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Development of Intensive Motivational Interviewing (IMI) and Modifications for Treating Women with Alcohol Use Disorders

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Abstract

Women have greater vulnerability to alcohol problems than men. They become intoxicated after drinking half as much as men, develop cirrhosis of the liver more rapidly, and have a greater risk of dying from alcohol-related accidents. Despite more serious consequences related to their drinking, treatment for women with alcohol use disorders has been understudied relative to treatment for men. Intensive motivational interviewing (IMI) is a recent psychotherapeutic intervention for substance abuse problems that draws on the principles of brief motivational interviewing (1–2 session). However, the intervention includes 9 sessions designed to enable therapists to have maximum flexibility to facilitate factors known to be important for women with substance use disorders, such as active facilitation of client-therapist collaboration, empowerment, and affirmation of strengths. This paper reviews the development of IMI, initial favorable findings for women with co-occurring methamphetamine and alcohol problems, and the design of an ongoing longitudinal study assessing the effects of MI for women with alcohol problems over a 12-month time period. Relational Theory is used as a conceptual framework for understanding IMI for women. The theory emphasizes understanding, building, and modifying interpersonal relationships as a central goal. From this perspective, self-efficacy, self-esteem, and reduction in drinking are enhanced through interpersonal connections with others. Plans for additional study of IMI are described along with suggestions for therapists

Keywords

women; motivational interviewing; intensive motivational interviewing; alcohol; relational theory

Relative to men, women with alcohol problems are less likely to receive treatment (McHugh, Wigderson & Greenfield, 2014). For women who do enter treatment, drinking advances more rapidly from use, to onset of alcohol related problems, to their first treatment episode. Even with fewer years of drinking at treatment entry, women average more serious medical, psychiatric, and social consequences than men (Campbell, et al., 2015). This is described as the “telescoping effect” in the scientific literature (McHugh, Wigderson & Greenfield, 2014). Despite more serious consequences related to drinking, treatment for women with alcohol use disorders has been understudied relative to treatment for men. Research has demonstrated that a number of treatment interventions are effective for alcohol problems among women and men (e.g., Grant, Pedersen, Osilla, Kulesza, & D’amico, 2016). However, effect sizes found in these studies are typically small. There is therefore an urgent

need for development of new interventions that can have larger and more sustained impacts, particularly for women.

This paper traces the development of an innovative intervention for women with alcohol use disorders, Intensive Motivational Interviewing (Intensive MI). The paper begins with a brief overview of standard MI for alcohol problems and then describes how Intensive MI originated as an attempt to be more responsive to the needs of persons with illicit drug disorders such as methamphetamine dependence. After reviewing two outcome studies on Intensive MI for methamphetamine dependence, the paper describes the unexpected finding that women with co-occurring alcohol problems along with methamphetamine dependence significantly reduced their drinking while men did not. Based on these encouraging findings, a version of Intensive MI for women with drinking problems was created. Gender specific modifications of intensive MI are described and the paper concludes with considerations for theory, recommendations for further research examining a variety of outcomes, and suggestions for qualitative studies that can increase our understanding of women's experiences of intensive MI.

Overview of Motivational Interviewing

Motivational interviewing (MI) was originally developed as a brief intervention (generally one or two sessions) aimed at increasing motivation for change in problem drinkers (Miller, 1983). However, over the past three decades MI has expanded to the treatment of other populations and enjoys empirical support for treating persons with drug, gambling, smoking, health and a variety of other problems (Arkowitz, Miller & Rollnick, 2015). MI includes techniques such as reflections, open questions, developing discrepancies, rolling with resistance, feedback, developing a change plan, engaging ambivalence, and supporting self-efficacy. Of prime importance is that the therapist and client have a collaborative relationship that assists the client to overcome ambivalence toward positive change (Miller & Rollnick, 2012). It is imperative that the atmosphere of MI be one of acceptance and empathy so that the client can explore his or her ambivalence and move toward positive change.

Recent innovations in MI emphasize four therapeutic processes: engaging, focusing, evoking, and planning (Miller & Rollnick, 2012). Engaging refers to developing an alliance with the client and working together as a collaborative team. Focus refers to developing goals and the direction of sessions. Evoking refers to eliciting change talk from the client during therapeutic exchanges. There is an increasing emphasis in the MI literature on "change talk" because it has been shown to be associated with subsequent behavioral change (Miller & Rollnick, 2012). Planning refers to discussion about options for enacting change. MI is most effective when the therapist is skilled at facilitating the therapeutic processes most needed for individual clients at different points in the session.

Systematic reviews of the alcohol treatment literature have consistently shown standard MI to be effective for alcohol use disorders (Lundahl & Burke, 2009). Further, MI has been shown to be effective in several different contexts, including as a stand-alone treatment and as preparation for more intensive treatment. However, overall effects found in these studies tend to be small and Miller and Rollnick (2012) pointed out that there is significant variation

in outcomes across studies. Overall, the empirical support for MI may be weaker for the treatment of illicit drug as compared to alcohol abuse. For example, a review of studies assessing MI for illicit drug problems among adolescents found no effect (Li, Zhu, Tse, Tse, & Wong, 2016). Galloway, Polcin, Kielstein, Brown & Mendelson (2007) suggested that illicit drug dependent populations with more serious problem severity in multiple areas might require a combination of more sessions, broader targeting of multiple problem areas, and the use of MI as a way to facilitate access to a variety of services that address client needs.

Moving Beyond Standard MI

For many persons with substance use disorders, particularly those with more serious problems, effective interventions require longer, more intensive treatment that addresses a variety of problem areas in addition to substance use (e.g., employment, mental health, and medical) (National Institute on Drug Abuse, 2012). It is therefore not surprising that the limited number of sessions for MI, generally one or two, has been one of its most controversial aspects. Standard MI has been questioned especially when it has been used as a stand-alone treatment for persons suffering from higher severity of substance use problems (Polcin, et al, 2014).

There may be a variety of ways that a higher dose of MI might be helpful to persons while they attend substance abuse treatment programs. The role of intensive MI as an add-on intervention to treatment programs is significantly different from standard MI. Instead of one or two MI sessions at the beginning of treatment to increase motivation, intensive MI addresses new issues that arise during the course of treatment as well as ongoing problems with which clients struggle. For example, some clients, particularly those who are court mandated, enter treatment programs but remain in a pre-contemplation stage of change for some time. Eliciting motivation and addressing the issues hindering progress might require more than a few sessions. Others might enter treatment and relapse after establishing initial abstinence. Some of these clients may require additional sessions to process the relapse and reengage in a new change plan. For clients who are motivated and make rapid progress, additional sessions can enhance the recovery process and address issues that could impede sustained recovery. Thus, therapists and clients can address issues such as the benefits and challenges of abstinence, strategies for maintaining recovery, additional problems related to substance use that could threaten abstinence if not addressed, the need for additional services, and modification of existing goals in the change plan. At this point in the development of intensive MI, notions of how it might be helpful are based on conceptual and clinical grounds. Validation of the mechanisms of how intensive MI operates will require additional research.

There is some empirical evidence supporting the contention that higher doses of MI have stronger effects on substance use outcomes (Lundahl et al, 2010). However, surprisingly few studies have assessed a higher dose of MI or other modifications made to be more responsive to the needs of special populations. One exception is the manual created by Polcin, Brown and Galloway (2005), which was designed to offer nine MI-based sessions to persons dependent on methamphetamine while they attended outpatient treatment.

Intensive MI for Methamphetamine Dependence

Methamphetamine dependent persons frequently experience significant co-occurring problems in addition to methamphetamine use, including psychiatric disorders and interpersonal violence (Nakama, et al., 2008). Intensive MI was initially developed as a therapy intervention for persons with methamphetamine dependence and was based on the rationale that more sessions were needed to address the higher frequency and severity of methamphetamine use and co-occurring problems. The purpose of additional sessions was to identify problem areas, increase motivation to address them, and develop a change plan that could be updated and modified to address problems over time. Based on previous clinical and research experience, the study team developed a 9-session version of intensive MI (Polcin, Brown & Galloway, 2005). This dose was felt to be significantly different from the standard one to two sessions of MI. However, the research team limited the intervention to nine sessions to keep the focus on MA and related problems and avoid sessions drifting into a type of generic, long-term therapy.

Intensive MI uses all of the supportive and directive interventions of standard MI throughout the course of the nine sessions (i.e., Miller & Rollnick, 2012). The intensive MI manual was designed to enable the therapist to be flexible in addressing methamphetamine problems and other pressing issues by drawing upon MI interventions as needed. Such an approach is consistent with research showing highly structured manuals that direct therapeutic activities are not as effective as MI that encourages therapist flexibility in terms of implementation (Lundahl, et al., 2010). Moreover, there is evidence supporting the contention that use of MI based techniques needs to be based on skillful and strategic analysis of each client (Gaume, et al., 2016). For example, overuse of standard MI techniques such as open questions and simple reflections can result in worse drinking outcomes (Tollison, et al, 2013). Intensive MI therapists and supervisors participating in a focus group felt finding the right mix of supportive and directive MI interventions was one of the most important yet difficult therapeutic tasks (Polcin, et al., 2015).

Although intensive MI is designed to allow for therapist flexibility to respond to the needs of each clinical situation, there is also some degree of structure. The first three sessions draw from MI-based interventions (Motivational Enhancement Therapy) conducted as part of the National Institute on Drug Abuse (NIDA) Clinical Trials Network (CTN) (Ball et al., 2007). Prior to the first session, the client completes worksheets designed to identify problems and priorities and their level of motivation to address them. During the first session the worksheets are used to facilitate in-depth discussion of problems and reasons for making changes. The second session addresses ambivalence, or the “pros and cons” of making or not making changes. Worksheets are used to help the client examine the advantages and disadvantages of making changes in various areas. The goal of session three is to use the discussions in the first two sessions to develop a change plan addressing problems that includes goals, plans for achieving them and ways that obstacles might be addressed. It is understood that the focus of the first three sessions may vary depending on client presenting issues and needs.

Responsiveness to those needs is always paramount, although there is usually a way for therapist to discuss a wide variety of issue within the structure of each of the first three sessions.

The CTN MI interventions ended with the completion of the change plan during session three. Intensive MI includes six additional sessions (session four through nine) that address the course of recovery over time. Thus, in addition to addressing how the problems identified in the change plan proceed, sessions four through six address new problems that emerge during the therapy and new strategies for maintaining beneficial changes. Intensive MI addresses the change plan in terms of obstacles, modification of goals, formulation of new plans for achieving goals, and development of new goals once initial goals are achieved. The final session (session nine) addresses termination and what if any additional services are needed.

Comparison of MI and Intensive MI

Recognition of the change plan as a dynamic process that changes over time rather than a static event at the end of the intervention represents a significant difference between standard MI and intensive MI. As the change plan is modified, there are changes in the strategic focus. There are also changes in how the therapist understands and interacts with the client over time. For example, like standard MI, intensive MI focusses on eliciting motivation to change undesirable behaviors, particularly early in treatment. Therapists attempt to engage clients in “change talk” rather than “sustain talk” (Gaume, et al., 2016). The former includes reasons to make changes in substance use and other problems and the latter includes statements about the benefits of continuing one’s current use. Not surprising, outcomes are better for higher change talk and lower sustain talk. However, because intensive MI takes place over nine weeks, there is also a focus on maintaining desirable changes that have been made. For clients who have achieved abstinence and made improvements in other areas of functioning, sustain talk refers to expression of the benefits of maintaining those changes (e.g., maintaining abstinence and continuing to work a program of recovery). The therapist looks for opportunities to engage the client in discussions of the advantages of their current situation relative to the time when they were using substances. Therefore, the change plan shifts into activities designed to sustain improvements as well as make desirable changes.

The longer time frame for intensive MI also allows the client and therapist to address relapses as they occur. Typically, relapse occurs within the first month of treatment (Deane, Wooton, Hsu & Lelley, 2012). Because intensive MI occurs over the course of nine sessions, it is well suited to address the precipitants and consequences of relapse as well as modifications in the changes plan. Relapses provide key opportunities to help the client better understand their drinking, the role it plays in their life and its consequences. All of the standard MI techniques are used to facilitate an open and thorough discussion of the relapse, including the motivation for drinking, the consequences, and what, if anything, the client wishes to do in response to it. Comparisons between standard and intensive MI are summarized in Table 1.

Although the intensive MI manual is structured to include nine sessions primarily targeting substance use, there is no inherent reason it could not be used to transition into long-term therapy that addresses a variety of issues in addition to substance use. When issues or problems other than substance use come up within the nine sessions (e.g., relationship problems, family conflicts, and personal crises) the therapist is directed to help the client connect the issue to substance use in some way. Examples include ways the issue causes substance use, ways the substance use make the issue worse, and ways the issue might be impacted by a change in substance use. However, intensive MI leading to longer term therapy beyond nine sessions might modify this approach and connect issues to substance use in a flexible manner when the therapist feels it is necessary.

Intensive MI as a Stand Alone Intervention

The initial intensive MI manual for methamphetamine dependence was pilot tested as a stand-alone intervention using a sample of 30 methamphetamine dependent individuals in an outpatient setting (Galloway et al., 2007). The therapist conducting intensive MI was a license clinician who attended a one day training with the first author of the intensive MI manual and assisted with finalization of the manual. Ongoing supervision included feedback based on coded audiotaped sessions. The study design was a single group, pre-post comparison of methamphetamine use before and during treatment. Intensive MI was implemented as a stand-alone treatment without other services.

Compared to methamphetamine use before receiving the intervention, participants during treatment reduced the number of days of methamphetamine use and provided fewer positive urine screens (Galloway, et al., 2007). Effect sizes for reductions in methamphetamine use and positive urine screens were medium in magnitude. The Yale Adherence and Competence Scale (YACS II) (Nuro et al., 2005) was used to ensure that intensive MI maintained an MI focus and did not drift into other types of therapy or generic counseling. Adherence measures showed the therapist consistently used MI interventions with a high level of skill. For a more complete description of the intervention, piloting procedures, and adherence measures see Galloway et al (2007).

Randomized Clinical Trial of Intensive MI for Methamphetamine Dependence

The successful piloting of intensive MI led to a randomized trial assessing 217 methamphetamine dependent persons (49% women) who were assigned to a standard, single session of MI (standard motivational interviewing) or the 9 sessions of intensive MI (Polcin et al., 2014). Comparisons between study participants were conducted at baseline, and 2-, 4-, and 6-month follow-up. To ensure time equivalence between groups, the standard motivational interviewing condition received eight nutrition education sessions in addition to a single session of MI. The study took place at an outpatient treatment program and all participants in both conditions received standard treatment, which consisted of cognitive behavioral group therapy three times per week.

Participants in both standard motivational interviewing and intensive MI conditions increased the percent days abstinent (PDA) from methamphetamine between entry into the study and 2-month follow-up (Polcin et al., 2014). Importantly, the improvements noted at 2 months were maintained at 4 and 6 months. However, no differences in average PDA were found between standard motivational interviewing and intensive MI conditions at any of the time points assessed. Similar effects were found for outcomes measured by the Addiction Severity Index drug scale (ASI) (McLellan et al., 1992). For both study conditions, average ASI drug severity decreased from baseline to 2 months and lower severity was maintained at 4 and 6 months. However, there were no differences between the two study conditions at any of the time points.

Results were different for assessments of psychiatric severity, which were measured using the psychiatric severity scale on the ASI. Psychiatric severity significantly declined from baseline to the 2-month follow-up for the intensive MI condition and remained lower at 4 and 6 months (Polcin et al., 2014). However, there was no similar improvement for the standard motivational interviewing group. When we assessed individual items within the psychiatric severity scale, we found improvement on days experiencing depression may have been a driving force for overall psychiatric improvement among participants receiving intensive MI. Combining men and women together (overall analysis) indicated a significant reduction in depression for those assigned to the intensive MI condition. Interestingly, men decreased their days of depression in both study conditions while women in the standard motivational interviewing condition showed a directional (though not significant) *increase* in depression.

Secondary analyses of the intensive MI study included examining whether other types of substance use were affected by the intervention. An unexpected finding was that women who had at least a minimal level of problem with alcohol (ASI Alcohol Severity score > 0 or one or more DSM IV criteria) showed significantly larger improvement on the ASI alcohol scale if they were assigned to the intensive MI rather than standard motivational interviewing condition (Korcha, Polcin, Evans, Bond, & Galloway, 2014). Men did not show similar differences. For women with drinking problems there were no differences between study conditions on ASI alcohol severity at 2-month follow-up. However, there were differences at four months and those differences increased at six months. Compared men, women tended to have stronger therapeutic alliances than men and those alliances increased over time in the intensive MI condition. Further, the level of therapeutic alliance was associated with better alcohol outcome. Importantly, this finding is one of very few showing gender differences for MI based interventions.

Intensive MI for Women with Alcohol Use Disorders

The secondary analysis of the methamphetamine study assessing the impact of intensive MI on co-occurring alcohol problems among women was limited in several important ways. First, to be enrolled in the methamphetamine study, participants needed to have a diagnosis of methamphetamine dependence. Thus, the impact of intensive MI on alcohol problems was limited to persons who also had co-occurring methamphetamine dependence. Second, the overall level of alcohol problems among the women studied was low. A large majority

did not meet criteria for alcohol dependence. In addition, there were limitations that applied to the entire study that may have also impacted the secondary analysis of alcohol problems. For example, the treatment as usual condition that both study conditions received (Craving Intervention Management) was fairly intensive, consisting of three groups per week. Previous studies of methamphetamine treatment (e.g., Rawson et al., 2004) conducted at this site showed the intervention was associated with significant reduction of methamphetamine use. Thus, the randomized trial was conducted within the context of a very strong treatment as usual intervention that may have masked differences between study conditions. Another limitation for the overall study was the effect of assessment reactivity (i.e., improvement due to participation in research interviews), which may have been pronounced because research interviews were conducted on a weekly basis during treatment.

The limitations of the study design and the favorable findings of intensive MI on drinking problems among women provided a strong rationale for a study specifically geared to treating drinking problems among women. The aim was to recruit women with DSM-V alcohol use disorders and exclude women with moderate to severe problems with other substances. The study team hoped to find a balance between keeping the strengths of the of the intensive MI manual used to treat methamphetamine dependence and modifying it to address the needs of women with alcohol disorders.

Structure and Content of Intensive MI for Drinking Problems among Women

The version of intensive MI for women kept the basic structure of the earlier version and used all of the same MI interventions. However, intensive MI for women included instructions for therapists to look for a variety of potential problems that are more common among women, including symptoms of trauma, domestic violence, single parenting, mental health problems, and drinking self-efficacy. (A copy of Intensive MI for Drinking Problems among Women can be obtained by contacting the corresponding author).

The first three sessions intensive MI for drinking problems among women focus on the same themes as the earlier version of intensive MI. Enhanced by worksheets completed prior to sessions, there is sequential focus on identification of problems and concerns (session one), pros and cons of making changes (session two), and change planning (session three). As in the earlier version, the therapist has flexibility to address pressing issues and use MI interventions as indicated by clinical situations. However, relative to the earlier version of intensive MI, the therapist using intensive MI for women is careful to attend to issues common among women. During discussion of drinking, drinking related problems, and reasons to make a change in drinking, the therapist considers the potential influence of issues that are particularly prevalent among women, including trauma, mental health symptoms (e.g., anxiety and depression), self-esteem, self-efficacy, and abuse in relationships. The therapist works to bring these issues into discussions, helps the client see their influence as a cause and consequence of drinking, as well as a potential impediment to recovery.

An important innovation of the new intensive MI intervention is a more direct inquiry during the first session into issues and problems among women that could hinder engagement in treatment. Standard MI assumes that an increase in desire to change drinking behavior will

lead to better engagement in treatment. Although standard MI has been shown to improve retention and engagement relative to non-treatment comparison groups, the revised intensive MI manual for women emphasizes directly addressing barriers and resistances to attending and engaging in treatment will help more. The manual specifically instructs therapists to consider whether negative past treatment experiences, fears about being judged by staff or peers, trauma, and psychiatric symptoms hinder engagement. In addition, practical barriers are considered (e.g., transportation and lack of childcare) as well as negative influences from intimate partners, friends or family to end treatment or continue drinking. Rather than requiring the therapist to address all of these issues with every client, the manual encourages flexibility to address these issues as they apply on a case-by-case basis. Intensive MI for women includes an *initial change plan* completed during the first session that addresses ways that each client can manage potential obstacles that hinder engagement in treatment. However, because intensive MI consists of more sessions than standard MI there is more time to address these barriers over the course of nine weeks as they occur, not simply at the beginning.

There are also ways that the focus of sessions two (pros and cons) and session three (change planning) continue throughout the course of nine sessions. Reasons to make or not make changes regarding one's drinking and other issues are not static decisions at any given time point in the therapy. Rather, the decisional balance changes over time and the larger number of sessions enables the therapist and client to address fluctuating motivation.

Relational Theory

Conceptually, the advantages of using intensive MI to address issues among women with drinking problems can best be understood within the framework of Relational Theory (DeYoung, 2015). This theory explains women's psychological development as based on connectedness as opposed to separation and individuation. Relational theory helps underscore the complex associations between women's relationships and addiction to substances. Many types of psychotherapy are male-oriented, focusing on separation, autonomy, and self-efficacy as therapeutic objectives. In contrast, Relational Theory emphasizes building interpersonal connection with the therapist and with others in the client's social sphere. From this perspective, self-efficacy, self-esteem, and perhaps reduction in drinking, are built more from interpersonal connection with others than autonomy or use of skills to manage problems. Intensive MI's emphasis on an empathic, collaborative relationship between client and therapist that is developed over time (as opposed to single session MI) may be as an essential component in the healing process. This view is consistent with Relational Theory and it might be one reason we saw a beneficial response to higher doses of MI among women. The importance of the therapeutic relationship for women was evident in preliminary findings showing women who received intensive MI had stronger therapeutic alliances than men and that those alliances increased over time (Korcha et al., 2014). Further, level of therapeutic alliance was associated with better alcohol outcome.

Although additional analyses of quantitative and qualitative data are needed to substantiate the importance of relationships outside of the therapy setting, anecdotal reports from study

therapists suggest that discussion of drinking and decisions to change drinking in terms of the impact on the client's relationships were an important aspect of the intervention. Relationship issues figured prominently during discussion of prominent MI themes, such as the pros and cons of drinking, pros and cons of making a change in drinking, and developing discrepancies between drinking and one's goal or values. Previous qualitative research has highlighted poor interpersonal relationships as critical barriers to women's substance use recovery (Sun, 2007) but these characteristics have not been examined extensively in substance abuse treatment research. Additional research is needed to identify and validate the elements of Relational Theory that are influential on intensive MI for women.

Current Study of Intensive MI for Women with Alcohol Problems

Intensive MI for drinking problems among women is currently being evaluated using a randomized clinical trial design. To be included in the study, women must have a DSM V diagnosis of an alcohol use disorder. Women with moderate to severe drug problems or those who need a higher level of care beyond outpatient treatment are excluded. The trial seeks to recruit 220 women, and randomize half to receive intensive MI and half to receive a standard single session of MI along with 8 sessions of nutrition education added to provide time equivalence. Both groups attend weekly therapy groups focused on alcohol problems. The baseline interview is administered prior to beginning treatment and follow-up interviews are conducted at 2, 6, and 12 months post-baseline. Drinking outcomes include percent drinking days (PDD) and percent heavy drinking days (4+ drinks; PHDD). The severity of alcohol and psychiatric problems are measured by the ASI. Hypotheses suggest women receiving intensive MI will have better drinking outcomes at all follow-up time points than women in the control group.

Hypotheses also suggest measures of engagement (number of sessions attended), and social support factors will operate as mediators of drinking outcomes. Social support measure include general social support, alcohol related social support, and measures of the therapeutic alliance.

Considerations for Additional Research

The current state of intensive MI development raises multiple questions to be addressed by additional research. For example, in the earlier work on intensive MI for methamphetamine dependence, intensive MI was found to reduce drinking problems among women but not methamphetamine use. One possible factor is that some research (Polcin, Buscemi, Nayak, Korcha, & Galloway, 2012) shows that women dependent on methamphetamine often have co-existing psychiatric disorder that are different from psychiatric disorders among women dependent on other substances. In particular, somatoform and eating disorders are more common among women with methamphetamine dependence. These differences might play a role in the differential impact of intensive MI for different substances. However, more research is needed to substantiate this hypothesis and other factors could be influential on treatment outcomes.

Another issue needing attention is whether intensive MI is effective for women with a primary alcohol diagnosis. In the methamphetamine study, all of the women were dependent

on methamphetamine and alcohol problems were secondary, often with low severity levels. Because the ongoing intensive MI study targets women with alcohol use disorders we expect significantly higher levels of alcohol severity. The effects of intensive MI might therefore be stronger because the higher severity at entry into the study allows for more room for improvement.

It is currently unclear why there are gender differences in terms of intensive MI effects. In the intensive MI study of methamphetamine, overall co-occurring psychiatric severity improved significantly over time for men but not for women (Polcin, et al., 2014). However, the beneficial effects of intensive MI for co-existing alcohol problems was significant for women but not men (Korcha, et al, 2014). Additionally, women had stronger therapeutic alliances that improved over time. We currently rely on Relational Theory (DeYoung, 2015) to understand the benefits of intensive MI for women, but more research is needed on the experiences of women to assess whether that is accurate. The applicability of relational theory to understanding intensive MI might vary in different clinical contexts. The use of qualitative methods that draw on the experiences of therapists and clients (e.g., Polcin et al., 2015) could help to understand the effects of intensive MI. In addition, formal testing of mediators of and moderators could inform our understanding of how intensive MI operates to effect change.

Another issue needing more attention is when to use supportive and directive interventions. In a qualitative study of intensive MI therapists and adherence monitors there was an emphasis on the importance of selecting the right mix of supportive and directive interventions (Polcin et al., 2015). However, there is currently very little research to guide therapists. Studies are needed that demonstrate the impact of different interventions in different situations. Similarly, there is also a need for research on the circumstances when “change talk” and “sustain talk” are beneficial. Studies of standard MI for active drinkers have shown change talk is associated with reductions in drinking while sustain talk is associated with continued drinking (Miller & Rollnick, 2012). However, many persons receiving intensive MI will achieve a period of abstinence at some point over the nine sessions and sustain talk that reflects a desire to maintain abstinence might be beneficial. Change talk that reflects movement toward substance use might be associated with worse outcome (e.g., increased socialization with substances users and activities that involve substance use).

Conclusion

This paper is the first to integrate various papers on intensive MI and to describe how intensive MI has been adapted to address the needs of women with alcohol use disorders. Intensive MI was initially developed to provide a more intensive intervention than standard MI to methamphetamine dependent persons. The intent was to provide additional sessions to address the array of significant problems presented by methamphetamine dependent persons and work on those problems over time. One advantage of intensive MI is that implementation of the change plan is a process that can be modified over time rather than a static event created at the end of the intervention. A clinical trial of intensive MI for methamphetamine dependence found benefit in terms of reducing psychiatric problems, but

methamphetamine use was similar in the intensive MI treatment and comparison groups. However, study design limitations might have played a role in masking differences. These included potential assessment reactivity (i.e., clinical benefits from frequent research assessments) and a very potent treatment-as-usual intervention attended by both study conditions. An unexpected finding was that women with co-occurring alcohol problems made significant reductions in severity of drinking problems. Based on these favorable findings, intensive MI was revised to address the needs of women with drinking problems and is currently being studied in a randomized trial.

The longer duration of intensive MI presents challenges in terms of how we think about and modify MI-based goals and concepts. For example, implementation of the change plan is conceptualized as an ongoing process that is central to the therapeutic work between client and therapist. In standard MI, it is a task that is finalized at the end of the intervention. The concepts of change and sustained talk need to be understood within the clinical context. For persons who have a goal of maintaining abstinence sustained talk might support ways to continue to achieve that goal and change talk might contain ways abstinence is undermined.

There are a host of questions about intensive MI that need to be addressed, including reasons for the gender effects found and for the different effects on different substances. The mix of supportive and directive interventions is viewed by therapists to be important, but there are few empirically supported guidelines to inform selection of supportive and directive interventions. Although we currently propose Relational Theory (DeYoung, 2015) as a theoretical model for understanding the beneficial effects of intensive MI on drinking problems among women, there is a need for research to support this contention. Qualitative studies describing the experiences of clients would help in this regard as would studies assessing mediators and moderators of outcome. Although intensive MI was developed as a time-limited intervention targeting substance use disorders, there may be ways to transition into long-term therapy that continues to monitor substance abuse issues but encompasses a broader range of problems and goals.

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Table 1

Comparison of MI and Intensive MI

Characteristic	MI	Intensive MI
Length	1–2 sessions	9 sessions
Focus	primary target behavior	primary target behavior and related problems
Change and Sustain Talk	change target behaviors	change target behaviors sustain areas of improvement
Change Plan		
Time Developed	end of the intervention	session 3 updated and modified sessions 4–9
Implementation	after intervention is finished	during and after the intervention
Content	Content is fixed at the time the change plan is developed	content changes and adapts to client needs