient chemical dependency treatment increases abstinence, increases participation in subsequent self-help support group meetings, reduces incarceration days, alleviates psychiatric symptoms, reduces future psychiatric inpatient admissions, increases compliance with prescribed psychotropic medication plans, and improves composite scores on the Addiction Severity Index (ASI).

METHOD

Clients

Clients were recruited over a 15-month study period at a 28-day, Minnesota-model, inpatient chemical dependency treatment program in Austin, Texas. As in other Minnesota-model programs, the Austin program emphasized abstinence and a comprehensive, multiprofessional treatment approach incorporating the principles of Alcoholics Anonymous (AA). Services provided included medical supervision, education, group therapy, individual counseling, and introduction to AA and other self-help groups. Clients were eligible to participate in the study if they had Axis I *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, mental and substance dependence disorders as described by the American Psychiatric Association (1994), had not previously attended Good Chemistry Groups, and agreed to participate after being fully informed of the study. There was no other eligibility criterion.

Ninety-seven clients participated in this study, 48 in the experimental group and 49 in the control group. Three others withdrew from the study. Of the 97 clients, 46 (47%) were men and 51 (53%) were women. The mean age was 32.9 years ($SD = 7.9$), with a range from 18 to 56. Fifty-seven (59%) were White, 27 (28%) were African American, and 13 (13%) were of Hispanic origin. The clients' mean years of education was 11.2 ($SD = 2.3$), with a range of 5 to 18 years. The clients were diagnosed with two types of primary disorders, a chemical dependence diagnosis and a major mental disorder. These diagnoses had been made independently by a psychiatrist before clients were considered for the chemical dependency treatment program. Most (72, or 74%) had mood disorders, 29 (30%) with major depression and 43 (44%) with dysthymia. Ten (10%) had a thought disorder (schizophrenia or other psychotic disorder); 12 (12%) had mood and thought disorders (bipolar or schizoaffective disorder); and 3 (3%) had post-traumatic stress disorder. Most (58 clients, 60%) were polysubstance dependent. Most others were dependent on alcohol (17 clients, or 18%) or cocaine (15 clients, or 16%). Because all clients had one or more substance dependence disorders (none had only the less severe diagnosis of "substance abuse"), the sample was homogeneous with respect to the dependence diagnosis.

Upon admission to the program, members of the experimental and control groups did not differ significantly on demographic or diagnostic variables or on any of the measures designated as dependent variables. Neither did they differ significantly on the number of previous admissions to Texas state psychiatric hospitals in the last year or on the number of lifetime criminal convictions they reported (76% of the total sample had ever been convicted of a crime). Slightly more than half (53% of experimentals and 57% of controls) were on probation or parole when they entered this study. Given the attention paid to stages of treatment in dual diagnosis services, we believe that the clients are best described as being in what McHugo, Drake, Burton, and Ackerson (1995) call the "early persuasion" stage. In this stage, "the client has regular contacts with a case manager or counselor but has not reduced substance use more than a month" (p. 763). In this study most of the clients had been on a waiting list for a couple of weeks and were making a weekly call to a program staff member to enter the chemical dependency treatment program.

Good Chemistry Groups Intervention

The Good Chemistry Groups intervention tested in this study aimed to help clients view current substance use as a leading cause of negative consequences in their lives, such as mental instability. The intervention initially was conceptualized, and this study was implemented, before most of the other studies reported in the literature review appeared in print. The Good Chemistry Groups are very similar to the psychoeducational groups offered in mental health settings to the extent that Good Chemistry begins with 15 minutes of psychoeducation; however, what is unique is that the psychoeducation is followed by 45 minutes of structured group therapy. Educational groups are also part of chemical dependency treatment programs but they do not contain the substantial content on mental disorders that Good Chemistry includes.

Several considerations guided the development of Good Chemistry. One was the lack of any compelling theoretical or empirical basis for any particular way to integrate treatment for both disorders. Another was the notion that a multifaceted treatment approach would be needed in light of the agreement in the literature that people with both mental and substance use disorders face more difficult courses of recovery because they must manage multiple illnesses (Keitner, Ryan, Miller, Kohn, & Epstein, 1991). A third consideration was the consistent empirical support that had been accumulating for the efficacy of psychoeducational and behavioral treatment approaches with individuals suffering from severe and persistent mental illnesses (Hogarty et al., 1986; Lukens & Thorning, 1998).

The group format was chosen primarily for two clinical reasons. One was the notion that utilizing peer pressure, feedback, group norms, and gentle confrontation may be more successful than individual treatment in penetrating denial of each illness. The other reason was the opportunity that a group

modality offers for using coleaders, including one coleader who is working a successful dual recovery program and who thus can serve as a role model and a catalyst for hope. Group leaders maintained a high degree of structure, keeping each session focused on the topic for that session and posing questions for discussion on narrow topics. Based on the premise that severe and persistent mental disorders make clients vulnerable to information overload, group leaders were guided by the principles of specificity, repetition, and overlearning.

Group process was also guided by the premise that because of their severe mental disorders, dually diagnosed clients are too fragile to handle the stress or implied rejection of harsh confrontation. Thus, failing to remain completely abstinent was met with softer responses. Behavioral rewards were given for very small increments of improvement. For example, if a client reported that he "only smoked dope 4 nights last week," the therapist might praise him effusively and have the group applaud because he did not smoke every night as he used to do. This is unlike traditional chemical dependency groups in which a client giving such a report might be told, "You are in denial and are screwing up; you are not clean and sober." The client might even be dismissed from the program for breaking the rules of traditional chemical dependency treatment groups. In contrast with the traditional approach of requiring clients to be clean and sober in order to remain in the program, Good Chemistry Groups attempted to create a peer group norm of trying *to become* clean and sober. Underlying this approach is the notion that with dually diagnosed clients a main program objective should be to keep them engaged in treatment regardless of their degree of progress in becoming clean and sober. Another way that Good Chemistry Groups processes contrast with traditional chemical dependency treatment groups is that the focus is kept on the implications of having dual disorders and the need to work on both at the same time. In traditional chemical dependency treatment groups the focus is on the chemical dependency, not the mental disorders.

The complete intervention consisted of nine structured Good Chemistry Groups sessions. Each session focused on a different topic. The topics for the nine sessions were (1) signs and symptoms of mental and substance use disorders; (2) how the illnesses overlap and interact; (3) dangers of mixing nonprescribed substances with medications; (4) a closer look at mixing medications with alcohol, marijuana, and cocaine; (5) exploring 12-step programs; (6) AA's view of medications; (7) recognizing the cues and triggers of relapse and preparing solutions; (8) the importance of asking for extra help when needed; and (9) the importance of staying involved in treatment. The sessions were offered three times a week. The nine sessions thus took 3 weeks to complete. At the end of each 3-week cycle the nine sessions were repeated during the next 3 weeks. This process was repeated for 21 cycles throughout the 15-month course of the study. Because some sessions were offered twice during a 4-week period, clients were allowed to attend any session more than once as they wished. Groups were conducted with 2 or more participants, and the maximum number of clients who attended any particular session was 12. Admissions were staggered during the nine-session series, so clients could start attending sessions at any point. They did not wait until the first session in the series was offered. In light of this, all sessions began with a review of key concepts.

Each of the 1-hour sessions began with 15 minutes of psychoeducation consisting of the Good Chemistry dos and don'ts and mottos and related material to assist people with dual diagnoses. Clients were then given substantial opportunity and encouragement to process information, especially their thoughts, feelings, and experiences regarding the session topic. The coleaders engaged clients by presenting information on the session topic and then facilitated group interaction by posing critical questions. Unlike 12-step meetings, "cross-talk" was fostered and processed by the group, and reticent attendees were actively encouraged to participate.

Behavioral principles played a large role in the intervention. Self-reports of desired behaviors, such as incremental efforts to become or stay clean, sober, and stable, were positively reinforced with metal tokens (similar to AA chips), applause, praise, and affection from peers. The tokens offered a symbolic reward. They could be worn as amulets to display the progress being made by the client. If desired behaviors were not reported, shaping was done by reinforcing successive approximations to the desired behavior, such as rewarding hours of sobriety instead of days of sobriety. Although alcohol and other drug dependence was recognized as a co-occurring illness, alcohol and other drugs were also conceptualized as undesirable reinforcers that may have initially offered consumers some positive consequences such as pleasure, escape from a painful reality, or removal of unpleasant side effects of psychotropic medications. A goal of the Good Chemistry Groups, therefore, was to help clients view current substance use as a leading cause of negative consequences in their lives, such as mental instability. Thus, the groups were designed to help clients recognize and break specific maladaptive and often ritualized chains of behavior and replace them with more adaptive behaviors. Adaptive behaviors recommended to all participants included staying mentally stable by taking medications as prescribed, participating in jointly agreed-upon services, and abstaining from all addictive substances.

Several steps were taken to enhance intervention fidelity. Those selected as coleaders for the group sessions had previously been trained by the founder of the Good Chemistry treatment approach (a social worker) and had co-led Good Chemistry Groups with her. Good Chemistry training is 16 hours long, and professional and peer coleaders are trained together on topics such as criteria for diagnosis, research on dual diagnoses and dual diagnoses treatment, self-help groups, spirituality, use of medications, role modeling, and so forth. The training includes study of the Good Chemistry manual (Webb, 1995), which contains scripts for the didactic portion of each group session and questions for presentation to the group at the end of each session.

Trainees also take a written exam to assess their learning. Both professional and peer coleaders assume equal roles in conducting the groups (either may present the psychoeducational portion and facilitate group discussion). One coleader in this study was a licensed chemical dependency counselor. The other was a former Good Chemistry participant who, after remaining clean, sober, and stable for more than 1 year, received Good Chemistry Co-Leader Training and had several years of experience as a peer coleader. The fully documented program manual was used to guide each session. The founder of Good Chemistry listened in to monitor two sessions from an adjoining room; she qualitatively concluded that the sessions reflected a very high degree of treatment fidelity, as the coleaders followed the treatment manual and exhibited good clinical skills regarding group process.

Outcome Measures

The dependent variables in this study were (a) use of alcohol or other nonprescribed drugs; (b) amount of participation in self-help support group meetings after discharge; (c) incarceration; (d) psychiatric symptoms; (e) inpatient admissions after discharge; (f) psychotropic medication compliance; and (g) composite scores for the Medical, Legal, Alcohol, Drug, Psychiatric, and Family/Social domains of the ASI. The Medical composite score of the ASI assesses the extent of medical problems reported by the client. Clients who were complying with their prescribed regimen of psychotropic medications and psychosocial care were expected to experience fewer medical problems and fewer complications from preexisting medical conditions. The Legal composite score of the ASI assesses self-reported legal difficulties connected to drug-related issues, such as arrests and other criminal behavior. In addition to using the composite scores of the ASI, specific items on it were used to triangulate with measures of some of the other six dependent variables, as reported below. The ASI was developed

by McLellan and colleagues (1985) and is widely used in the chemical dependency field. The composite scores for each of its seven domains range from 0 (*no problems*) to 1.

The ASI has been shown to be reliable and valid with substance abusers (Fureman, McLellan, & Alterman, 1990; McLellan et al., 1985). In using it with homeless people with substance disorders, some of whom also had psychiatric problems, Drake, McHugo, and Biesanz (1995) found that test-retest reliability for the composite scores ranged from .64 to .86. Hodgins and El-Guebaly (1992) found the ASI to be useful with those who had substance and psychiatric disorders. Adequate reliability was found on five of the seven composite scores, with the Legal and Family/Social Relations composite scores being problematic. Zanis, McLellan, and Corse (1997) assessed the use of the ASI with individuals dually diagnosed with schizophrenia and substance abuse and found alphas ranging from .67 to .85. We assessed the internal consistency reliability of our ASI data and obtained alphas ranging from .70 to .94 for four of the domains, but our alphas ranged from only .42 to .63 for the Legal domain and from .60 to .78 for the Drug domain.

Abstinence from the use of alcohol or drugs was assessed in a triangulated fashion based on self-reports, collateral reports, and urine and saliva tests. Self-reports were obtained in a section of the ASI on whether or not the client had used any alcohol or drugs in the last 30 days. The collateral report was obtained using a slightly modified version of the Case Manager Rating Scale (Drake et al., 1990), a scale designed for use in the dual diagnoses field. Its scores can range from 1 (*no substance use or related problems*), to 5 (*extremely severe use of alcohol or drugs and related problems*) during the past 30 days. (The modifications involved replacing the *case manager* label with the label *collateral*, referring to the use of alcohol or drugs instead of just alcohol and referring to use during the past 30 days instead of the past year.) The scale has been found to be highly sensitive and reliable, with test-retest reliabilities close to 100% and kappa coefficients between .85 and .95 (Drake et al., 1990; Drake, Osher, & Wallach, 1989).

Degree of participation in self-help support group meetings after discharge was assessed by asking clients and collaterals, on a form developed for this study, how many such meetings they attended during the past month. Incarceration was assessed in a triangulated fashion based on self-reports on ASI items regarding incarceration and by asking collaterals. Because the most prevalent mood disorder among clients in this study was depression, psychiatric symptoms were assessed in part according to self-reports of suicidal ideation and suicide attempts. Those two problems, as well as other self-reported psychiatric symptoms, were assessed via items on the ASI on

which clients report the number of days they experienced psychiatric problems. Inpatient admissions after discharge were assessed by examining the computerized state database on psychiatric admissions and by reports of clients and collaterals at follow-up. Psychotropic medication compliance was assessed via questions asked of collaterals, with answers recorded on a form developed for this study. Composite domain scores on the ASI were used to measure medical, legal, alcohol, drug, psychiatric, and family/social problems.

Research Design

Ninety-seven clients were randomly assigned to an experimental ($n = 48$) or a control group ($n = 49$). The control group received 28-day inpatient chemical dependency treatment only. The experimental group received the same inpatient chemical dependency treatment plus Good Chemistry Groups. Hypotheses were tested by comparing the two groups on follow-up data collected at 30, 60, and 90 days after discharge.

The follow-up data turned out to be difficult to collect. Many clients were transient or homeless. Many left no forwarding address. The clients were asked to provide the names of two collaterals and to sign release forms for us to contact the collaterals for follow-up information. However, sometimes even these collaterals did not know how to reach the clients. Some clients had moved to another state. Others gave telephone numbers that were incorrect. The study's funding was modest, and efforts to find hard-to-locate clients had to be within reasonable limits. Shortly before discharge clients were reminded by research assistants of the importance of staying in touch and were given a card with information on how to contact the research assistants. Clients' addresses were updated at this time. After discharge, reminders were disseminated by mail or phone, if possible. Clients were paid $20 for each postdischarge interview. If they could not be found, their primary and secondary collaterals were contacted in an effort to locate them. Collaterals were most often family members or friends, but also included professionals such as case managers and probation officers. Collaterals were also contacted for information about the clients' progress at each follow-up period. If contacting collaterals failed to locate clients, the statewide mental health database was examined to see if they were receiving inpatient or outpatient services elsewhere in the state. Follow-up interviews were conducted wherever clients happened to be, including in jail.

Despite the foregoing efforts, each follow-up, by itself, involved only about half of the clients. Forty-six clients (47% of the participants), 22

TABLE 1: *Experimental and Control Group Comparisons on Mean Addiction Severity Index (ASI) Composite Scores at Pretest and Follow-Up for Clients for Whom Follow-Up Data Were Available*

	Mean Composite Scores[a]				
	Pretest		Posttest		
ASI Composite Domain	*Experimental Group*	*Control Group*	*Experimental Group*	*Control Group*	*ANCOVA Significance*
Medical	0.52	0.36	0.38	0.18	*ns*
	SD = 0.35	*SD* = 0.36	*SD* = 0.41	*SD* = 0.32	$p = .07$
	n = 33	*n* = 34	*n* = 33	*n* = 35	
Alcohol	0.41	0.31	0.18	0.12	*ns*
	SD = 0.28	*SD* = 0.26	*SD* = 0.21	*SD* = 0.20	
	n = 33	*n* = 33	*n* = 33	*n* = 35	
Drug	0.17	0.19	0.04	0.09	*ns*
	SD = 0.12	*SD* = 0.12	*SD* = 0.07	*SD* = 0.09	$p = .03$
	n = 32	*n* = 34	*n* = 33	*n* = 35	
Family/social relations	0.33	0.35	0.13	0.21	*ns*
	SD = 0.19	*SD* = 0.21	*SD* = 0.16	*SD* = 0.21	
	n = 33	*n* = 32	*n* = 33	*n* = 34	
Legal	0.14	0.11	0.13	0.13	*ns*
	SD = 0.14	*SD* = 0.18	*SD* = 0.18	*SD* = 0.20	
	n = 33	*n* = 32	*n* = 33	*n* = 35	
Psychiatric problems	0.57	0.55	0.33	0.35	*ns*
	SD = 0.24	*SD* = 0.29	*SD* = 0.22	*SD* = 0.27	
	n = 33	*n* = 32	*n* = 33	*n* = 34	

a. The higher the score, the worse the problems.

experimental and 24 controls, participated in the 30-day follow-up. At the 60-day follow-up 53 participants (55% of the sample), 24 experimentals and 29 controls, participated. At the 90-day follow-up, 52 participants (54% of the sample), 27 experimentals and 25 controls, participated. In all, 68 (70%) of the 97 clients (33 experimentals and 35 controls) participated in at least one follow-up, as did 78 (80%) of collaterals. Only 33 (34%) clients participated in all three follow-ups. Fifteen experimentals and 14 controls did not participate in any follow-up. In total, some follow-up information was obtained on 83 (86%) of the clients who originally agreed to participate. Consequently, the follow-up data were aggregated and treated as one posttest. For example, self-help group attendance was calculated using the number of days attendance was reported at each follow-up for which data are available and dividing that figure by the number of follow-ups in which the client or collateral participated. ASI and Case Manager Rating Scale comparisons were made by using the last scores available.

During each follow-up contact clients and collaterals were asked to report only on the immediate 1-month follow-up period. They were not asked to recall information for follow-up periods that they had missed. Baseline data were collected upon inpatient admission by the staff of the inpatient chemical dependency program. Follow-up data were collected by master's in social work students who were hired as research assistants for this study. They were not blind as to the experimental status of the clients. Clients were included in the data analysis regardless of how long they stayed in the inpatient chemical dependency program or how few Good Chemistry Groups sessions they attended. Statistics used to test hypotheses were chi-square and ANCOVA (depending on the level of measurement of each dependent variable), using baseline data when applicable as covariates to control for possible baseline differences between group members found at follow-up.

There was no statistically significant difference in the proportion of experimental (81%) and control (90%) clients for whom some follow-up information was available; $\chi^2(1) = 1.4$; $p = .23$. Neither was there much difference on the baseline demographic and diagnostic variables for clients found versus not found at follow-up. The only ASI domain on which the two sets of clients differed was Medical. Clients not located at follow-up had less severe initial medical problem scores at baseline ($M = .25$) on the ASI ($F = 5.5$, $df = 1, 94$, $p = .02$) than those found ($M = .44$). There were no initial (baseline) differences on any other composite scores of the ASI. Not all of the clients spent the full 28 days in the inpatient chemical dependency treatment program, but the length of stay of the experimental and control groups' clients was very similar, 25.6 and 26.3 days, respectively.

RESULTS

An overall alpha of .10 was chosen to test our hypothesis regarding the superior effectiveness of adding the Good Chemistry Groups to the standard inpatient treatment. An alpha of .05 was considered but rejected for several reasons. One reason was the limited number of clients who participated during follow-up periods. For some variables follow-up data are available for only 68 clients. Assuming a medium effect size, an n of 68 yields a power coefficient of about .82 with an alpha of .10, as compared to only .72 with an alpha of .05. Thus, using an alpha of .10 reduced our risk of a Type II error from .28 to a more acceptable level of .18 (Rubin & Babbie, 1997). Another reason for setting alpha at .10 was the absence of a clear, empirical basis for assuming an effect size that was at least of medium magnitude. In addition, we needed to use the Bonferroni adjustment because we tested for significant treatment effects on seven dependent variables and assessed several variables in multiple ways, yielding 19 bivariate significance tests. Consequently, we divided our overall alpha of .10 by 20 and thus used an alpha of .005 for each separate test of significance.

None of the 19 hypothesis-testing comparisons was statistically significant. In fact, only three would have been significant at the .10 level without the Bonferroni adjustment. All effect sizes were low and would have lacked clinical significance even had they been statistically significant. A MANCOVA was conducted on the ASI composite posttest scores, using the ASI pretest scores as covariates. It, too, indicated that the differences between the experimental and control groups were not statistically significant ($p = .12$). Table 1 displays the comparisons on the ASI composite scores. Table 2 displays the remaining 13 comparisons.

DISCUSSION AND APPLICATIONS TO SOCIAL WORK PRACTICE

Our study failed to support the superior effectiveness of the integrated treatment approach it evaluated. Although clients in both groups generally improved from baseline to follow-up on ASI scores (as displayed in Table 1), adding the Good Chemistry Groups intervention to the standard inpatient chemical dependency services did not seem to help the dually diagnosed clients in our study. We conclude this despite the limitations in our study (which we cite shortly) in light of the following three considerations. First, we examined 19 outcome indicators and found no statistically significant findings on

TABLE 2: ***Experimental and Control Group Comparisons on 13 Outcome Variables at Follow-Up for Clients for Whom Follow-Up Data Were Available***

Outcome Variable	*Experimental Group*	*Control Group*	*Significance*
Clients abstaining from alcohol and drugs	37% *n* = 38	29% *n* = 42	*ns*
Mean days alcohol or drugs used	8.4 *SD* = 10.5 *n* = 37	11 *SD* = 12.8 *n* = 42	*ns*
Clients attending any self-help meetings after exiting inpatient treatment	84% *n* = 38	77% *n* = 43	*ns*
Mean self-help meetings attended after exiting inpatient treatment	11.5 *SD* = 11.0	7.7 *SD* = 8.6	*ns* *p* = .09
Clients incarcerated	31% *n* = 39	25% *n* = 44	*ns*
Mean days incarcerated	2.8 *SD* = 6.2 *n* = 39	2.2 *SD* = 5.0 *n* = 42	*ns*
Clients reporting suicidal ideation	24% *n* = 33	31% *n* = 35	*ns*
Clients reporting suicide attempts	0 *n* = 33	2 *n* = 35	*ns*
Mean days psychiatric problems experienced, as reported on ASI	12.6 *SD* = 11.1 *n* = 33	13.7 *SD* = 10.1 *n* = 34	*ns*
Clients receiving inpatient psychiatric treatment after discharge	2 *n* = 33	1 *n* = 35	*ns*
Clients reentering inpatient chemical dependency treatment after discharge	4 *n* = 33	6 *n* = 35	*ns*
Clients prescribed psychotropic medications and taking them as prescribed, based on collateral reports	34.6% *n* = 26	33.3% *n* = 27	*ns*
Mean score on 5-point Case Manager Rating Scale (higher scores = worse substance abuse)	1.86 *SD* = 1.4 *n* = 35	2.02 *SD* = 1.4 *n* = 41	*ns*

NOTE: ASI = Addiction Severity Index.

any of them. Second, the importance of possible Type II errors seems to be reduced by the fact that all effect sizes were low and would have lacked clinical significance even had they been statistically significant. Third, our findings are generally consistent with the findings of previous experiments and quasi-experiments that evaluated whether integrated treatment approaches for dually diagnosed clients are more effective than standard approaches.

Nevertheless, various methodological limitations in our study should be mentioned. We were able to directly collect follow-up data from only 70% of the clients after inpatient discharge. The availability of data from collaterals only partially remedied this problem, bringing the proportion of clients with some follow-up data to 86%. Some might question our use of the ASI to measure some outcome variables. For example, Zanis et al. (1997) found poor test-retest reliability for the ASI's Medical, Drug, and Legal domains in a sample composed primarily of clients with schizophrenia. When we assessed the internal consistency reliability of our ASI data, we also obtained relatively low alphas for the Drug and Legal domains. However, five of the previous studies evaluating integrated dual diagnosis treatments utilized the ASI (Blankertz & Cnaan, 1994; Burnam et al., 1995; Drake et al., 1997, 1998; Lehman et al., 1993). Moreover, we did not rely exclusively on the ASI to measure outcome. We also used other forms of client self-report, collaterals' reports, and, in the case of substance use, urine and saliva tests.

Another methodological limitation was that many clients in the experimental group did not attend all the Good Chemistry Groups sessions. Sometimes clients had to miss a session due to a conflicting appointment. At times they were excused from all inpatient program activities due to a physical illness. Some missed sessions because they were dismissed early from the inpatient program. Others left against professional advice or were asked to leave because they seriously breached the inpatient program's rules. We did not consider any of these clients as having withdrawn from the Good Chemistry Groups intervention, and they were still eligible to participate in the groups on an outpatient basis even if they were dismissed prematurely from the inpatient program due to breach of rules. Only 3 clients withdrew from the study. Before discharge they explicitly said they no longer wanted to be part of the research. Nine of the 48 experimental group clients who remained in the study attended less than half of the nine Good Chemistry Groups. Only 27 (56%) of them attended eight or more of the sessions. Thus, treatment dosage was less than desired for many clients, and this limitation is not easily dismissed.

How to handle—in the data analysis—clients who received a less-than-desirable dosage presents a dilemma when evaluating the effectiveness of

programs for dually diagnosed clients. These clients are difficult to retain in treatment or to motivate to utilize recommended services. (Recognizing that, our study, as well as some others, used degree of participation in self-help support groups as an outcome variable.) We probably can assume that as a prerequisite for outcome effectiveness, programs for these clients first need to succeed in engaging and retaining these clients in treatment. In light of this, consider the implications of a data analysis that excluded all clients who received less than the recommended dosage of the intervention. It is reasonable to suppose that the clients who completed the recommended dosage were already functioning better—regardless of treatment effects—than clients who did not complete the recommended dosage. Thus, excluding the latter set of clients would create a selectivity bias, called "creaming," in which the full groups of control clients are compared to only the highest functioning experimental clients. Retaining in the data analysis the clients who did not complete the recommended dosage may make it extremely difficult to obtain results supporting the effectiveness of the program, but the alternative is worse.

The above reasoning led us to conclude that we should retain clients who did not complete the recommended dosage in the data analysis, but as researchers are tempted to do, we also conducted an ancillary data analysis in which we excluded the 21 experimental group clients who attended fewer than eight group sessions. ANCOVA were run to compare the 27 experimental group clients who attended eight or more sessions to the control group on the nine outcome variables for which both baseline and follow-up data were collected. The results of this ancillary analysis were essentially the same as in our primary ANCOVA analysis. None of the nine comparisons was statistically significant. This suggests that the null results of our primary analysis cannot be attributed to the failure of some clients to complete the recommended dosage.

Another methodological issue is the presence of some heterogeneity in the diagnoses of our clients. However, all of our clients had a substance dependence diagnosis, and most had mood disorders. There is also the possibility that diffusion or imitation of treatment occurred (also see Mueser, Drake, & Miles, 1997). The null results of our study, and of most of the preceding studies, refer to the comparison of integrated treatment with standard treatment. It is conceivable that the superiority of integrated treatment is going undetected due to the diffusion of knowledge about the treatment of dual disorders throughout traditional programs that are consequently moving, de facto, in a more integrated direction. In our study, for example, offering the special integrated Good Chemistry Groups treatment in the inpatient setting possibly could have sensitized other staff in the facility to the unique treatment needs

of dually diagnosed clients. If so, this may have benefited clients in the control group and thus diluted differences in outcomes between the two groups. Moreover, because the recipients of both integrated and standard treatment approaches in the studies to date have tended to show some improvement, it is conceivable that both treatment approaches are effective. But the point of our study is not that the integrated treatment approach is ineffective compared to no treatment; it is that adding the integrated treatment does not appear to increase the effectiveness of the existing standard treatment.

Finally, one might ask whether the Good Chemistry Groups need a longer intervention period to be effective. We are unable to answer that question. All we can say at this point is that what we tried did not work.

It therefore seems reasonable to conclude, despite the limitations we have cited, that Good Chemistry Groups or other current integrated treatments for clients with dual diagnoses do not appear to add to the effects of standard treatments for dually diagnosed clients. Even studies with the largest and most homogeneous samples, longest follow-up periods, and most sensitive measures have not produced the kind of clinically significant outcomes that social workers and others who have dedicated themselves to integrated treatment would hope to find. Consequently, practitioners are challenged to develop more effective treatment approaches than those cited in this study. If they employ any of the integrated approaches we have cited, they should simultaneously acknowledge the dubious additional effectiveness of these approaches and require rigorous evaluation of client outcomes.

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A Statewide Follow-Up Study of Alcohol and Illegal Drug Use Treatment

Jorge Delva
Jane Allgood
Florida State University

Ronald Morrell
Department of Children and Families

C. Aaron McNeece
Florida State University

Objective: Estimates of the 6- to 12-month prevalence of substance use and results of tests comparing drug use among individuals that completed and did not complete substance abuse treatment are provided. Method: The sample consists of 499 participants in a computerized assisted telephone interview in 1999. Results: Alcohol was the most commonly used substance followed by marijuana and cocaine or crack. Individuals that completed outpatient treatment were less likely to have used cocaine or crack when compared with individuals that did not complete outpatient treatment. A lower percentage of individuals that completed residential treatment used alcohol, marijuana, or crack when compared to noncompleters; however, these differences were not statistically significant. Frequency of family arguments and shorter treatment episodes were significantly associated with drug use. Conclusions: Posttreatment substance use varied as a function of the type of drug used, treatment modality, familial relationship, and length of treatment.

The economic costs of alcohol and drug abuse in the United States have been estimated to be approximately $110 billion (National Institute on Drug Abuse, 1998). According to a report by the Office of National Drug Control Policy (ONDCP) (1999), the Substance Abuse and Mental Health Services Administration (SAMHSA) prevention and treatment budgets in 1997 through 1999 were approximately $1 billion per year, with treatment funds being three times greater than prevention funds. Recent evidence from state

Authors' Note: Correspondence may be addressed to Jorge Delva, Ph.D., who is now affiliated with the School of Social Work, 1080 South University, University of Michigan, Ann Arbor, MI 48109-1106; e-mail: jdelva@umich.edu. This research was funded by the State of Florida Department of Children and Families. The views presented in this article are solely those of the authors and do not represent those of the Department.

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Gender Differences in Dually-Diagnosed Clients Receiving Chemical Dependency Treatment†

Diana M. DiNitto, Ph.D.*; Deborah K. Webb, Ph.D.** & Allen Rubin, Ph.D.***

Abstract—This article considers gender differences among 97 clients with dual diagnoses of severe mental illness and chemical dependency (46 male and 51 female). Comparisons are made at the time of their admission to an inpatient chemical dependency treatment program and at follow-up in cases where data are available. Many of the findings at time of admission are consistent with the few studies that have compared men and women with co-occurring mental and substance use disorders. For example, the women were more likely to have experienced emotional, physical, or sexual abuse, and they reported being charged with fewer types of crimes. Most differences at admission concerned psychiatric problems and family/social relations. Women reported that they were more bothered by their psychiatric symptoms and their family/social relations, but they also reported more happiness and closeness in some relationships. The women also said they had more relatives with alcohol, drug, and especially psychiatric, problems. At follow-up, gender differences in the family/social and psychiatric domains persisted. Findings suggest that men and women with dual diagnoses might benefit from different emphases in treatment programs.

Keywords—co-occurring disorders, coexisting disabilities, dual diagnosis, gender differences

The high incidence of co-occurring mental and substance use disorders (see Kessler et al. 1996), also referred to as dual diagnoses, has led to recognition of the need to treat these disorders simultaneously or in an integrated fashion (Drake et al. 1993). This is especially true in the case of severe mental illnesses such as schizophrenia, bipolar disorder, and major depression. Recently, practitioners and researchers have begun to study gender differences among individuals with dual diagnoses to determine if services might be more effectively targeted to meet clients' needs. This article reports on the differences in several types of problems experienced by men and women with dual diagnoses as they entered an inpatient chemical dependency treatment program. It also reports on several outcome measures to determine if there were differences in how the men and women fared following treatment.

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*Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin School of Social Work, Austin, Texas.

**Director of Quality Management, Program Evaluation, and Research, Austin Travis County Mental Health Mental Retardation Center, Austin, Texas.

***Bert Kruger Smith Centennial Professor, University of Texas at Austin School of Social Work, Austin, Texas.

Please address correspondence and reprint requests to Diana M. DiNitto, Ph.D., Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin School of Social Work, 1925 San Jacinto Boulevard, Austin, Texas 78712. E-mail: ddinitto@mail.utexas.edu.

REVIEW OF THE LITERATURE ON GENDER DIFFERENCESAND DUAL DIAGNOSES

Only a few studies to date have considered gender differences among patients or clients with dual diagnoses (see Watkins, Shaner & Sullivan 1999; Westreich et al. 1997;

Brunette & Drake 1997; Mowbray et al. 1997; Comtois & Ries 1995; Jerrell & Ridgely 1995). Comtois and Reis (1995) did not identify any demographic differences among the 217 male and 121 female dually-diagnosed outpatients in their study. Neither did Jerrell and Ridgely (1995) in their study of 31 women and 101 men with psychotic or affective disorders and substance use disorders assigned to three different types of treatment. In their study of 56 men and 25 women inpatients with dual diagnoses, Weistreich and colleagues (1997) found that the only demographic difference was that women were more likely to have a place of residence. The only demographic difference that Brunette and Drake (1997) found in their sample of 137 men and 37 women, all of whom had substance use disorders and schizophrenia or schizoaffective disorder and were receiving case management, was that the women were more likely to have children. Likewise, in their study of 467 hospital patients (26% were female) with a range of psychiatric diagnoses and substance use disorders, Mowbray and colleagues (1997) found that the women had more children. They also found more women who were younger than age 34.

Large epidemiological studies show that women are more likely than men to have anxiety disorders and affective disorders in combination with substance use disorders (Kessler et al. 1997; Helzer & Pryzbeck 1988). Few studies report gender differences among people with schizophrenia and substance use disorders (Brunette & Drake 1997), but Comtois and Ries (1995) and Westreich and colleagues (1997) found more men diagnosed with schizophrenia and more women diagnosed with affective disorders in their treatment samples. Jerrell and Ridgely (1995) found that somewhat more men than women admitted to their study had schizophrenia (p=.07), but there was no difference for other severe mental disorders.

The chemical dependency literature has generally portrayed alcohol- and drug-dependent women as having more psychopathology than men (see Vanicelli 1984 for a discussion). Watkins, Shaner and Sullivan (1999) note that more women (n=11) than men (n=10) in their qualitative study of people with schizophrenia and substance use disorders described feelings of fear and paranoia. However, in their sample of people with schizophrenia or schizoaffective disorder and substance use disorders, Brunette and Drake (1997) did not find gender differences with regard to the number who also had antisocial personality or mood disorders. The men and women also did not differ on the total or affect scores on the expanded Brief Psychiatric Rating Scale (Lukoff, Neuchterlein & Ventura 1986) or on the number taking antidepressants or benzodiazepines. Both Comtois and Ries (1995) and Jerrell and Ridgely (1995) found a tendency for higher functioning among the dually-diagnosed women than men in their studies. Though Mowbray and colleagues (1997) found that more men were employed, the men also reported more days with employment problems.

Apart from epidemiological data, there is limited information on gender differences in the alcohol and drug problems of men and women with dual diagnoses. The only difference in drug problems that Westreich and colleagues (1997) identified was that more women than men tested positive for opiates at admission. Brunette and Drake (1997) also identified few differences in drug problems. The men had a longer history of marijuana use and they abused drugs for a significantly longer period than women, but there were no significant differences in age of onset or severity of drug use. Jerrell and Ridgely (1995) also found no statistically significant difference in severity of drug problems. Comtois and Ries (1995), however, found that the men in their study were more likely to be polydrug users, and they had higher levels of substance use severity (quantity and frequency of use) as rated by clients' case managers.

The literature stresses the large number of dually-diagnosed women who have experienced emotional, physical, and sexual trauma (Gearon & Bellack 1999; Alexander 1996; Zweben 1996). Gearon and Bellack (1999) note the increased vulnerability of women with schizophrenia and substance use disorders to sexual and physical abuse due to their cognitive and social skill deficits. In their study of patients with schizophrenia and substance use disorders, Brunette and Drake (1997) found that women's self reports indicated more violent crime victimization than did men's. Likewise, Westreich and colleagues (1997) found that more dually-diagnosed women than men had been crime victims.

Reed and Mowbray's (1999) review indicates that the health of women with substance abuse disorders and severe mental illness is worse than that of other women, and worse than the health of men with substance use disorders and mental illness. Women with these disorders have more medical hospitalizations and more alcohol and drug-related health problems, such as hepatitis, cirrhosis, fractures, anemia, kidney and bladder ailments, and more breast cancer than women in the general population. In Mowbray and colleagues' (1997) empirical study of 467 patients, women also had more severe medical problems. Brunette and Drake (1997) also found more chronic medical problems among women than men in their study of patients with schizophrenia and substance use disorders. However, Comtois and Ries (1995) found no gender differences in the number of dually-diagnosed men and women with physical disabilities and with nonpsychiatric cognitive disabilities.

Compared to men, women who are addicted to alcohol or other drugs lack social supports, including support to get treatment (see Davis & DiNitto 1998 for a review). Women's substance use disorders are frequently initiated during their involvement with an addicted partner (see, for example, Hser, Anglin & Booth 1987). As Gearon and

Bellack (1999:410) also note of dually-diagnosed women, "Years of experiencing stigma and social isolation may make this group of women eager to please individuals who give them attention and the promise of love and affection—regardless of how they are treated or what they are asked to do."

Westreich and colleagues (1997) found that more women than men in their sample had primary responsibility for children, and Mowbray et al. (1997) found that more women had children residing with them. In their qualitative study, Watkins, Shaner and Sullivan (1999) noted that women diagnosed with schizophrenia and substance use disorders mentioned problems with raising children more often than did their male counterparts. However, in their study of people with schizophrenia or schizoaffective disorder and substance use disorders, Brunette and Drake (1997) found that though women were more likely than men to have children, they had very little contact with them, suggesting substantial problems in their ability to function. The women in Brunette and Drake's (1997) study reported more social contacts, in general, but similar levels of satisfaction with their social lives compared with the men.

Watkins, Shaner and Sullivan (1999) noted that both dually-diagnosed men and women with schizophrenia cited fear of legal reprisals as a motivator for being in treatment. Men, however, were more likely to seek treatment due to fears of becoming violent in situations such as family altercations and after becoming delusional. Mowbray and colleagues (1997) found that more men in their study had arrest records, and they had higher legal problem scores than the women. In Brunette and Drake's (1997) study, men had also been charged with crimes more often and had spent more time incarcerated, but the men and women did not differ on variables measuring verbal and physical aggression. Comtois and Ries (1995), however, found no differences between their male and female clients with respect to involuntary commitment or parole status.

Watkins, Shaner and Sullivan (1999) report that both dually-diagnosed men and women in their study had difficulty engaging in treatment (problems with treatment engagement are a recurring theme in the dual diagnoses literature; see, for example, Osher & Kofoed 1989). Women in the general population who have alcohol problems are less likely than men to receive chemical dependency treatment (see Weisner, Greenfield & Room 1995), but Westreich and colleagues (1997) found no differences in the number of dually-diagnosed men and women who had previous inpatient or outpatient addiction treatment. In Brunette and Drake's (1997) study, both male and female subjects who had schizophrenia generally had their first contact with psychiatric treatment at ages 20 to 21. Though women in the general population are more likely to use medical (Reed & Mowbray 1999) and mental health (Zweben 1996) services than men, Westreich and colleagues (1997) found no gender difference in their dually-diagnosed sample in the percentage who had previous inpatient psychiatric treatment. Comtois and Ries (1995) found that dually-diagnosed women received more medication management services but attended group treatment less frequently than men. The subjects did not differ in the amounts of case management and day treatment they received, the phase of treatment to which they were assigned, their length of enrollment, or compliance.

Little has been written comparing the treatment outcomes of men and women with dual diagnoses. On a post hoc basis, Jerrell and Ridgely (1995) compared outcomes of the 101 men and 31 women in their study who had psychotic or affective disorders and were assigned to one of three treatment conditions (intensive case management, behavioral skills training, or 12-Step recovery model). At the six month follow-up, the men and women did not differ on total social adjustment scores or change scores for this variable. The women had better total role functioning scores at follow-up, but their change scores were not statistically different from the men's. Though women had more total psychiatric symptoms at follow-up, their change scores on this variable also did not differ from the men's. There were no gender differences with regard to alcohol and drug symptoms. The men and women made equal progress across the three treatments, but the small number of women participants requires caution in interpreting the results. DiNitto and colleagues (2001) found substantial self-help group attendance among dually diagnosed clients (most of whom had mood rather than thought disorders) in the 90 days following their discharge from inpatient chemical dependency treatment. Clients with more education attended more meetings, but gender was not related to amount of attendance. However, Mowbray and colleagues (1997) found that at time of psychiatric hospital admission, more dually-diagnosed women than men had ever attended self-help groups.

METHOD

Based on the small but growing literature on gender and dual diagnoses, the authors used an available data set (see DiNitto, Webb & Rubin In press) to conduct a secondary analysis of gender differences among a group of dually-diagnosed clients. All clients had Axis I, DSM-IV mental and substance dependence disorders (American Psychiatric Association 1994).

Data were initially collected as clients entered a Minnesota-model inpatient chemical dependency treatment program operated by a community mental health center in Austin, Texas. Attempts were made to conduct follow-ups with clients at 30, 60, and 90 days post-discharge from the inpatient program. Follow-up data were also obtained from a collateral (e.g., family member, friend, counselor, probation officer) chosen by the client.

MEASURES

The primary data collection instrument was the Addiction Severity Index (ASI; Fureman, McLellan & Alterman 1990; McLellan et al. 1985), both initial and follow-up versions. The ASI has been widely used in the chemical dependency field to assess clients at treatment entry. It has also been used extensively in chemical dependency research. The ASI contains seven domains: medical, employment/support, alcohol, drug, legal, family/social, and psychiatric. In addition to the individual questions that comprise each domain, a composite score can be calculated for each domain, indicating the severity or extent of the client's problems in each area, with 0 being no problem and 1 being the highest problem score. There are also questions about whether the client has experienced emotional, physical, or sexual abuse and about family members' alcohol, other drug, and psychiatric problems.

The ASI was not designed for clients with dual diagnoses, but one or more domains have been used in several dual diagnoses studies by leading dual diagnoses researchers (see, for example, Drake et al. 1998, 1997). In using it with homeless people with substance use disorders, some of whom also had psychiatric problems, Drake, McHugo and Biesanz (1995) found that test-retest reliability for the composite scores ranged from .64 for medical to .86 for alcohol use. Results were poorer when the subject had more severe alcohol dependence or more severe psychiatric problems. Hodgins and El-Guebaly (1992) found the ASI generally useful with those who had dual diagnoses of substance use and psychiatric disorders (primarily depression), with adequate reliability on five of the seven composite scores. The legal and family relations composite scores were the most problematic. Zanis, McLellan, and Corse (1997) assessed the ASI with individuals who had dual diagnoses of schizophrenia and substance abuse and found alphas of .67 to .85 on all but the legal domain. In the study reported below, alphas on four domains ranged from .70 to .94, but alphas ranged from .42 to .63 for the legal domain, .59 to .71 for the employment domain, and .60 to .78 for the drug domain over the four administrations of the instrument.

Clients were asked additional questions at follow-up about their attendance at self-help groups. They were also asked to take saliva and urine tests at follow-up to detect alcohol, marijuana, or cocaine use. Some study participants did not take these tests as requested, but in a number of cases the tests were not conducted because follow-up interviews had to be done by telephone due to clients' mobility. A statewide data base was accessed to determine if the client had been admitted to a Texas state psychiatric hospital prior to admission to the study or during follow-up.

Another instrument used at follow-up was a modified version of the Case Manager Rating Scale (CMRS; Drake et al. 1990). Instead of case managers, the instrument was administered to collaterals, the time interval was changed from the past year to the past month, and drugs in addition to alcohol were included. The CMRS is a five-point scale ranging from 1 (no substance abuse or related problems) to 5 (extremely severe use of alcohol or drugs and related problems). In its original form, the scale has shown test-retest reliability of close to 100% and Kappa coefficients between .85 and .95 (Drake et al. 1990; Drake, Osher & Wallach 1989). Collaterals were also asked for information about the clients' use of self-help groups, medication compliance, legal involvement, and hospitalizations.

SAMPLE

Ninety-seven clients participated in the baseline phase of the original study. Of the 97 clients, 46 (47%) were male and 51 (53%) were female. Their mean age was 33, with a range from 18 to 56. Fifty-nine percent were White, 28% were African-American, and 13% were of Hispanic origin. Participants' mean years of education were 11.2. Most (74%) had mood disorders (30% had major depression and 44% had dysthymia). Ten percent had a thought disorder (schizophrenia or other psychotic disorder); 12% had mood and thought disorders (bipolar or schizoaffective disorder); and 3% had posttraumatic stress disorder. All had substance dependence (not abuse) disorders. The majority (60%) were dependent on more than one substance. Most of the rest had a major drug problem of either alcohol (18%) or cocaine (16%) dependence. A sizable percentage (41%) had never been married. The usual employment pattern for most clients (52%) was to be unemployed. Seventy-six percent of the sample had at least one criminal conviction, and 55% were on probation or parole when they entered the study.

The original study lacked the extensive funding that is often needed to locate dually-diagnosed clients following treatment discharge. Only about half of the participants were found at each follow-up period. Many elected not to stay in the Austin area after discharge from the inpatient chemical dependency treatment program. In total, 68 (70%) of the 97 original clients participated in at least one of the three follow-ups. Of collaterals, 78 (80%) participated. Combining the client and collateral data resulted in some follow-up information available on 83 (86%) of the 97 clients. In order to maximize the number of cases available for outcome comparisons, the follow-up data have been aggregated over follow-up periods. For example, alcohol and drug use was determined by whether the client, the client's saliva or urine tests (when available), or the collateral indicated use at any of three follow-ups. Self-help group attendance was calculated by adding the number of meetings attended during each follow-up period for which data are available and dividing by the number of follow-up periods available. In the case of the follow-up ASI

composite scores and of collaterals' ratings on the CMRS, the last score available was used.

RESULTS

Results regarding gender differences are presented for the seven domains of the ASI followed by information on emotional, physical, and sexual abuse. Though composite scores for each domain are based on many of the individual items in that domain, differences in individual items were also reported to illuminate variables of interest. The authors also report on additional outcome variables collected for the original study. Due to the large number of variables investigated, only the statistically significant results are reported in Table 1. Though investigation of many variables may be criticized as a "fishing expedition," each domain is an important area of consideration for people with dual diagnoses. Before examining these domains, it bears noting that there were no statistically significant differences in any demographic characteristics between the men and women (age, race/ethnicity, education, religion, etc.).

Medical

There were no statistically significant differences between the men and women on any ASI medical items (e.g., times hospitalized for medical reasons, having a chronic medical problem, taking medications for physical problems, receiving a pension for a physical disability). There was also no difference on ASI medical composite scores at baseline or follow-up.

Employment/Support

Table 1 shows that there were three statistically significant gender differences in the employment/support domain. First, more women (61%) than men (17%) reported they received welfare or public assistance (phi = .44). This is the strongest relationship of any of the variables in the employment/support domain. Second, the men reported working an average of 3.2 days for pay in the month prior to admission to the inpatient chemical dependency treatment program, compared to 0.7 days for the women. Third, the men reported fewer people who depended on them for support than the women (mean= .65 versus 1.2).

The men and women did not differ on other employment/support variables such as occupation, employment pattern, days with employment problems, length of longest full time job, or receiving support from a pension, Social Security, or other sources such as family, friends, or illegal activities. The ASI employment/support composite scores at baseline and follow-up also did not differ by gender, but unemployment among the men and women contributed to these scores being the highest of any ASI domain for both genders.

Alcohol and Other Drug Problems

Several moderate relationships were identified in the alcohol and other drug problem domains. Interviewers rated women as having a significantly greater need for drug (but not alcohol) treatment than men. The interviewers' mean rating was 5.3 for men and 6.7 for women (on a scale from 0 to 9, with 9 being the greatest need; ES=.56). In addition, more men than women reported that their substance use was limited to alcohol (30% versus 8%, phi=.29). Though the relationship was weaker (phi=.22), more women (55%) than men (33%) reported that they had overdosed on drugs. The remaining statistically significant differences concerned the number of relatives with alcohol or drug problems. More women than men said they had mothers (29% versus 8%), sisters (44% versus 11%), and maternal uncles (29% versus 6%) with drug problems. More women than men also reported having maternal grandmothers (26% versus 6%) and maternal uncles (66% versus 33%) who had alcohol problems. The phi values for these family member variables ranged from .27 to .36, with sisters' drug problems showing the strongest gender difference.

The men and women did not differ significantly on the number of years of use of various types of drugs, the number of previous treatment episodes for alcohol or other drug problems, or the length of their last voluntary period of abstinence. During the follow-up periods, there was no statistically significant difference in the percentage of men and women who used alcohol or other drugs or in the percentage who received inpatient or outpatient substance abuse treatment. Collaterals ratings of clients at follow-up, using the modified Case Manager Rating Scale to assess alcohol and drug use and related problems, also showed no statistically significant gender differences. Although the men reported a mean of 10.6 days (SD= 13.2) of alcohol or other drug use at follow-up, and the women 5.3 (SD=9.6), the standard deviations were large and the difference was not statistically significant (p=.06). There was also no difference in the number of AA and other self-help group meetings attended. ASI alcohol and drug composite scores at baseline and follow-up also did not differ.

Legal

As seen in Table 1, men reported significantly more legal problems on several ASI items, though their ASI legal composite scores at admission did not differ significantly from the women's. More men had previous charges for probation and parole violations; burglary, larceny, and breaking and entering (B&E); DWI; assault; weapons offenses; and disorderly conduct. Of the women, 20% reported prostitution charges, while none of the men did. The phi values for these variables ranged from .20 for weapons charges to .35 for burglary, larceny, and B&E, indicating relatively weak to moderate relationships. Another

TABLE 1
Variables with Statistically Significant ($p \leq .05$) Relationships by Gender (Variables are for Time of Admission Unless Noted Otherwise)

Variable Category	Variable	Men	Women	Effect Size (ES), phi, or Cramer's V (V)
Employment/ Support	Received welfare in last 30 days	17.4% (n=46)	60.8% (n=51)	phi=.44
	Mean number of days paid work in 30 days prior to admission	3.2 (n=46)	.7 (n=51)	ES=.50
	Mean number of dependents	.65 (n=46)	1.2 (n=51)	ES=.46
Alcohol and Other Drug Problems	Interviewer rating of need for drug treatment (mean)	5.3 (n=45)	6.7 (n=50)	ES=.56
	Substance abuse includes alcohol only	30.4% (n=46)	8.0% (n=50)	phi=.29
	Percent who had overdosed	33.3% (n=42)	55.1% (n=49)	phi=.22
	Mother had drug problem	7.5% (n=40)	28.9% (n=45)	phi=.27
	Sister had drug problem	11.1% (n=27)	44.1% (n=34)	phi=.36
	Maternal uncle had drug problem	5.6% (n=36)	28.9% (n= 38)	phi=.31
	Maternal grandmother had alcohol problem	5.7% (n=35)	25.7% (n=35)	phi=.27
	Maternal uncle had alcohol problem	33.3% (n=36)	65.8% (n=38)	phi=.32
Legal	Probation/parole violation charges	62.2% (n=45)	37.5% (n=48)	phi=.25
	Burglary, larceny and B & E charges	37.8% (n=45)	8.3% (n=48)	phi=.35
	DWI charges	35.6% (n=45)	10.4% (n=48)	phi=.30
	Assault charges	40.9% (n=44)	14.3% (n=49)	phi=.30
	Weapons charges	20.0% (n=45)	6.3% (n=48)	phi=.20
	Disorderly conduct charges	57.8% (n=45)	35.4% (n=48)	phi=.22
	Prostitution charges	0% (n=45)	20.4% (n=49)	phi=.33
	Mean number months incarcerated in life	16.3 (n=44)	5.8 (n=48)	ES=.55
	Treatment admission on legal suggestion	56.8% (n=44)	33.3% (n=51)	phi=.24
	On probation or parole	68.2% (n=44)	44.0% (n=50)	phi=.24
Family/Social	How troubled by family problems in last 30 days before admission (mean)	1.6 (n=45)	2.4 (n=50)	ES=.55
	How important is family counseling (mean)	1.8 (n=45)	2.8 (n=50)	ES=.65
	How troubled by social problems in last 30 days before admission (mean)	1.2 (n=45)	2.2 (n=50)	ES=.72

(continued on next page)

TABLE 1 (Continued)

Variable Category	Variable	Men	Women	Effect Size (ES), phi, or Cramer's V (V)
Family/Social	How important is counseling for social problems (mean)	1.3 (n=45)	2.5 (n=50)	ES=.80
	Interviewer rating of need for family/social counseling (mean)	4.8 (n=45)	6.5 (n=50)	ES=.83
	Mean ASI family/social composite at follow-up	.10 (n=33)	.24 (n=34)	ES=.83
	Marital status			
	Married	11.1%	17.6%	V=.32
	Widowed	0%	5.9%	
	Separated	15.6%	17.6%	
	Divorced	17.8%	31.4%	
	Never married	55.6% (n=45)	27.5% (n=51)	
	Living with an alcohol or other drug abuser	20.0% (n=45)	45.8% (n=48)	phi=.25
	Problems with sexual partner/ spouse (lifetime)	68.3% (n=41)	86.0% (n=50)	phi=.21
	Problems with mother (lifetime)	59.1% (n=44)	80.0% (n=50)	phi=.23
	Problems with sibling (lifetime)	48.8% (n=41)	75.5% (n=49)	phi=.28
	Problems with siblings (last 30 days)	12.2% (n=41)	31.3% (n=48)	phi=.23
	Problems with children (lifetime)	11.1% (n=36)	31.9% (n=47)	phi=.25
	Problems with children (last 30 days)	2.7% (n=37)	17.0% (n=47)	phi=.23
	Satisfied with marital situation			
	No	33.3%	20.0%	V=.30
	Indifferent	17.8%	4.0%	
	Yes	48.9% (n=45)	76.0% (n=50)	
	Have had close relationship with sexual partner/spouse	51.2% (n=41)	79.6% (n=49)	phi=.30
	Have had close relationship with children	48.5% (n=33)	78.7% (n=47)	phi=.31
	Spend free time with:			
	Family	11.1%	40.0%	V=.35
	Friends	40.0%	18.0%	
	Alone	48.9% (n=45)	42.0% (n=50)	
Psychiatric	Mean ASI psychiatric composite score at admission	.47 (n=45)	.67 (n=49)	ES=.87
	Mean ASI psychiatric composite score at follow-up	.27 (n=33)	.41 (n=34)	ES =.60
	Mean number of days with psychiatric problems in 30 days prior to admission	18.2 (n=45)	23.3 (n=50)	ES=.44
	Mean number of days with psychiatric problems at follow-up	10.4 (n=33)	15.8 (n=34)	ES=.52

(continued on next page)

TABLE 1 (Continued)

Variable Category	Variable	Men	Women	Effect Size (ES), phi, or Cramer's V (V)
Psychiatric	How troubled by psychiatric problems in last 30 days (mean)	2.4 (n=45)	3.3 (n=50)	ES=.70
	How important is counseling for psychiatric problems (mean)	2.4 (n=45)	3.3 (n=49)	ES=.55
	Interviewer rating of need for psychiatric services (mean)	5.2 (n=45)	6.7 (n=50)	ES=.67
	Anxiety or tension (lifetime)	82.2% (n=45)	96.0% (n=50)	phi=.22
	Anxiety or tension (last 30 days)	68.9% (n=45)	88.2% (n=51)	phi=.24
	Hallucinations (last 30 days)	17.8% (n=45)	45.1% (n=51)	phi=.29
	Trouble concentrating (last 30 days)	57.8% (n=45)	82.4% (n=51)	phi=.27
	Suicidal ideation (last 30 days)	25.0% (n=44)	52.9% (n=51)	phi=.28
	Client obviously anxious/nervous during interview	42.2% (n=45)	68.6% (n=51)	phi=.27
	Mother had psychiatric problem	20.0% (n=40)	56.5% (n=46)	phi=.37
	Father had psychiatric problem	13.9% (n=36)	43.2% (n=44)	phi=.32
	Brother had psychiatric problem	13.8% (n=29)	38.5% (n=39)	phi=.27
	Sister had psychiatric problem	7.4% (n=27)	38.2% (n=34)	phi=.36
	Maternal grandmother had psychiatric problem	5.7% (n=35)	32.4% (n=34)	phi=.34
	Maternal aunt had psychiatric problem	10.2% (n=39)	40.0% (n=35)	phi=.35
	Maternal uncle had psychiatric problem	2.8% (n=36)	33.3% (n=39)	phi=.39
	Paternal grandfather had psychiatric problem	0% (n=29)	13.0% (n=23)	phi=.28
	Paternal aunt had psycniatric problem	3.2% (n=31)	21.2% (n=33)	phi=.27
	Paternal uncle had psychiatric problem	9.7% (n=31)	30.6% (n=36)	phi=.26
Emotional, Physical and Sexual Abuse	History of any abuse	70.5% (n=44)	94.0% (n=50)	phi=.31
	Emotional abuse (lifetime)	70.5% (n=44)	92.0% (n=50)	phi=.28
	Physical abuse (lifetime)	51.2% (n=43)	88.0% (n=50)	phi=.40
	Sexual abuse (lifetime)	18.2% (n=44)	69.4% (n=49)	phi=.51
	Any abuse (last 30 days)	20.0% (n=45)	52.0% (n=50)	phi=.33
	Emotional abuse (last 30 days)	20.0% (n=45)	52.0% (n=50)	phi=.33

variable moderately associated with gender was months incarcerated during lifetime, with a mean of 16 months for men and 6 months for women (ES=.55). More men than women were on probation or parole at the time of admission (68% versus 44%), with the percentage for both groups being large. Men were also more likely than women to have entered the inpatient chemical dependency treatment program at the suggestion of the legal system (57% versus 33%). The phi value of .24 for these last two variables is relatively weak.

Among the non-statistically significant gender differences at admission were the number of times convicted of a crime and the percentage awaiting charges. At follow up, the men and women did not differ on the number who had been incarcerated or on the mean number of days they were incarcerated. At follow-up, both groups had legal composite scores in the low range that did not differ significantly.

Family/Social

As seen in Table 1, some of the strongest relationships in this study concern family/social variables. On a scale from 0 (no need) to 4 (extreme need), the women rated their need for counseling for social problems at admission at a mean of 2.5 compared to men's 1.3. The effect size for this variable was strong at .80. On a scale from 0 to 9, the interviewers also rated women as needing family/social counseling more than men (mean=6.5 versus 4.8) with a strong effect size of .83. The mean ASI family/social composite score at follow-up was .10 for men and .24 for women. Though the effect size of .83 for this relationship was strong, these scores—which can range from 0 (no problems) to 1 (the highest problem score)—fall at the less problematic end of the continuum for both men and women.

On a scale from 0 to 4, the women reported being more troubled than the men by social problems (mean=2.2 versus 1.2) with a relatively strong effect size of .72. The women were also significantly more troubled by family problems than men (mean=2.4 versus 1.6) with a moderate effect size of .55. They also rated their need for family counseling higher at a mean of 2.8 versus 1.8 for men, with a moderate effect size of .65.

Other significant differences are also shown in Table 1. The women were most likely to be divorced (31%), and the men never married (56%); with a Cramer's V of .32, this association is in the moderate range. The women (44%) were also more likely to be living with an alcohol or other drug abuser than the men (20%), with a phi of .25 indicating a moderate relationship. The women also reported more problems during the last 30 days and during their lifetimes with various relatives, with modest phi values ranging from .21 to .28. However, the women were also more likely to be satisfied with their current marital situation, and they were more likely to have reported a close relationship with their spouse or other sexual partner and with their children (phi values for these variables range from .30 to .31, indicating moderate relationships). Finally, women (40%) were more likely than men (11%) to report spending free time with family, and men (40%) were more likely to spend free time with friends than women (18%). The magnitude of this association was moderate (v=.35), though nearly half of both groups reported spending their free time alone.

The men and women did not differ significantly on other family and social variables. For example, in the 30 days prior to admission, similar percentages reported serious problems getting along with their mothers and fathers, and they did not differ on the percentage that reported serious lifetime problems with their fathers. Similar percentages reported that they had a close relationship with their mother, father, siblings, and close friends, and there was no difference in the mean number of days they reported having had serious family conflicts in the 30 days prior to admission. The men and women also did not differ in the percentages who said they were satisfied with their current living arrangements and with the way they spend their free time.

Psychiatric Problems

There was no statistically significant difference in the primary Axis I mental disorders of the men and women in the study. Major depression and dysthymia were the most frequent diagnoses for both genders. However, Table 1 shows that some of the strongest gender associations discerned in this study were in the area of psychiatric problems. Regarding the ASI composite psychiatric score, women reported higher (worse) scores at the time of admission to the inpatient chemical dependency treatment program (.67 versus .47 for men), and the difference persisted at follow-up (.41 and .27, respectively). The effect size of .87 for this variable at admission was stronger than the effect size of .60 at follow-up; however, after controlling for admission scores, there was no difference in the treatment gains made by the men and women.

Women reported experiencing psychiatric problems on more days in the 30 days prior to admission (23 versus 18 for men) with an effect size of .44 indicating a modest relationship. At admission, the women also reported being more troubled by their psychiatric problems, rating them 3.3 versus the men's 2.4 on a scale from 0 (not at all troubled) to 4 (extremely troubled). An effect size of .70 indicates a relatively strong relationship for this variable. Using a 0 (not at all) to 4 (extremely) scale, the women also reported that psychiatric counseling was more important to them (mean=3.3 versus 2.4 for men), with a moderate effect size of .55. On average, interviewers also rated the women as having a greater need for psychiatric services than the men (6.7 versus 5.2 on a scale from 0 to 9), with a moderate effect size of .67. At follow-up the women continued to report having experienced substantial psychiatric

difficulties on significantly more days than men (15.8 versus 10.4) with a moderate effect size of .52.

Significantly more women than men reported substantial anxiety or tension (88% versus 69%), hallucinations (45% versus 18%), trouble concentrating (82% versus 58%), and suicidal ideation (53% versus 25%) in the 30 days prior to admission to the inpatient chemical dependency treatment program. Phi values for these variables are modest, ranging from .24 to .29. More women also reported experiencing substantial anxiety or tension in their lifetime (96% versus 82%), with a modest phi value of .22. These problems, however, were present in a large majority of both male and female study participants. Interviewers reported a statistically significant and moderate (phi=.27) difference in the percentage of women and men who appeared anxious or nervous during the baseline interview (69% versus 42%). The women were more likely to report having relatives in every category (parents, brothers, sisters, grandparents, aunts, and uncles) who had psychiatric problems. With phi values ranging from .26 to .39, these relationships are moderate.

Interviewers indicated that during the baseline interview similar numbers of men and women appeared depressed or hostile, exhibited thought disorders, and had difficulty comprehending or concentrating. There were also no significant differences at baseline with respect to number of prior inpatient and outpatient psychiatric treatment episodes reported or the number who reported that they received a pension for psychiatric reasons. At follow up, the men and women did not differ on the number admitted to Texas state psychiatric hospitals. The majority of the men and women reported having taken psychotropic medication in their lifetime and in the 30 days prior to admission with no statistically significant differences. Of those whom collaterals said were supposed to be taking psychotropic medications, there was no difference at follow-up in the number whom collaterals reported taking their medications as prescribed.

Sexual, Physical, and Emotional Abuse

Table 1 indicates that women (94%) were more likely than men (71%) to report having been the victim of physical, sexual, and/or emotional abuse in their lifetime, though the proportion of men reporting some type of abuse is sizable. Phi values for each type of abuse range from .28 to .51; the strongest gender relationship was for sexual abuse, with 69% of women and 18% of men reporting sexual abuse at some point during their lives. In the 30 days prior to admission, more women (52%) than men (20%) also reported experiencing physical, sexual, and/or emotional abuse. Women were also more likely to report emotional abuse in the last 30 days (52% versus 20%), but not physical or sexual abuse alone. The phi values for both any abuse and emotional abuse in the last 30 days is moderate at .33.

DISCUSSION

This study has a number of limitations. It relies on post hoc analyses. Most of the data are based on clients' self reports. The sample size is small. Generalizability is also limited because clients were all treated at the same inpatient chemical dependency treatment program operated by one community mental health center in Austin, Texas. These clients may not be representative of clients in other geographical locations or those seen in other types of treatment programs. For all these reasons, the present findings should be viewed as exploratory, indicating lines for further investigation. Nevertheless, the consistency with which moderate to strong relationship magnitudes were found, especially in the areas of family/social problems, psychiatric problems, and emotional, physical, and sexual abuse, warrants consideration.

At entry into the inpatient chemical dependency treatment program, women reported being more troubled by family and social problems, and they rated their need for family and social counseling higher than men. Interviewers also rated the women's need for family and social counseling higher than men's, perhaps reflecting the women's greater concerns in these areas. More women also reported having had serious problems getting along with family members than men, including their mother and their children; however, more women than men reported having had close relationships with their spouses or partners and children. These findings may reflect women's greater sensitivity to family and social concerns than men's. They are also consistent with the literature that emphasizes the importance of relationships in the lives of women (see Jordan et al. 1991). These findings about family and social concerns lead to consideration of the idea that dually-diagnosed women may be more attuned to these problems and therefore more inclined to acknowledge them. They may also be more willing to address them in treatment. However, dually-diagnosed women may hesitate to discuss these concerns in coed group therapy sessions if they sense that men are less cognizant of these problems. These findings suggest the need for women-only dual diagnosis groups where sensitive family and social relationships issues can be discussed without the repercussions that may occur when other (male) group members cannot identify with such problems and may even discount them.

Though men were less likely to report family and social problems, they have undoubtedly experienced such problems as a cause or consequence of their mental and substance use disorders. The help offered to them may need to take a different form initially than it does for women. Men may be more likely to have partners and other relatives who are supportive of them obtaining treatment and other services (see, for example, Beckman & Amaro 1986), but they may deny or minimize the family and social

upheaval they have experienced. Discussing family and social problems may not seem like a "manly" thing to do, and many men have been socialized to cut off their feelings about these matters. Men-only groups might be a more appropriate venue for helping dually-diagnosed men identify, acknowledge, and address these problems.

Substance abuse researchers such as Hser, Anglin, and Booth (1987) have found that women with drug problems are more likely to have an addicted partner than men with drug problems. Similarly, the dually-diagnosed women in the study reported in this article more often were living with an alcohol or other drug abuser. Following treatment, return to a partner or family member who uses alcohol and other drugs obviously hinders a woman's chance of remaining clean and sober. These findings underscore the need to help dually-diagnosed women understand the negative effects of such associations. They may also need practical assistance in disentangling their lives from other drug users. Treatment providers should help them locate alternative residential placements that offer supportive environments free from alcohol- and other drug-using peers, especially male partners who may influence them to return to alcohol or other drug use.

Other researchers (Comtois & Reis 1995; Jerroll & Ridgely 1995) have found that dually-diagnosed women generally functioned at higher levels than dually-diagnosed men, but the present findings indicate that women are, or at least perceive that they are, more impaired by psychiatric problems. The women's ASI psychiatric composite scores were higher at baseline and at follow-up compared to men's, suggesting a greater need for psychiatric services. The women reported more days with serious psychiatric distress at admission and at follow-up. They also reported a greater desire for psychiatric counseling. It is not clear whether this has to do with gender differences in perceptions of problems, or reflects a more objective measure of psychiatric distress, but based on the psychiatric domain items of the ASI, interviewers also rated the dually-diagnosed women as in greater need of psychiatric assistance when they entered the inpatient chemical dependency treatment program.

Compared to the men, the women also reported having more relatives in every category who had psychiatric problems. By virtue of their socialization, women may be better family historians than men. The women's reports of relatives with psychiatric problems may also suggest that dually-diagnosed women are more sensitive to such problems and are more willing to identify others, as well as themselves, as having these difficulties. As also indicated in the area of family problems, socialization may make men less willing to label themselves or others as having psychiatric difficulties. Like alcohol and drug problems, family members' psychiatric problems are often kept in the closet or at least not overtly acknowledged by other family members. These problems are the "elephants in the living room" that no one discusses. Dually-diagnosed men may need more help in recognizing that the unusual behaviors of family members may be related to psychological or psychiatric disorders.

As has been consistently reported in the chemical dependency and dual diagnosis literature (see, for example, Zweben 1996; Miller & Downs 1993), many women in this study identified past emotional, physical, and sexual abuse. The strongest relationship was for sexual abuse. These horrific experiences may account, at least in part, for the greater psychiatric distress that dually-diagnosed women reported in this study, but this is not to minimize the number of men who reported victimization. These problems warrant serious attention in treatment. Even in cases where both men and women have experienced these problems, the very nature of the victimization indicates that different treatment strategies are needed. Women who are likely fearful of discussing such abuse with men need the safety of women-only groups to address these problems (see, for example, Underhill 1986). Men who have been victimized, especially sexually, may also find it extremely difficult to discuss such experiences with people of the opposite gender or even the same gender. Individual treatment may be the most appropriate strategy for them. Today, short-term treatment is often the norm in chemical dependency and mental health managed care systems in the public and private sectors. Understaffing of treatment programs, especially the lack of highly qualified clinicians, is not uncommon. Serious psychiatric problems, including the sequelae of abuse, may therefore not be adequately treated. Greater investments are needed to address these needs among dually-diagnosed consumers.

In addition to family/social, psychiatric, and abuse problems, there were noteworthy differences in the areas of legal difficulties and alcohol and drug problems. These findings reflect gender differences in the general population with regard to illegal activities. Prior to entering the inpatient treatment program, the men were more likely to have been charged with various types of crimes, and they had longer periods of lifetime incarceration. Prostitution was the only crime for which women were more likely to be arrested. Both dually-diagnosed men and women need assistance to ensure that they do not encounter problems with the law, since being jailed or imprisoned may add to psychiatric deterioration. These findings suggest that prevention of criminal activity for people with dual diagnoses should focus on the different types of crimes that men and women are most likely to commit. For women, the shame or degradation that may accompany prostitution can easily exacerbate depression and feelings of worthlessness. Engaging in prostitution also increases the likelihood of contracting sexually transmitted diseases. Chemical dependency treatment often includes an AIDS prevention

component. Treatment for women should include not only information on safer sex, but also a focus on avoiding sexual activity as a means of supporting oneself or obtaining drugs or money to buy drugs.

The available dual diagnosis literature suggests few differences between men and women in the area of alcohol and drug problems (Westreich et al. 1997; Brunette & Drake 1997; Jerrell & Ridgely 1995). In the present study, however, more men than women reported a problem that included alcohol only. More women reported they had overdosed on drugs, and interviewers rated the women as having a greater need for drug treatment. These findings suggest that dually diagnosed men may benefit from a greater emphasis on alcohol problems, and women from an emphasis on other drug problems.

The women reported more categories of relatives with alcohol and drug problems, especially their mother, sisters, and maternal relatives. The men's reports of fewer relatives with alcohol and other drug problems is not consistent with the alcoholism literature that shows a strong genetic component in the transmission of alcoholism from fathers to sons (see Cloninger, Bohman & Sigvardsson 1981). Our findings suggest that men may not recognize the impact of alcohol and drug problems in their families of origin. If this is true, men may benefit from participation in Al-Anon (including adult children of alcoholics groups) and Naranon (a self-help group for the family and friends of drug addicts) to increase their understanding of chemical dependency, which is often referred to as a "family disease."

In the area of employment/support, women were responsible for the support of more dependents, and they were more likely to receive public assistance (welfare) payments than men. Men worked more days in the month prior to treatment; however, most of the men and women were unemployed. Since sheer boredom provides time to think about and use alcohol and other drugs, more attention should be paid to engaging dually-diagnosed men and women in the types of activities that are meaningful to them.

Though the literature suggests that dually-diagnosed women have more severe medical problems than men (see Reed & Mowbray 1999; Brunette & Drake 1997; Mowbray et al. 1997), the present study did not find this. These findings did concur with the literature that suggests few demographic differences between men and women with dual diagnoses (Brunette & Drake 1997; Mowbray et al. 1997; Westreich et al. 1997; Comtois & Reis 1995; Jerrell & Ridgely 1995).

This study indicates substantial gender differences among dually-diagnosed clients receiving inpatient chemical dependency treatment. In particular, it suggests that differential treatment strategies should be tested in the areas of family/social, psychiatric, abuse, legal, alcohol, and other drug problems to determine if they will help male and female clients achieve more optimal functioning.

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Self-Help Group Meeting Attendance among Clients with Dual Diagnoses†

Diana M. DiNitto, Ph.D.*; Deborah K. Webb, Ph.D.**; Allen Rubin, Ph.D.***; Debra Morrison-Orton, Ph.D.**** & Kathryn G. Wambach, Ph.D.*****

Abstract—This study explores factors associated with self-help group meeting attendance in the aftercare of 81 clients with dual diagnoses of severe mental illness and chemical dependency following their discharge from an inpatient chemical dependency treatment program. It also explores the association between self-help group meeting attendance and treatment outcomes. Data were collected from patient records and results of the Addiction Severity Index (ASI) administered as part of an earlier experiment that evaluated the effectiveness of the treatment program. Collaterals also provided follow-up information. Of thirteen variables examined, only two were associated with increased self-help group meeting attendance: having more years of education and having a major substance problem that did not include alcohol. No association was found between self-help group meeting attendance and treatment outcome regarding psychiatric problem severity or five other domains of the ASI. A moderate association was found indicating that more self-help group meeting attendance was related to improvements in the legal problems domain of the ASI. Implications are discussed for future research and for improving self-help group meeting attendance and its influence on treatment outcomes for individuals with dual diagnoses.

Keywords—chemical dependency, dual diagnosis, mental illness, self-help groups, substance use disorders, 12-Step groups

Twelve-Step programs like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are considered very important aids in recovery from chemical dependency. In each of these programs, as well as in other self-help programs for people with addictions (such as Women for Sobriety and Save Our Selves), individuals with similar difficulties work together in a group format to provide acceptance and support for each other's recovery efforts (Kirkpatrick 1999; Khantzian & Mack 1994; Christopher 1992; Emrick 1987).

Nearly all chemical dependency treatment programs incorporate a 12-step approach, and many include on-site self-help group meetings in their program (see Mathew et al. 1996; Galanter 1990). In addition, judges, probation and parole officers, and military commanders commonly mandate documented self-help group attendance for their charges who have chemical dependency problems. As more individuals with mental illness are also diagnosed with chemical dependency (and vice versa), clinicians are increasingly encouraging them to participate in self-help groups in addition to mental health treatment. Noordsy and

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*Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin, School of Social Work, Austin, Texas.

**Director of Quality Management, Program Evaluation, and Research, Austin Travis County Mental Health Mental Retardation Center, Austin, Texas.

***Bert Kruger Smith Centennial Professor, University of Texas at Austin, School of Social Work, Austin, Texas.

****Assistant Professor, California State University at Bakersfield, Department of Social Work, Bakersfield, California.

*****Associate Professor, University of Texas at Austin, School of Social Work, Austin, Texas.

Please address correspondence and reprint requests to Diana M. DiNitto, Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin, School of Social Work, 1925 San Jacinto Boulevard, Austin, Texas 78712-1203. E-mail: ddinitto@mail.utexas.edu

colleagues (1996) suggest that clients with severe mental illness may have difficulties participating in 12-Step programs, but in a recent study, DiNitto, Webb & Rubin (In press) found substantial self-help group attendance among clients with dual diagnoses who had been introduced to 12-Step programs while in inpatient chemical dependency treatment. This article explores factors related to the self-help group meeting attendance of these individuals.

Although it is difficult to research self-help groups like Alcoholics Anonymous due to their emphasis on anonymity and the fluidity of group membership, a number of attempts have been made to study aspects of attendance and participation (see Miller & McCrady 1993). Efforts have been made to describe characteristics of those who attend, their length or degree of participation and involvement, changes in their behavior, their substance use outcomes, and their perceived usefulness of the groups (see, for example, Connors & Dermen 1996; McCrady, Epstein & Hirsch 1996; Morgenstern et al. 1996a; Morgenstern et al. 1996b; Burton & Williamson 1995; Montgomery, Miller & Tonigan 1995; Carlson, Dilts & Radcliff 1994; Kaskutas 1994; Snow, Prochaska & Rossi 1994; Emrick et al. 1993; Humphreys & Woods 1993; Emrick 1989, 1987; Ogborne & Glaser 1981; Boscarino 1980; Trice & Roman 1970; Trice 1957).

Not everyone with chemical dependency opts to attend self-help groups (Burton & Williamson 1995; Ogborne & Glaser 1981; Bean 1975), and the dropout rate in AA is reported to be about 50% within three months of initial attendance (Alcoholics Anonymous 1990). As a result, it is difficult to gain access to large numbers of those attending or participating in any methodologically meaningful way. Even studies that offer some follow-up information on participants rely heavily on self-selection (volunteers). These volunteers may be different from the members as a whole, and comparison groups are difficult to find. Few studies have addressed the self-help group participation of individuals with dual diagnoses, for whom successful recovery is often additionally measured in terms of factors such as decreased psychiatric hospitalization, decreased psychiatric symptomatology, and increased medication compliance. Despite the difficulties in studying self-help group involvement, the authors' review of the literature identified some factors that merit empirical exploration as to their possible association with self-help group meeting attendance by individuals with dual disorders.

One potential factor is whether an individual has a major mental disorder and the type and severity of that disorder. Noordsy and colleagues (1996) suggest factors that may impede some people with schizophrenia from initiating attendance, such as difficulty sitting still during meetings, fear of crowds, concern that others will be watching them, or discomfort with the jargon of 12-Step programs (for example, phrases such as "Let go and let God" may activate delusional religious ideation). As Wallen and Weiner (1989) describe, AA references such as "Restore us to sanity" can also be problematic. In this context, sanity refers to an end to behaviors engaged in while using chemicals, such as committing crimes. It does not refer to problems of severe mental illness—neurobiological disorders that require medical and mental health interventions. But confusion may lead some clients with dual diagnoses into a false sense of security that they can reach recovery without the aid of medications for their mental illness. Although AA has endorsed a position that supports the use of psychotropic medications when judiciously prescribed (Alcoholics Anonymous 1984), some AA attendees still try to dissuade individuals with mental illness from taking these medications.

Other reasons postulated regarding low attendance at self-help group meetings by individuals with dual diagnoses are a feeling of not fitting in or a sense of not being welcomed or accepted by other members (Ridgely & Jerrell 1996). Noordsy and colleagues (1996) suggest that loss of a spouse, children, a regular job, driving privileges, and/or a car (all frequently mentioned in AA members stories) may not generalize to people with severe thought disorders like schizophrenia who, due to the nature of their disability, may never have had these things. In many ways, those with unipolar mood disorders like major depression may be more similar to the general membership of self-help groups like AA than those with thought disorders. They are less likely to suffer the hallucinations, delusions, or social-behavioral problems commonly faced by persons with thought disorders. Although people with depressive disorders may become so incapacitated at times that they cannot initiate action, such as attending self-help meetings, Noordsy and colleagues (1996) believe that they are more likely to attend such meetings than those with thought disorders.

Several studies provide grounds for postulating that clients with less severe psychiatric problems might be more likely to attend self-help groups. For example, the Project MATCH Research Group (1997) found little difference among type of treatment used and outcome when considering client characteristics except on one attribute, psychiatric severity. Clients with lower psychiatric severity had more days of abstinence after a 12-Step factilitation approach than those receiving a cognitive-behavioral intervention. McLellan and colleagues (1983a, b) have also reported that clients fare better in substance abuse treatment if their psychiatric symptomatology is less severe.

A second factor worth exploring in regard to attendance is ethnicity. Different ethnic groups have varied concepts about what constitutes a problem with alcohol or other drugs and what should be done about it based on personal experience in their subculture and environment (Longshore 1997). For example, some Mexican-Americans have reported reluctance and ambivalence about drug treatment (Longshore 1997), and this may include self-help

groups. Traditional healing and spiritual systems within Hispanic cultures in the United States, including *curanderismo* (Mexican-American), *espiritismo* (Puerto Rican), and *santeria* (Cuban), may be used to address alcohol and drug problems (Gloria & Peregoy 1996). Generally speaking, these systems share the common goal of harmony and balance and view suffering as the result of some failure in the individual (Gloria & Peregoy 1996). This suffering may be seen as God's will and solutions may be viewed as coming through spiritual or divine intervention rather than medical or other human interventions. Little has been written about the participation of Hispanics or Hispanic subgroups in self-help groups, though data from 1990 (containing only small samples of Hispanics and Blacks) indicate that Hispanics participate in AA at the same rate as African-Americans, but that both of these groups participate less than Whites (Caetano 1993).

Smith (1994) argues that African-American cultural values may conflict with the values of powerlessness and anonymity espoused in traditional self-help groups. He points out that historically African-Americans have been kept powerless and anonymous in the dominant White culture. He further states that if a culture believes itself to be "with no power it will be resistant to accepting these steps" [of AA] (Smith 1994: 111). Thus, self-help groups like AA may be less appealing to African-American communities. On the other hand, it has been suggested that AA is appealing to African-Americans because both African-American culture and AA are rich in spirituality and metaphorical meaning (Hudson 1985; Caldwell 1983). Humphreys and Woods (1993) found that African-Americans were more likely to attend 12-Step groups if they lived in an African-American community, where groups would likely be composed of African-American members.

The self-help group participation of people with substance use disorders of different racial and ethnic backgrounds is obviously a topic of debate. It is often pointed out that AA was developed by White men and that Whites continue to comprise most of the program's membership. Many other self-help groups for people with alcohol and other drug problems also attract a membership composed largely of Whites, and there is nothing to suggest that participation among those with dual diagnoses would differ.

A third factor possibly associated with self-help meeting attendance is education level. Although Emrick's (1989, 1987) and Emrick and colleagues' (1993) meta-analyses found little support for education being a factor in AA attendance, Humphreys, Moos, and Finney (1995) suggested that those with higher education may perceive chemical dependency problems sooner because they may be more likely to be employed and may associate with a peer group that is less involved in heavy drug use. Humphreys, Moos, and Finney (1995) found that persons with higher educational and occupational status did tend to identify drinking problems earlier and were more likely to adopt a goal of moderate drinking, while those with less education and income often identified their problem after "hitting bottom" and were more likely to attend 12-Step programs that promote abstinence.

Though people with severe mental illness may be highly intelligent, their formal educational attainment may be limited by the obstacles posed by their illness. Factors such as ability to read and to articulate one's thoughts may have some bearing on self-help group attendance and participation. In groups like AA, members may be asked to read aloud at meetings, there is emphasis on studying the *Big Book* of Alcoholics Anonymous and other written materials that groups provide, and members often engage in discussions about the twelve steps or other aspects of recovery. Those with lower levels of education may be unable to participate in these ways. They may feel uncomfortable with these activities, especially if they are already self-conscious or have low self-esteem due to their dual disabilities. Therefore, it is possible that the ability to comprehend and participate in self-help meetings increases with education among individuals with dual diagnoses.

A fourth factor warranting investigation is gender. Research on assessment and treatment of addictions has been based on the male-as-norm, which has led to a bias in understanding the needs of women (Wilke 1994). Only recently have studies addressed women's substance use, treatment, self-help, and recovery issues (Davis & DiNitto 1998). There is wide support for women-only self-help groups (see for example, Nelson-Zlupko et al. 1996; Kaskutas 1994), and many communities have women-only AA groups. As of 1998, an estimated 34% of AA members were women (see the "AA Fact File" at www.alcoholics-anonymous.org), a figure roughly proportional to the ratio of women to men ages 15 to 54 who met the diagnostic criteria for alcohol dependence in the last twelve months (Kessler et al. 1994). Some studies have credited AA exposure or attendance with higher abstinence rates for women compared to men (see Beckman 1993), but women, particularly women with dual diagnoses, may be more reluctant than men to participate in these group meetings for a number of reasons.

Zweben (1996) says that women with dual disorders may be discouraged from continued participation in 12-Step groups because their progress may be slower than that of other members. Traditional self-help groups may also reinforce gender role stereotyping, making it especially difficult for women with severe mental disabilities to participate. Women may express reluctance to speak openly in a male-dominated setting about issues regarding sex and violence or other problems encountered in intimate relationships. In coed groups women often defer to men. Men often interrupt, talk over, or unknowingly use manipulative techniques to silence women or to redirect the conversation (Sapiro 1990). Men tend to use more hostile

words. As a group, women are less likely to use a confrontational style of communication, and confrontation can be both "frightening and alienating" to them (Van Den Bergh 1991: 24). For example, name calling in self-help groups (such as referring to oneself or another person as a "drunk") is often used as a tool for breaking down denial. Women, more than men, may consider such language offensive.

In her study comparing AA and Women for Sobriety, Kaskutas (1994) reported that women who chose not to attend AA said they felt like outsiders there, disagreed with program principles, and disliked what they considered a male-focused orientation. Kaskutas also found that women did not attend AA because of what they considered negativity of the groups. Instead, women wanted empowerment and encouragement, not continued feelings of powerlessness and submissiveness that were common in their everyday lives. On the other hand, men, who have more likely experienced feeling powerful and dominant, may gain humility through "giving up" and become less controlling. Some of the women in Kaskutas's study believed that AA did nothing to promote self-esteem and, instead, decreased feelings of self-worth. Though these explanations are counter to the experiences of many women who feel that AA has played a significant role in their recovery, women continue to comprise a smaller portion of the AA membership than men. There is no reason to believe that women with dual diagnoses would be any more likely to participate. In fact, their gender coupled with their severe mental disorders may increase their reluctance to attend.

A fifth factor identified in our review is the individual's major drug problem. Alcohol, cocaine, and cannabis are the substances most frequently used by clients with dual diagnoses (Rosenberg et al. 1998; Blankertz & Cnaan 1994; Burnam et al. 1995). AA, which focuses on alcohol problems, is widely available, with meetings around the clock in many urban areas. Other groups such as Narcotics Anonymous (NA) and Cocaine Anonymous (CA) target people with other drugs addictions. In many areas, these groups have fewer weekly meetings than AA. AA, the most accessible of the groups, may not be as helpful for those with dual diagnoses whose primary addiction does not include alcohol. Individuals whose major substance problem does not involve alcohol may, therefore, attend self-help groups less frequently due to less availability of suitable meetings.

Other factors identified in our review that may affect self-help group attendance include age, religiosity or spirituality, whether one was abused as a child, whether living with dependent children, previous chemical dependency treatment, access to an automobile, and whether on probation or parole. Evidence suggests that attendance at self-help group meetings may be more likely among individuals who are older, who are more religious or spiritual, who have not been abused, who do not have child care responsibilities, who have had previous chemical dependency treatment, who have access to an automobile, and/or are on probation or parole (see, for example, DiCenso & Paull 1999; Galanter et al. 1996; McCrady, Epstein & Hirsch 1996; Morgenstern et al. 1996a; Nelson-Zlupko et al. 1996; Zweben 1996; Humphreys, Moos & Finney 1995; Nealon-Woods, Ferrari & Jason 1995; Burman 1994; Kaskutas 1994; Miller & Kurtz 1994; Wilke 1994; Emrick et al. 1993; Humphreys & Woods 1993; Emrick 1987, 1989; Beckman & Kocel 1982).

In addition to identifying factors that might be associated with attendance at self-help group meetings, the present review also found evidence supporting the notion that self-help groups have some positive effect on members' outcomes (Project MATCH Research Group 1997; Morgenstern et al. 1996b; Noordsy et al. 1996; Burnam et al. 1995; Humphreys, Moos & Finney 1995; Montgomery, Miller & Tonigan 1995; Carlson, Dilts & Radcliff 1994; Kaskutas 1994). Consequently, a second aim of the current study was to assess the association between level of attendance and treatment outcomes for clients with dual diagnoses.

METHODOLOGY

Data for this study came from an earlier experimental study done to test the effectiveness of an integrated, group treatment for individuals with dual diagnoses (see DiNitto, Webb & Rubin In press). The integrated group treatment was added to a Minnesota-model inpatient chemical dependency treatment program operated by a community mental health center in Austin, Texas that accepted clients who had Axis I mental and substance use disorders as defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV; American Psychiatric Association 1994). Diagnoses were made by program psychiatrists. Participants in the original study were recruited as they entered the inpatient program. The inpatient program included intensive psychoeducational groups, treatment groups, individual counseling, and attendance at facility-sponsored and community AA and NA groups. Attendance at 12-Step group meetings was required of all participants while in the treatment program, and there was considerable encouragement for them to attend self-help groups following treatment. Those in the experimental group also received a series of integrated group treatment sessions, called Good Chemistry Groups, designed especially for people with dual diagnoses (Webb 1995). Good Chemistry Groups include a special orientation to 12-Step group participation for those with dual diagnoses. For example, there was discussion of how self-help groups for those with chemical dependency could be useful to people with dual diagnoses. Experimental participants were also instructed on topics such as appropriate behavior at meetings and how to resist suggestions to stop taking psychotropic medications.

The DiNitto, Webb and Rubin (In press) study assessed whether the Good Chemistry intervention enhanced outcomes for clients in the experimental group. Outcome data were collected from clients and collaterals (e.g., a family member, friend, case manager) at 30, 60, and 90 days following the client's discharge from the inpatient chemical dependency treatment program. There were few differences between the experimental and control groups on outcomes, including alcohol and drug use, legal problems, psychiatric functioning, and self-help group attendance. Given that the literature suggests that having dual diagnoses may inhibit attendance at self-help groups, a finding of particular interest was that both experimental and control group members attended a substantial number of self-help meetings in the 90 days after discharge. Almost all of this attendance was at AA meetings. Experimental group clients attended an average of 11.5 days (SD=11.0), and control group clients attended an average of 7.7 days (SD=8.6). The difference was not statistically significant. In the present study, the authors seek to identify variables that were associated with self-help group meeting attendance among clients with dual diagnoses in either treatment condition of the previous experiment, and explore whether attendance was related to clients' functioning at follow-up.

SAMPLE

The original study sample contained 97 clients; 53% were female, and the average age of clients was 33 years with a range from 18 to 56 years. Fifty-nine percent were White, 28% were Black, and 13% were of Hispanic origin. Nearly half (48%) were Protestant, 22% were Catholic, 13% professed another religion, and 17% had no religious affiliation. The mean number of years of education was 11.2 years with a range of five to 18. The majority of the sample (74%) had a primary Axis I mood disorder (major depression or dysthymia); 10% had a thought disorder (schizophrenia or other psychotic disorder), 12% had a combination of a mood and thought disorder (bipolar or schizoaffective disorder), and 3% had a diagnosis of post-traumatic stress disorder (PTSD). Approximately half of the sample also had a secondary Axis I mental disorder. All 97 clients had at least one substance dependence diagnosis (most commonly alcohol or cocaine), and 60% were dependent on more than one substance. Among participants, 64% had previous alcohol treatment, and 72% had previous drug treatment. Fifty-five percent were on probation or parole. Eighteen percent were living with children. Eighty-two percent said they had experienced emotional abuse during their lifetime, 71% had experienced physical abuse, and 45% sexual abuse. Thirty percent had access to an auto. The mean of clients' ASI composite scores at baseline was .43 for medical, .72 for employment, .38 for alcohol, .18 for drugs, .13 for legal, .32 for family/social, and .58 for psychiatric (a score of zero indicates no problem, and the highest problem score in each domain is one).

Approximately half of the clients participated in each follow-up. In total, 68 clients (70% of all subjects) participated in at least one follow-up. Collaterals for 78 subjects (80% of the sample), participated in at least one follow-up. In total, there are some follow-up data for 83 clients (86% of the sample). Subjects who participated in at least one follow-up did not differ from those who did not participate on demographic characteristics, primary or secondary mental disorder, drugs on which they were dependent, number of criminal convictions, and number and days of previous stays in Texas state psychiatric hospitals. With regard to ASI composite scores at baseline, those not found at follow-up had a significantly lower mean medical composite score (.25) than those found at follow-up (.44) ($F=5.5$, $df=1,94$, $p=.02$). No other differences were noted.

MEASURES

In order to measure self-help group attendance, clients and collaterals were asked to identify the type of self-help meetings and the number of meetings clients attended during the 30-day time period covered by each follow-up. The current study relies on clients' reports of self-help group meeting attendance, except for a minority of the cases in which the client did not participate in follow-ups; in these cases, collaterals' reports were used if available. The number of meetings attended was computed by adding the number of meetings reported at each available follow-up and dividing the sum by the number of available follow-ups.

The independent variables in the present study were comprised of the factors identified in our literature review. These included clients' major psychiatric diagnosis, ethnicity, gender, education level, major substance problem, age, having a religious preference, whether previously abused, whether living with dependent children, previous chemical dependency treatment, access to an automobile, whether on probation or parole, and severity of psychiatric symptomatology and other problems.

Psychiatric diagnosis was available in patient records. For the present analyses, these diagnoses were dichotomized into two categories: thought disorders versus depressive disorders. Clients with a combination of mood and thought disorder symptoms, such as schizoaffective disorder or bipolar disorder, were coded as having a thought disorder. (Of the three clients in the original sample who had the major mental illness PTSD, only one was found at follow-up. Since PTSD did not fit our classification of mood or thought disorder, that client was excluded from the analyses involving primary mental disorder.) The remaining independent variables were obtained from the Addiction Severity Index (ASI; McLellan et al. 1980), which was

administered to clients at baseline and follow-up in the earlier experiment. Several of these variables were collapsed into dichotomous categories. Ethnicity was collapsed into White versus minority, because as noted in the literature review, there is reason to postulate that both African-Americans and Hispanics might attend meetings less than Whites. Other variables collapsed into dichotomous categories were religion, coded as having a particular religious preference or not; physical, sexual, and emotional abuse, coded as having experienced any of these in one's lifetime or not; prior chemical dependency treatment, coded as having previously participated in alcohol or drug treatment or not; major substance problem, coded as whether the client's major drug problem did or did not involve alcohol. The seven domains of the ASI (medical, employment, alcohol, drug, legal, family/social, and psychiatric) were used to indicate the severity of clients' problems. The psychiatric baseline score was used in the analyses attempting to identify predictors of self-help group attendance. The difference between the baseline and the last follow-up score available for each client for all seven domains of the ASI was used in another set of analyses to determine if attendance was related to improved treatment outcomes.

The ASI is administered as a semistructured interview and produces composite scores that represent clients' problems in each of the seven domains. This standardized instrument is widely used in the chemical dependency field and has been shown to be valid and reliable with individuals whose primary problem is a substance use disorder (McLellan et al. 1985). When used with clients who have schizophrenia, Zanis, McLellan and Corse (1997) found acceptable internal consistency in the range of .67 to .85 for all but the legal domain. Interrater reliability was good for all the composite scores, while test-retest reliability was acceptable for the employment, alcohol, family, and psychiatric domains, but not for the medical, legal, and drug domains. In a study of patients who were dually diagnosed, most of whom were depressed, Hodgins and El-Guebaly (1992) found the ASI generally useful. The family/social, employment, and particularly the legal composite scores were more problematic than other domains. Though the ASI may have drawbacks with clients who have dual diagnoses, there are few other instruments that capture so many facets of client functioning, and it has been used in several dual diagnoses treatment studies.

RESULTS

There are data on self-help group attendance for 81 clients, 65 (80%) of whom reportedly attended at some point following discharge from the inpatient chemical dependency program. In 55 of these 81 cases, both clients and their collaterals reported on whether the client attended self-help groups during follow-up. In 47 (85%) of these 55 cases, the client and collateral agreed on whether or not the client attended self-help groups. In the eight cases in which there was disagreement, six clients said they attended while their collateral said they did not. In the other two cases, the collaterals said the clients attended, but the clients said they did not attend. These discrepancies may have arisen when data were collected from clients and collaterals during different follow-up periods. They may also be due to social desirability bias on the part of the client, or even the collateral, as well as inaccurate recall. Data on the number of monthly meetings attended are available for 79 clients (in two cases there is information that the clients attended but no report of the number of meetings attended). The mean number of monthly meetings attended was 9.4 with a range from zero to 30. Sixteen (20%) of the 79 clients attended no meetings, while 20 (25%) attended an average of at least 15 meetings.

Having calculated attendance, the authors began their exploratory analysis with a simple regression analysis of the relationship between each of the 13 independent variables and self-help group meeting attendance. As seen in Table 1, only one of these variables, education level, had at least a moderate association with self-help group meeting attendance ($r = .36$; $p = .0013$). The higher their education level, the more frequently clients attended self-help group meetings after discharge from the inpatient chemical dependency program. None of the other correlations exceeded .20, and none was statistically significant at an alpha of .10 with a Bonferroni correction (dividing .10 by 13, and thus requiring a probability value of less than .008 to be statistically significant).

We were surprised that no other variables had meaningful associations with self-help group meeting attendance, and wondered whether any would emerge in a multivariate analysis. Perhaps some independent variables were suppressing correlations involving other independent variables. To explore this possibility, a multiple regression analysis was conducted that included the dependent variable (number of self-help group meetings attended) and each independent variable with at least a .10 bivariate correlation with the dependent variable (education level, major substance problem, whether abused, age, previous chemical dependency treatment, and severity of psychiatric symptomatology). This analysis produced two variables that were associated with attendance at statistically significant levels. One, as in the bivariate, simple regression analyses, was educational level (beta=.33, p=.002). The other was major substance problem (beta=-.25; p=.02), with clients whose major problem did not include alcohol attending more self-help group meetings than those whose major problem was alcohol or alcohol and other drugs. Both of these variables had moderate correlations with attendance, with educational level explaining 12% of the variance in attendance and major substance problem explaining an additional 9% of the variance.

TABLE 1
Simple Regression Analysis of Association Between 13 Predictor Variables and Frequency of Attendance at Self-Help Group Meetings

Predictor Variable*	r	r^2	*p*-value
Educational level	.36	.13	.0013
Does substance abuse involve alcohol?	-.20	.04	.0763
Severity of psychiatric symptomatology	.20	.04	.0777
Abused as a child?	-.16	.03	.1511
Age	.15	.02	.1741
Previous alcohol or drug treatment	.13	.02	.2720
Religious preference	.08	.01	.5074
Does diagnosis include thought disorder?	-.07	.01	.5297
Living with dependent children?	.06	.00	.6020
Minority ethnicity	-.04	.00	.7839
Gender	.01	.00	.9140
Access to a car	.01	.00	.9417
On probation or parole	.00	.00	.9862

*Predictor variables measured upon admission to inpatient program; attendance measured following discharge from inpatient program.

A secondary aim of the current study was to assess the association between level of self-help group meeting attendance and treatment outcome for clients with dual diagnoses. Comparing the seven ASI composite scores at baseline and follow-up in the original study, statistically significant improvements were found for all domains except legal. In order to determine whether self-help group meeting attendance was related to improvements in these composite scores, the bivariate correlation between attendance and change from baseline to follow up for the psychiatric problem domain was examined first. No relationship was found between these two variables (r= -.01; p=.93). Next, a multiple regression analysis was conducted to see if a relationship between attendance and psychiatric treatment outcome would emerge if educational level and substance of choice were included in the equation. However, it did not (beta=.06; p=.66). Bivariate correlations between attendance and change from baseline to follow up in clients' scores on the remaining six ASI domains (employment, medical, alcohol, drugs, family/social, and legal) were also examined. None approached statistical significance except for change in the legal composite score, which had a significant, positive association with attendance (r=.30; p<.05), meaning that more self-help group attendance was associated with greater improvement in the legal domain.

DISCUSSION

The present findings fail to provide empirical support for most of the factors that were identified in the literature review as possible predictors of self-help group meeting attendance by individuals with dual diagnoses. Only educational level and major substance problem predicted attendance, and their correlations were moderate. None of the other 11 variables assessed were associated with attendance. The lack of association between self-help group attendance and the variables type of mental disorder and severity of psychiatric symptomatology is actually good news, since it suggests that efforts to help clients with severe thought disorders become involved in attending self-help group meetings can be as successful as efforts with clients who have other mental disorders. It also suggests that in determining whom to refer to self-help groups, practitioners should focus more on dually diagnosed clients' educational level than their Global Assessment of Functioning (American Psychiatric Association 1994) or Brief Psychiatric Rating Scale (Miller & Faustman 1996) scores. However, this was an exploratory study with a small sample. Future prospective studies, with different types of samples, may generate findings that contrast with ours regarding diagnoses, education, or the other variables assessed.

The findings on educational level contrast with Emrick (1989, 1987) and Emrick and colleagues' (1993) meta-analyses, which indicated little support for education as a predictor of AA attendance. They also contrast with the findings of Humphreys, Moos and Finney (1995) suggesting that having less education is associated with attending meetings. These studies, however, involved AA attendees in general and did not focus on people with dual diagnoses. Though attendance is not synonymous with degree of participation (see Montgomery, Miller & Tonigan 1995), dually diagnosed individuals with lower levels of education may avoid meetings if they are uncomfortable with self-help group participation activities. Noordsy and colleagues

(1996) indicated that some of their clients liked attending 12-Step groups because they could listen but did not have to speak at the meetings. Though attendees are free to decline to read aloud or participate in discussions, occasionally they may be asked to do so, causing them to be apprehensive about attending. Practitioners who believe their dually diagnosed clients can benefit from self-help groups may want to ascertain their clients' comfort level with attendance *and* participation activities and increase efforts to help clients ameliorate discomfort with both. Many treatment programs for people with dual diagnoses do this to some degree (see, for example, the framework for AA utilization suggested in Powell, Kurtz, Garvin and Hill 1996).

The foregoing suggestion assumes the importance of self-help group meeting attendance as a factor in the treatment outcomes of dually diagnosed clients. Emrick (1989) indicates that the effectiveness of AA for the general population of alcoholics who attend is still unproven, and Noordsy and colleagues (1996) note that self-help groups have not been a major component in the recovery of people with severe mental illness. The present findings on the lack of association between attendance and most ASI change scores do not provide grounds for optimism about the effectiveness of self-help group attendance on the outcomes of people with dual diagnoses following inpatient chemical dependency treatment. Perhaps the measures lacked sufficient sensitivity to detect these relationships among clients with dual diagnoses. Due to the severe mental illnesses of the clients in this study, the authors were particularly interested in the association between self-help group meeting attendance and improvement in psychiatric problem severity. Though we did not find a correlation between self-help group attendance and further reduction in psychiatric distress following clients' discharge from inpatient treatment, attendance following inpatient treatment may serve more to maintain treatment gains than to improve clients' outcomes. It is also conceivable that such attendance would be more strongly associated with outcomes after discharge from less comprehensive and/or less effective inpatient programs than the one evaluated here. Exploring this possibility may be a promising line for future research.

The absence of association between attendance and treatment outcome on five of the remaining six ASI domains (employment, medical, alcohol, drugs, family/social) underscores the points just made with regard to the psychiatric composite score. The exception to this pattern was the moderate (r=.30) association between attendance and change in the legal composite score. However, this finding should be interpreted cautiously. The legal composite score had the lowest internal consistency reliability of the seven ASI composite scores examined in this study. Zanis, McLellan and Corse (1997) also found it to lack acceptable internal consistency reliability when used with clients who have schizophrenia. Hodgins and El-Guebaly (1992) found it to be relatively problematic with dually diagnosed, depressed clients. In addition, with the Bonferroni correction, the foregoing correlation would not be significant at an original alpha of .05. Since chance cannot be eliminated as a plausible explanation for the .30 correlation between attendance and change in the legal composite score, future research should assess the effects of self-help group meeting attendance on clients' legal difficulties after discharge from inpatient chemical dependency treatment programs. This constitutes another line for future research.

Finally, further attention is warranted regarding the finding that clients whose substance problem did not involve alcohol attended more self-help group meetings than those whose problem did involve alcohol. This relationship is the inverse of what many might expect to find, since most of the self-help meeting attendance in this study was at AA, and AA meetings focus on those with alcohol rather than other drug problems. However, this finding is not inconsistent with Emrick's (1987) and Emrick and colleagues' (1989) reviews, which indicated that people whose substance problems involved drugs as well as alcohol attended AA meetings more frequently than individuals whose substance problem was alcohol alone. Further research, perhaps including some studies containing in-depth qualitative interviewing, may help clarify drug users' motivations for attending AA or other self-help groups.

The benefits of self-help group attendance for people with dual diagnoses may be difficult to capture in research studies conducted in the field, as this one was. Alcoholics Anonymous encourages newcomers to make "90 meetings in 90 days." The follow-up period in our study was limited to 90 days, perhaps not long enough to detect some of the benefits of self-help group attendance for clients who have to manage both mental and substance dependence disorders. Chemical dependency professionals are likely to continue to encourage clients with dual diagnoses to attend AA and other 12-Step groups, but other alternatives appear to be needed to improve outcomes for these individuals. Alliances among chemical dependency and mental health professionals and people with dual diagnoses are growing, and with them have come increased efforts to develop groups cofacilitated by professionals and people in dual recovery from mental illness and chemical dependency (see Bricker 1995; Webb 1995). People with dual diagnoses are also becoming more active in their own self-help movements, as evidenced by groups like Dual Recovery Anonymous (for information visit the web site at www.dualrecovery.org). Perhaps these developments will increase the association between treatment outcomes and self-help group meeting attendance by people with dual diagnoses. If so, the need for further research on the factors influencing such attendance for this target population will intensify, and future studies documenting the impact of attendance on treatment outcomes may provide more grounds for optimism than do the present findings.

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Self-Help Group Meeting Attendance among Clients with Dual Diagnoses†

Diana M. DiNitto, Ph.D.*; Deborah K. Webb, Ph.D.**; Allen Rubin, Ph.D.***; Debra Morrison-Orton, Ph.D.**** & Kathryn G. Wambach, Ph.D.*****

Abstract—This study explores factors associated with self-help group meeting attendance in the aftercare of 81 clients with dual diagnoses of severe mental illness and chemical dependency following their discharge from an inpatient chemical dependency treatment program. It also explores the association between self-help group meeting attendance and treatment outcomes. Data were collected from patient records and results of the Addiction Severity Index (ASI) administered as part of an earlier experiment that evaluated the effectiveness of the treatment program. Collaterals also provided follow-up information. Of thirteen variables examined, only two were associated with increased self-help group meeting attendance: having more years of education and having a major substance problem that did not include alcohol. No association was found between self-help group meeting attendance and treatment outcome regarding psychiatric problem severity or five other domains of the ASI. A moderate association was found indicating that more self-help group meeting attendance was related to improvements in the legal problems domain of the ASI. Implications are discussed for future research and for improving self-help group meeting attendance and its influence on treatment outcomes for individuals with dual diagnoses.

Keywords—chemical dependency, dual diagnosis, mental illness, self-help groups, substance use disorders, 12-Step groups

Twelve-Step programs like Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are considered very important aids in recovery from chemical dependency. In each of these programs, as well as in other self-help programs for people with addictions (such as Women for Sobriety and Save Our Selves), individuals with similar difficulties work together in a group format to provide acceptance and support for each other's recovery efforts (Kirkpatrick 1999; Khantzian & Mack 1994; Christopher 1992; Emrick 1987).

Nearly all chemical dependency treatment programs incorporate a 12-step approach, and many include on-site self-help group meetings in their program (see Mathew et al. 1996; Galanter 1990). In addition, judges, probation and parole officers, and military commanders commonly mandate documented self-help group attendance for their charges who have chemical dependency problems. As more individuals with mental illness are also diagnosed with chemical dependency (and vice versa), clinicians are increasingly encouraging them to participate in self-help groups in addition to mental health treatment. Noordsy and

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*Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin, School of Social Work, Austin, Texas.

**Director of Quality Management, Program Evaluation, and Research, Austin Travis County Mental Health Mental Retardation Center, Austin, Texas.

***Bert Kruger Smith Centennial Professor, University of Texas at Austin, School of Social Work, Austin, Texas.

****Assistant Professor, California State University at Bakersfield, Department of Social Work, Bakersfield, California.

*****Associate Professor, University of Texas at Austin, School of Social Work, Austin, Texas.

Please address correspondence and reprint requests to Diana M. DiNitto, Cullen Trust Centennial Professor in Alcohol Studies and Education, University of Texas at Austin, School of Social Work, 1925 San Jacinto Boulevard, Austin, Texas 78712-1203. E-mail: ddinitto@mail.utexas.edu

colleagues (1996) suggest that clients with severe mental illness may have difficulties participating in 12-Step programs, but in a recent study, DiNitto, Webb & Rubin (In press) found substantial self-help group attendance among clients with dual diagnoses who had been introduced to 12-Step programs while in inpatient chemical dependency treatment. This article explores factors related to the self-help group meeting attendance of these individuals.

Although it is difficult to research self-help groups like Alcoholics Anonymous due to their emphasis on anonymity and the fluidity of group membership, a number of attempts have been made to study aspects of attendance and participation (see Miller & McCrady 1993). Efforts have been made to describe characteristics of those who attend, their length or degree of participation and involvement, changes in their behavior, their substance use outcomes, and their perceived usefulness of the groups (see, for example, Connors & Dermen 1996; McCrady, Epstein & Hirsch 1996; Morgenstern et al. 1996a; Morgenstern et al. 1996b; Burton & Williamson 1995; Montgomery, Miller & Tonigan 1995; Carlson, Dilts & Radcliff 1994; Kaskutas 1994; Snow, Prochaska & Rossi 1994; Emrick et al. 1993; Humphreys & Woods 1993; Emrick 1989, 1987; Ogborne & Glaser 1981; Boscarino 1980; Trice & Roman 1970; Trice 1957).

Not everyone with chemical dependency opts to attend self-help groups (Burton & Williamson 1995; Ogborne & Glaser 1981; Bean 1975), and the dropout rate in AA is reported to be about 50% within three months of initial attendance (Alcoholics Anonymous 1990). As a result, it is difficult to gain access to large numbers of those attending or participating in any methodologically meaningful way. Even studies that offer some follow-up information on participants rely heavily on self-selection (volunteers). These volunteers may be different from the members as a whole, and comparison groups are difficult to find. Few studies have addressed the self-help group participation of individuals with dual diagnoses, for whom successful recovery is often additionally measured in terms of factors such as decreased psychiatric hospitalization, decreased psychiatric symptomatology, and increased medication compliance. Despite the difficulties in studying self-help group involvement, the authors' review of the literature identified some factors that merit empirical exploration as to their possible association with self-help group meeting attendance by individuals with dual disorders.

One potential factor is whether an individual has a major mental disorder and the type and severity of that disorder. Noordsy and colleagues (1996) suggest factors that may impede some people with schizophrenia from initiating attendance, such as difficulty sitting still during meetings, fear of crowds, concern that others will be watching them, or discomfort with the jargon of 12-Step programs (for example, phrases such as "Let go and let God" may activate delusional religious ideation). As Wallen and Weiner (1989) describe, AA references such as "Restore us to sanity" can also be problematic. In this context, sanity refers to an end to behaviors engaged in while using chemicals, such as committing crimes. It does not refer to problems of severe mental illness—neurobiological disorders that require medical and mental health interventions. But confusion may lead some clients with dual diagnoses into a false sense of security that they can reach recovery without the aid of medications for their mental illness. Although AA has endorsed a position that supports the use of psychotropic medications when judiciously prescribed (Alcoholics Anonymous 1984), some AA attendees still try to dissuade individuals with mental illness from taking these medications.

Other reasons postulated regarding low attendance at self-help group meetings by individuals with dual diagnoses are a feeling of not fitting in or a sense of not being welcomed or accepted by other members (Ridgely & Jerrell 1996). Noordsy and colleagues (1996) suggest that loss of a spouse, children, a regular job, driving privileges, and/or a car (all frequently mentioned in AA members stories) may not generalize to people with severe thought disorders like schizophrenia who, due to the nature of their disability, may never have had these things. In many ways, those with unipolar mood disorders like major depression may be more similar to the general membership of self-help groups like AA than those with thought disorders. They are less likely to suffer the hallucinations, delusions, or social-behavioral problems commonly faced by persons with thought disorders. Although people with depressive disorders may become so incapacitated at times that they cannot initiate action, such as attending self-help meetings, Noordsy and colleagues (1996) believe that they are more likely to attend such meetings than those with thought disorders.

Several studies provide grounds for postulating that clients with less severe psychiatric problems might be more likely to attend self-help groups. For example, the Project MATCH Research Group (1997) found little difference among type of treatment used and outcome when considering client characteristics except on one attribute, psychiatric severity. Clients with lower psychiatric severity had more days of abstinence after a 12-Step factilitation approach than those receiving a cognitive-behavioral intervention. McLellan and colleagues (1983a, b) have also reported that clients fare better in substance abuse treatment if their psychiatric symptomatology is less severe.

A second factor worth exploring in regard to attendance is ethnicity. Different ethnic groups have varied concepts about what constitutes a problem with alcohol or other drugs and what should be done about it based on personal experience in their subculture and environment (Longshore 1997). For example, some Mexican-Americans have reported reluctance and ambivalence about drug treatment (Longshore 1997), and this may include self-help

groups. Traditional healing and spiritual systems within Hispanic cultures in the United States, including *curanderismo* (Mexican-American), *espiritismo* (Puerto Rican), and *santeria* (Cuban), may be used to address alcohol and drug problems (Gloria & Peregoy 1996). Generally speaking, these systems share the common goal of harmony and balance and view suffering as the result of some failure in the individual (Gloria & Peregoy 1996). This suffering may be seen as God's will and solutions may be viewed as coming through spiritual or divine intervention rather than medical or other human interventions. Little has been written about the participation of Hispanics or Hispanic subgroups in self-help groups, though data from 1990 (containing only small samples of Hispanics and Blacks) indicate that Hispanics participate in AA at the same rate as African-Americans, but that both of these groups participate less than Whites (Caetano 1993).

Smith (1994) argues that African-American cultural values may conflict with the values of powerlessness and anonymity espoused in traditional self-help groups. He points out that historically African-Americans have been kept powerless and anonymous in the dominant White culture. He further states that if a culture believes itself to be "with no power it will be resistant to accepting these steps" [of AA] (Smith 1994: 111). Thus, self-help groups like AA may be less appealing to African-American communities. On the other hand, it has been suggested that AA is appealing to African-Americans because both African-American culture and AA are rich in spirituality and metaphorical meaning (Hudson 1985; Caldwell 1983). Humphreys and Woods (1993) found that African-Americans were more likely to attend 12-Step groups if they lived in an African-American community, where groups would likely be composed of African-American members.

The self-help group participation of people with substance use disorders of different racial and ethnic backgrounds is obviously a topic of debate. It is often pointed out that AA was developed by White men and that Whites continue to comprise most of the program's membership. Many other self-help groups for people with alcohol and other drug problems also attract a membership composed largely of Whites, and there is nothing to suggest that participation among those with dual diagnoses would differ.

A third factor possibly associated with self-help meeting attendance is education level. Although Emrick's (1989, 1987) and Emrick and colleagues' (1993) meta-analyses found little support for education being a factor in AA attendance, Humphreys, Moos, and Finney (1995) suggested that those with higher education may perceive chemical dependency problems sooner because they may be more likely to be employed and may associate with a peer group that is less involved in heavy drug use. Humphreys, Moos, and Finney (1995) found that persons with higher educational and occupational status did tend to identify drinking problems earlier and were more likely to adopt a goal of moderate drinking, while those with less education and income often identified their problem after "hitting bottom" and were more likely to attend 12-Step programs that promote abstinence.

Though people with severe mental illness may be highly intelligent, their formal educational attainment may be limited by the obstacles posed by their illness. Factors such as ability to read and to articulate one's thoughts may have some bearing on self-help group attendance and participation. In groups like AA, members may be asked to read aloud at meetings, there is emphasis on studying the *Big Book* of Alcoholics Anonymous and other written materials that groups provide, and members often engage in discussions about the twelve steps or other aspects of recovery. Those with lower levels of education may be unable to participate in these ways. They may feel uncomfortable with these activities, especially if they are already self-conscious or have low self-esteem due to their dual disabilities. Therefore, it is possible that the ability to comprehend and participate in self-help meetings increases with education among individuals with dual diagnoses.

A fourth factor warranting investigation is gender. Research on assessment and treatment of addictions has been based on the male-as-norm, which has led to a bias in understanding the needs of women (Wilke 1994). Only recently have studies addressed women's substance use, treatment, self-help, and recovery issues (Davis & DiNitto 1998). There is wide support for women-only self-help groups (see for example, Nelson-Zlupko et al. 1996; Kaskutas 1994), and many communities have women-only AA groups. As of 1998, an estimated 34% of AA members were women (see the "AA Fact File" at www.alcoholics-anonymous.org), a figure roughly proportional to the ratio of women to men ages 15 to 54 who met the diagnostic criteria for alcohol dependence in the last twelve months (Kessler et al. 1994). Some studies have credited AA exposure or attendance with higher abstinence rates for women compared to men (see Beckman 1993), but women, particularly women with dual diagnoses, may be more reluctant than men to participate in these group meetings for a number of reasons.

Zweben (1996) says that women with dual disorders may be discouraged from continued participation in 12-Step groups because their progress may be slower than that of other members. Traditional self-help groups may also reinforce gender role stereotyping, making it especially difficult for women with severe mental disabilities to participate. Women may express reluctance to speak openly in a male-dominated setting about issues regarding sex and violence or other problems encountered in intimate relationships. In coed groups women often defer to men. Men often interrupt, talk over, or unknowingly use manipulative techniques to silence women or to redirect the conversation (Sapiro 1990). Men tend to use more hostile

words. As a group, women are less likely to use a confrontational style of communication, and confrontation can be both "frightening and alienating" to them (Van Den Bergh 1991: 24). For example, name calling in self-help groups (such as referring to oneself or another person as a "drunk") is often used as a tool for breaking down denial. Women, more than men, may consider such language offensive.

In her study comparing AA and Women for Sobriety, Kaskutas (1994) reported that women who chose not to attend AA said they felt like outsiders there, disagreed with program principles, and disliked what they considered a male-focused orientation. Kaskutas also found that women did not attend AA because of what they considered negativity of the groups. Instead, women wanted empowerment and encouragement, not continued feelings of powerlessness and submissiveness that were common in their everyday lives. On the other hand, men, who have more likely experienced feeling powerful and dominant, may gain humility through "giving up" and become less controlling. Some of the women in Kaskutas's study believed that AA did nothing to promote self-esteem and, instead, decreased feelings of self-worth. Though these explanations are counter to the experiences of many women who feel that AA has played a significant role in their recovery, women continue to comprise a smaller portion of the AA membership than men. There is no reason to believe that women with dual diagnoses would be any more likely to participate. In fact, their gender coupled with their severe mental disorders may increase their reluctance to attend.

A fifth factor identified in our review is the individual's major drug problem. Alcohol, cocaine, and cannabis are the substances most frequently used by clients with dual diagnoses (Rosenberg et al. 1998; Blankertz & Cnaan 1994; Burnam et al. 1995). AA, which focuses on alcohol problems, is widely available, with meetings around the clock in many urban areas. Other groups such as Narcotics Anonymous (NA) and Cocaine Anonymous (CA) target people with other drugs addictions. In many areas, these groups have fewer weekly meetings than AA. AA, the most accessible of the groups, may not be as helpful for those with dual diagnoses whose primary addiction does not include alcohol. Individuals whose major substance problem does not involve alcohol may, therefore, attend self-help groups less frequently due to less availability of suitable meetings.

Other factors identified in our review that may affect self-help group attendance include age, religiosity or spirituality, whether one was abused as a child, whether living with dependent children, previous chemical dependency treatment, access to an automobile, and whether on probation or parole. Evidence suggests that attendance at self-help group meetings may be more likely among individuals who are older, who are more religious or spiritual, who have not been abused, who do not have child care responsibilities, who have had previous chemical dependency treatment, who have access to an automobile, and/or are on probation or parole (see, for example, DiCenso & Paull 1999; Galanter et al. 1996; McCrady, Epstein & Hirsch 1996; Morgenstern et al. 1996a; Nelson-Zlupko et al. 1996; Zweben 1996; Humphreys, Moos & Finney 1995; Nealon-Woods, Ferrari & Jason 1995; Burman 1994; Kaskutas 1994; Miller & Kurtz 1994; Wilke 1994; Emrick et al. 1993; Humphreys & Woods 1993; Emrick 1987, 1989; Beckman & Kocel 1982).

In addition to identifying factors that might be associated with attendance at self-help group meetings, the present review also found evidence supporting the notion that self-help groups have some positive effect on members' outcomes (Project MATCH Research Group 1997; Morgenstern et al. 1996b; Noordsy et al. 1996; Burnam et al. 1995; Humphreys, Moos & Finney 1995; Montgomery, Miller & Tonigan 1995; Carlson, Dilts & Radcliff 1994; Kaskutas 1994). Consequently, a second aim of the current study was to assess the association between level of attendance and treatment outcomes for clients with dual diagnoses.

METHODOLOGY

Data for this study came from an earlier experimental study done to test the effectiveness of an integrated, group treatment for individuals with dual diagnoses (see DiNitto, Webb & Rubin In press). The integrated group treatment was added to a Minnesota-model inpatient chemical dependency treatment program operated by a community mental health center in Austin, Texas that accepted clients who had Axis I mental and substance use disorders as defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV; American Psychiatric Association 1994). Diagnoses were made by program psychiatrists. Participants in the original study were recruited as they entered the inpatient program. The inpatient program included intensive psychoeducational groups, treatment groups, individual counseling, and attendance at facility-sponsored and community AA and NA groups. Attendance at 12-Step group meetings was required of all participants while in the treatment program, and there was considerable encouragement for them to attend self-help groups following treatment. Those in the experimental group also received a series of integrated group treatment sessions, called Good Chemistry Groups, designed especially for people with dual diagnoses (Webb 1995). Good Chemistry Groups include a special orientation to 12-Step group participation for those with dual diagnoses. For example, there was discussion of how self-help groups for those with chemical dependency could be useful to people with dual diagnoses. Experimental participants were also instructed on topics such as appropriate behavior at meetings and how to resist suggestions to stop taking psychotropic medications.

The DiNitto, Webb and Rubin (In press) study assessed whether the Good Chemistry intervention enhanced outcomes for clients in the experimental group. Outcome data were collected from clients and collaterals (e.g., a family member, friend, case manager) at 30, 60, and 90 days following the client's discharge from the inpatient chemical dependency treatment program. There were few differences between the experimental and control groups on outcomes, including alcohol and drug use, legal problems, psychiatric functioning, and self-help group attendance. Given that the literature suggests that having dual diagnoses may inhibit attendance at self-help groups, a finding of particular interest was that both experimental and control group members attended a substantial number of self-help meetings in the 90 days after discharge. Almost all of this attendance was at AA meetings. Experimental group clients attended an average of 11.5 days (SD=11.0), and control group clients attended an average of 7.7 days (SD=8.6). The difference was not statistically significant. In the present study, the authors seek to identify variables that were associated with self-help group meeting attendance among clients with dual diagnoses in either treatment condition of the previous experiment, and explore whether attendance was related to clients' functioning at follow-up.

SAMPLE

The original study sample contained 97 clients; 53% were female, and the average age of clients was 33 years with a range from 18 to 56 years. Fifty-nine percent were White, 28% were Black, and 13% were of Hispanic origin. Nearly half (48%) were Protestant, 22% were Catholic, 13% professed another religion, and 17% had no religious affiliation. The mean number of years of education was 11.2 years with a range of five to 18. The majority of the sample (74%) had a primary Axis I mood disorder (major depression or dysthymia); 10% had a thought disorder (schizophrenia or other psychotic disorder), 12% had a combination of a mood and thought disorder (bipolar or schizoaffective disorder), and 3% had a diagnosis of post-traumatic stress disorder (PTSD). Approximately half of the sample also had a secondary Axis I mental disorder. All 97 clients had at least one substance dependence diagnosis (most commonly alcohol or cocaine), and 60% were dependent on more than one substance. Among participants, 64% had previous alcohol treatment, and 72% had previous drug treatment. Fifty-five percent were on probation or parole. Eighteen percent were living with children. Eighty-two percent said they had experienced emotional abuse during their lifetime, 71% had experienced physical abuse, and 45% sexual abuse. Thirty percent had access to an auto. The mean of clients' ASI composite scores at baseline was .43 for medical, .72 for employment, .38 for alcohol, .18 for drugs, .13 for legal, .32 for family/social, and .58 for psychiatric (a score of zero indicates no problem, and the highest problem score in each domain is one).

Approximately half of the clients participated in each follow-up. In total, 68 clients (70% of all subjects) participated in at least one follow-up. Collaterals for 78 subjects (80% of the sample), participated in at least one follow-up. In total, there are some follow-up data for 83 clients (86% of the sample). Subjects who participated in at least one follow-up did not differ from those who did not participate on demographic characteristics, primary or secondary mental disorder, drugs on which they were dependent, number of criminal convictions, and number and days of previous stays in Texas state psychiatric hospitals. With regard to ASI composite scores at baseline, those not found at follow-up had a significantly lower mean medical composite score (.25) than those found at follow-up (.44) ($F=5.5$, $df=1,94$, $p=.02$). No other differences were noted.

MEASURES

In order to measure self-help group attendance, clients and collaterals were asked to identify the type of self-help meetings and the number of meetings clients attended during the 30-day time period covered by each follow-up. The current study relies on clients' reports of self-help group meeting attendance, except for a minority of the cases in which the client did not participate in follow-ups; in these cases, collaterals' reports were used if available. The number of meetings attended was computed by adding the number of meetings reported at each available follow-up and dividing the sum by the number of available follow-ups.

The independent variables in the present study were comprised of the factors identified in our literature review. These included clients' major psychiatric diagnosis, ethnicity, gender, education level, major substance problem, age, having a religious preference, whether previously abused, whether living with dependent children, previous chemical dependency treatment, access to an automobile, whether on probation or parole, and severity of psychiatric symptomatology and other problems.

Psychiatric diagnosis was available in patient records. For the present analyses, these diagnoses were dichotomized into two categories: thought disorders versus depressive disorders. Clients with a combination of mood and thought disorder symptoms, such as schizoaffective disorder or bipolar disorder, were coded as having a thought disorder. (Of the three clients in the original sample who had the major mental illness PTSD, only one was found at follow-up. Since PTSD did not fit our classification of mood or thought disorder, that client was excluded from the analyses involving primary mental disorder.) The remaining independent variables were obtained from the Addiction Severity Index (ASI; McLellan et al. 1980), which was

administered to clients at baseline and follow-up in the earlier experiment. Several of these variables were collapsed into dichotomous categories. Ethnicity was collapsed into White versus minority, because as noted in the literature review, there is reason to postulate that both African-Americans and Hispanics might attend meetings less than Whites. Other variables collapsed into dichotomous categories were religion, coded as having a particular religious preference or not; physical, sexual, and emotional abuse, coded as having experienced any of these in one's lifetime or not; prior chemical dependency treatment, coded as having previously participated in alcohol or drug treatment or not; major substance problem, coded as whether the client's major drug problem did or did not involve alcohol. The seven domains of the ASI (medical, employment, alcohol, drug, legal, family/social, and psychiatric) were used to indicate the severity of clients' problems. The psychiatric baseline score was used in the analyses attempting to identify predictors of self-help group attendance. The difference between the baseline and the last follow-up score available for each client for all seven domains of the ASI was used in another set of analyses to determine if attendance was related to improved treatment outcomes.

The ASI is administered as a semistructured interview and produces composite scores that represent clients' problems in each of the seven domains. This standardized instrument is widely used in the chemical dependency field and has been shown to be valid and reliable with individuals whose primary problem is a substance use disorder (McLellan et al. 1985). When used with clients who have schizophrenia, Zanis, McLellan and Corse (1997) found acceptable internal consistency in the range of .67 to .85 for all but the legal domain. Interrater reliability was good for all the composite scores, while test-retest reliability was acceptable for the employment, alcohol, family, and psychiatric domains, but not for the medical, legal, and drug domains. In a study of patients who were dually diagnosed, most of whom were depressed, Hodgins and El-Guebaly (1992) found the ASI generally useful. The family/social, employment, and particularly the legal composite scores were more problematic than other domains. Though the ASI may have drawbacks with clients who have dual diagnoses, there are few other instruments that capture so many facets of client functioning, and it has been used in several dual diagnoses treatment studies.

RESULTS

There are data on self-help group attendance for 81 clients, 65 (80%) of whom reportedly attended at some point following discharge from the inpatient chemical dependency program. In 55 of these 81 cases, both clients and their collaterals reported on whether the client attended self-help groups during follow-up. In 47 (85%) of these 55 cases, the client and collateral agreed on whether or not the client attended self-help groups. In the eight cases in which there was disagreement, six clients said they attended while their collateral said they did not. In the other two cases, the collaterals said the clients attended, but the clients said they did not attend. These discrepancies may have arisen when data were collected from clients and collaterals during different follow-up periods. They may also be due to social desirability bias on the part of the client, or even the collateral, as well as inaccurate recall. Data on the number of monthly meetings attended are available for 79 clients (in two cases there is information that the clients attended but no report of the number of meetings attended). The mean number of monthly meetings attended was 9.4 with a range from zero to 30. Sixteen (20%) of the 79 clients attended no meetings, while 20 (25%) attended an average of at least 15 meetings.

Having calculated attendance, the authors began their exploratory analysis with a simple regression analysis of the relationship between each of the 13 independent variables and self-help group meeting attendance. As seen in Table 1, only one of these variables, education level, had at least a moderate association with self-help group meeting attendance ($r = .36$; $p = .0013$). The higher their education level, the more frequently clients attended self-help group meetings after discharge from the inpatient chemical dependency program. None of the other correlations exceeded .20, and none was statistically significant at an alpha of .10 with a Bonferroni correction (dividing .10 by 13, and thus requiring a probability value of less than .008 to be statistically significant).

We were surprised that no other variables had meaningful associations with self-help group meeting attendance, and wondered whether any would emerge in a multivariate analysis. Perhaps some independent variables were suppressing correlations involving other independent variables. To explore this possibility, a multiple regression analysis was conducted that included the dependent variable (number of self-help group meetings attended) and each independent variable with at least a .10 bivariate correlation with the dependent variable (education level, major substance problem, whether abused, age, previous chemical dependency treatment, and severity of psychiatric symptomatology). This analysis produced two variables that were associated with attendance at statistically significant levels. One, as in the bivariate, simple regression analyses, was educational level (beta=.33, p=.002). The other was major substance problem (beta=-.25; p=.02), with clients whose major problem did not include alcohol attending more self-help group meetings than those whose major problem was alcohol or alcohol and other drugs. Both of these variables had moderate correlations with attendance, with educational level explaining 12% of the variance in attendance and major substance problem explaining an additional 9% of the variance.

TABLE 1
Simple Regression Analysis of Association Between 13 Predictor Variables and Frequency of Attendance at Self-Help Group Meetings

Predictor Variable*	r	r^2	*p*-value
Educational level	.36	.13	.0013
Does substance abuse involve alcohol?	-.20	.04	.0763
Severity of psychiatric symptomatology	.20	.04	.0777
Abused as a child?	-.16	.03	.1511
Age	.15	.02	.1741
Previous alcohol or drug treatment	.13	.02	.2720
Religious preference	.08	.01	.5074
Does diagnosis include thought disorder?	-.07	.01	.5297
Living with dependent children?	.06	.00	.6020
Minority ethnicity	-.04	.00	.7839
Gender	.01	.00	.9140
Access to a car	.01	.00	.9417
On probation or parole	.00	.00	.9862

*Predictor variables measured upon admission to inpatient program; attendance measured following discharge from inpatient program.

A secondary aim of the current study was to assess the association between level of self-help group meeting attendance and treatment outcome for clients with dual diagnoses. Comparing the seven ASI composite scores at baseline and follow-up in the original study, statistically significant improvements were found for all domains except legal. In order to determine whether self-help group meeting attendance was related to improvements in these composite scores, the bivariate correlation between attendance and change from baseline to follow up for the psychiatric problem domain was examined first. No relationship was found between these two variables (r= -.01; p=.93). Next, a multiple regression analysis was conducted to see if a relationship between attendance and psychiatric treatment outcome would emerge if educational level and substance of choice were included in the equation. However, it did not (beta=.06; p=.66). Bivariate correlations between attendance and change from baseline to follow up in clients' scores on the remaining six ASI domains (employment, medical, alcohol, drugs, family/social, and legal) were also examined. None approached statistical significance except for change in the legal composite score, which had a significant, positive association with attendance (r=.30; p<.05), meaning that more self-help group attendance was associated with greater improvement in the legal domain.

DISCUSSION

The present findings fail to provide empirical support for most of the factors that were identified in the literature review as possible predictors of self-help group meeting attendance by individuals with dual diagnoses. Only educational level and major substance problem predicted attendance, and their correlations were moderate. None of the other 11 variables assessed were associated with attendance. The lack of association between self-help group attendance and the variables type of mental disorder and severity of psychiatric symptomatology is actually good news, since it suggests that efforts to help clients with severe thought disorders become involved in attending self-help group meetings can be as successful as efforts with clients who have other mental disorders. It also suggests that in determining whom to refer to self-help groups, practitioners should focus more on dually diagnosed clients' educational level than their Global Assessment of Functioning (American Psychiatric Association 1994) or Brief Psychiatric Rating Scale (Miller & Faustman 1996) scores. However, this was an exploratory study with a small sample. Future prospective studies, with different types of samples, may generate findings that contrast with ours regarding diagnoses, education, or the other variables assessed.

The findings on educational level contrast with Emrick (1989, 1987) and Emrick and colleagues' (1993) meta-analyses, which indicated little support for education as a predictor of AA attendance. They also contrast with the findings of Humphreys, Moos and Finney (1995) suggesting that having less education is associated with attending meetings. These studies, however, involved AA attendees in general and did not focus on people with dual diagnoses. Though attendance is not synonymous with degree of participation (see Montgomery, Miller & Tonigan 1995), dually diagnosed individuals with lower levels of education may avoid meetings if they are uncomfortable with self-help group participation activities. Noordsy and colleagues

(1996) indicated that some of their clients liked attending 12-Step groups because they could listen but did not have to speak at the meetings. Though attendees are free to decline to read aloud or participate in discussions, occasionally they may be asked to do so, causing them to be apprehensive about attending. Practitioners who believe their dually diagnosed clients can benefit from self-help groups may want to ascertain their clients' comfort level with attendance *and* participation activities and increase efforts to help clients ameliorate discomfort with both. Many treatment programs for people with dual diagnoses do this to some degree (see, for example, the framework for AA utilization suggested in Powell, Kurtz, Garvin and Hill 1996).

The foregoing suggestion assumes the importance of self-help group meeting attendance as a factor in the treatment outcomes of dually diagnosed clients. Emrick (1989) indicates that the effectiveness of AA for the general population of alcoholics who attend is still unproven, and Noordsy and colleagues (1996) note that self-help groups have not been a major component in the recovery of people with severe mental illness. The present findings on the lack of association between attendance and most ASI change scores do not provide grounds for optimism about the effectiveness of self-help group attendance on the outcomes of people with dual diagnoses following inpatient chemical dependency treatment. Perhaps the measures lacked sufficient sensitivity to detect these relationships among clients with dual diagnoses. Due to the severe mental illnesses of the clients in this study, the authors were particularly interested in the association between self-help group meeting attendance and improvement in psychiatric problem severity. Though we did not find a correlation between self-help group attendance and further reduction in psychiatric distress following clients' discharge from inpatient treatment, attendance following inpatient treatment may serve more to maintain treatment gains than to improve clients' outcomes. It is also conceivable that such attendance would be more strongly associated with outcomes after discharge from less comprehensive and/or less effective inpatient programs than the one evaluated here. Exploring this possibility may be a promising line for future research.

The absence of association between attendance and treatment outcome on five of the remaining six ASI domains (employment, medical, alcohol, drugs, family/social) underscores the points just made with regard to the psychiatric composite score. The exception to this pattern was the moderate (r=.30) association between attendance and change in the legal composite score. However, this finding should be interpreted cautiously. The legal composite score had the lowest internal consistency reliability of the seven ASI composite scores examined in this study. Zanis, McLellan and Corse (1997) also found it to lack acceptable internal consistency reliability when used with clients who have schizophrenia. Hodgins and El-Guebaly (1992) found it to be relatively problematic with dually diagnosed, depressed clients. In addition, with the Bonferroni correction, the foregoing correlation would not be significant at an original alpha of .05. Since chance cannot be eliminated as a plausible explanation for the .30 correlation between attendance and change in the legal composite score, future research should assess the effects of self-help group meeting attendance on clients' legal difficulties after discharge from inpatient chemical dependency treatment programs. This constitutes another line for future research.

Finally, further attention is warranted regarding the finding that clients whose substance problem did not involve alcohol attended more self-help group meetings than those whose problem did involve alcohol. This relationship is the inverse of what many might expect to find, since most of the self-help meeting attendance in this study was at AA, and AA meetings focus on those with alcohol rather than other drug problems. However, this finding is not inconsistent with Emrick's (1987) and Emrick and colleagues' (1989) reviews, which indicated that people whose substance problems involved drugs as well as alcohol attended AA meetings more frequently than individuals whose substance problem was alcohol alone. Further research, perhaps including some studies containing in-depth qualitative interviewing, may help clarify drug users' motivations for attending AA or other self-help groups.

The benefits of self-help group attendance for people with dual diagnoses may be difficult to capture in research studies conducted in the field, as this one was. Alcoholics Anonymous encourages newcomers to make "90 meetings in 90 days." The follow-up period in our study was limited to 90 days, perhaps not long enough to detect some of the benefits of self-help group attendance for clients who have to manage both mental and substance dependence disorders. Chemical dependency professionals are likely to continue to encourage clients with dual diagnoses to attend AA and other 12-Step groups, but other alternatives appear to be needed to improve outcomes for these individuals. Alliances among chemical dependency and mental health professionals and people with dual diagnoses are growing, and with them have come increased efforts to develop groups cofacilitated by professionals and people in dual recovery from mental illness and chemical dependency (see Bricker 1995; Webb 1995). People with dual diagnoses are also becoming more active in their own self-help movements, as evidenced by groups like Dual Recovery Anonymous (for information visit the web site at www.dualrecovery.org). Perhaps these developments will increase the association between treatment outcomes and self-help group meeting attendance by people with dual diagnoses. If so, the need for further research on the factors influencing such attendance for this target population will intensify, and future studies documenting the impact of attendance on treatment outcomes may provide more grounds for optimism than do the present findings.

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