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# An Open Trial of Motivational Interviewing to Address Suicidal Ideation with Hospitalized Veterans

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## Abstract

**Objective—**The purpose of this open trial was to test the acceptability of Motivational Interviewing to Address Suicidal Ideation (MI-SI) for psychiatrically hospitalized veterans with suicidal ideation, estimate its pre-post effect size on the severity of suicidal ideation, and examine the rate of treatment engagement after discharge.

**Methods—**Participants received a screening assessment, baseline assessment, one or two MI-SI sessions, post-treatment assessment, and 60-day follow-up assessment. Thirteen veterans were enrolled, nine (70%) completed both MI-SI sessions and the post-treatment assessment, and eleven (85%) completed the follow-up assessment.

**Results—**Participants found MI-SI to be acceptable. They experienced large reductions in the severity of suicidal ideation at post-treatment and follow-up. In the two months following discharge, 73% of participants completed two or more mental health or substance abuse treatment sessions each month.

**Conclusions—**These preliminary findings suggest that MI-SI has potential to reduce risk for suicide in psychiatrically hospitalized veterans and that a more rigorous trial is needed.

### Keywords

Veterans; suicidal ideation; motivational interviewing; inpatients; treatment engagement

Veterans who are hospitalized on acute inpatient units are at high risk for suicide. In a prospective study of psychiatric inpatients from 128 Veteran Administration (VA) Medical

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Centers, the suicide rate in the year following discharge was 445/100,000 (Desai, Dausey, & Rosenheck, 2005), 37 times the rate in the general population (12/100,000) (Centers for Disease Control and Prevention, 2012). In a study of depressed veterans who received treatment from VA (Valenstein et al., 2009), the suicide rate in the 12 months following hospitalization was 568/100,000, almost five times the rate of veterans who received outpatient treatment for depression (114/100,000) (Valenstein et al., 2009), 47 times the rate in the general population. The elevated rate of suicide in this population suggests a critical need for empirically supported interventions.

Brief interventions such as sending caring letters or providing suicide-related education and a follow-up phone call have been found to reduce risk for suicide in high-risk populations (Fleischmann et al., 2008; Motto & Bostrom, 2001), and have been implemented as part of VA suicide prevention policy (Department of Veterans Affairs, Office of Inspector General, 2007). However, a comprehensive review of Department of Defense (DOD) and VA suicide prevention studies indicated that there is a paucity of studies on brief suicide interventions targeting psychiatrically hospitalized veterans (Bagley, Munjas, & Shekelle, 2010). The lack of research is critical, as interventions that are efficacious for other populations do not always generalize to veterans (R. Bradley, Greene, Russ, Dutra, & Westen, 2005). Research on brief suicide interventions for psychiatrically hospitalized veterans is therefore needed.

Motivational Interviewing (MI) (Miller & Rollnick, 2002) is a “client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence (pg. 25).” A comprehensive meta-analysis of MI studies across a variety of outcomes showed that a brief course of MI improves treatment outcome and increases engagement in subsequent treatment (Hettema, Steele, & Miller, 2005). MI has also been found to reduce hazardous drinking in veterans (Bien, Miller, & Boroughs, 1993), making it a promising intervention for this population. Motivational Interviewing to Address Suicidal Ideation (MI-SI) is an adaptation of MI for use with patients who are thinking about suicide (Britton, Williams, & Conner, 2008). It is proposed to enhance the intrinsic motivation to live and make life worth living by helping patients who are thinking about suicide explore and resolve their ambivalence about living (Britton, Patrick, & Williams, 2011). Research is needed to examine whether adding a brief course of MI-SI to standard care in acute settings can improve prevention efforts.

This preliminary study was designed to meet stage 1b aims of the Stage Model of Behavioral Therapies Research, which are to demonstrate the ability to conduct the study, participant acceptance of the intervention, and clinically significant improvement (Rounsaville, Carroll, & Onken, 2001). This report focuses on the acceptability of MI-SI for psychiatrically hospitalized veterans who are thinking about suicide, and its potential for reducing the severity of suicidal ideation. Suicidal ideation was chosen as the suicide-related outcome because it is a necessary precursor to suicidal behavior (Conner, McCloskey, & Duberstein, 2008; Kessler, Borges, & Walters, 1999), is sensitive to change (Beck, Kovacs, & Weissman, 1979; Linehan, Armstrong, Suarez, & Allmon, 1991), and the large samples and follow-up periods needed to use suicide attempts as an outcome are beyond the scope of preliminary studies (Brown et al., 2005; Clarkin, Levy, Lenzenweger, & Kernberg, 2007).

Treatment engagement was examined as a secondary outcome, as it has been found to reduce risk for suicide in this population (Desai et al., 2005).

## Methods

### Participants

Participants were recruited from the 16-bed acute inpatient unit at the Syracuse Veterans Administration Medical Center (VAMC) from 2/16/2010 to 8/11/2010. Inclusion criteria included: 1) Veteran status, 2) 18 or over, 3) treated on unit, 4) English speaking, 5) able to understand the description of the study and the informed consent process, 6) eligible to receive VHA healthcare at the Syracuse VAMC or local outpatient facilities so they could return to the Syracuse VAMC for follow-up, 7) clinically cleared to participate (e.g., not aggressive or violent with staff or other patients), and 8) having thoughts of suicide. The presence of current suicidal ideation was determined with a score over 2 on Beck's Scale for Suicidal Ideation (SSI) (Beck, Kovacs, & Weissman, 1979), which prospectively predicts death by suicide (Brown, Beck, Steer, & Grisham, 2000). Exclusion criteria included: 1) current psychosis, 2) current mania, and 3) dementia. Initial eligibility was determined during morning meetings with unit staff and was confirmed during the screening phase. Current psychosis and mania were assessed using a two-step process. Positive screens on the current psychotic and mania sections of the Mini International Neuropsychiatric Interview (MINI) were used to identify individuals who may have current psychosis or mania (Sheehan et al., 1998). Because both scales are overly sensitive, research staff consulted with clinical staff to confirm that individuals with positive screens were psychotic or manic. Dementia was determined with a score of 23 or lower on the Mini Mental Status Examination (MMSE) (Crum, Anthony, Bassett, & Folstein, 1993; Folstein, Folstein, & McHugh, 1975).

Two hundred and eighteen patients were admitted to the unit, 130 (60%) did not meet eligibility criteria, and 52 (24%) were unavailable to researchers because they were scheduled for discharge within 48 hours of identification by study staff and were engaged in discharge planning (Des Jarlais, Lyles, Crepaz, & TREND, 2004). Of the 36 who were approached, 30 (83%) consented (see Figure 1 for flow diagram), 16 (36%) met eligibility criteria, and 13 (43%) received at least one MI-SI session (Table 1). Participants served during different eras: 4 (31%) Vietnam (1961-1975), 2 (15%) Persian Gulf (1990-1991), 3 (23%) Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND, 2001-present), and 4 (31%) between engagements (Department of Veterans Affairs, 2009). Three (23%) participants attended a minimum of two sessions in each of the two months prior to hospitalization, indicating engagement in treatment.

### Procedures

Potential participants were identified during daily staff meetings. Clinic staff asked patients if they were interested in learning about the study, and introduced them to a research assistant who described the study and reviewed the consent form. The study was an open trial and consisted of three phases. Phase 1, the assessment phase, included a screening assessment (30 mins.) to confirm eligibility, and a baseline assessment (50 mins.) of risk

factors and outcome variables. Phase 2, the treatment phase, started on the same day or as soon after the baseline assessment as possible. It consisted of two MI-SI sessions spaced over three days, with a no treatment day in-between, although some participants were discharged prior to completing the second session. A post-session assessment was conducted after the second session (about 10 minutes) that was used to assess the acceptability of MI-SI and post-treatment outcome. All assessments were conducted by trained master's and doctorate level researchers. Due to staffing limitations, an MI-SI clinician conducted two of the post-treatment assessments. Phase 3, the 60-day in-person follow-up assessment (50 mins.), was used to assess outcome and was conducted by independent research assistants. All assessments and therapy sessions were held in private areas. MI-SI sessions were recorded using a digital audio recorder to examine clinician fidelity to MI-SI. Participants were paid $5 by check for completing the screening assessment, and $80 for completing the follow-up assessment. The study was approved by the Institutional Review Board at the Syracuse VA Medical Center (VAMC).

## Measures

**Outcome Variables—***Client satisfaction* was measured with the Client Satisfaction Questionnaire (CSQ-8) (Attkisson & Zwick, 1982), a reliable and valid measure that assesses patients' satisfaction with services that was modified to assess satisfaction with therapy. Participants were also asked 3 questions concerning their satisfaction with the sessions: What are your general thoughts about the counseling sessions you just finished? What, if anything, did you like about the sessions? 3) What, if anything, could have made the sessions a little bit better? *Suicidal ideation* was measured with the SSI (Beck et al., 1979). The SSI is an interview that measures the "intensity of the patient's specific attitudes, behaviors, and plans to commit suicide" (p. 4) (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999). It has good internal consistency, construct validity (Beck, Brown, & Steer, 1997), predictive validity, and is sensitive to change over time (Brown et al., 2000). Participants were asked about their current suicidal ideation (i.e., past week) at baseline and follow-up. The baseline assessment measured the severity of suicidal ideation the week prior to admission to avoid underestimating the severity of suicidal ideation due to the benefits of hospitalization. A modified version of the SSI (i.e., past 48 hours) was used to assess the severity of suicidal ideation after the second MI-SI session. The reduced time frame was needed to focus the post-treatment assessment of suicidal ideation to the time after treatment had started. *Treatment engagement* was measured using the Alcohol and Drug Services, Medication, Medical Services, and Psychological Services sections of the Treatment Services Review (TSR-6) at the 60-day follow-up assessment, which has been shown to be both reliable and valid (Cacciola et al., 2008). Participants were engaged in treatment if they attended a minimum of two sessions in each of the two months over follow-up. This criterion was used in a previous study with psychiatrically hospitalized veterans (Desai, Dausey, & Rosenheck, 2005).

**Risk Factors—**Risk factors for suicidal behavior were assessed to describe the sample. A *history of suicide attempts* is consistently predictive of death by suicide across different populations (Harris & Barraclough, 1997; Nock et al., 2008), and was assessed with a question from the National Comorbidity Survey (Kessler, Borges, & Walters, 1999).

Psychiatric conditions that increase risk for suicide in veterans were assessed to describe the risk profile of the sample (Ilgen et al., 2010). *Depression* was assessed with the Physicians Health Questionnaire (PHQ-9) (Spitzer, Kroenke, Williams, & Patient Health Questionnaire Primary Care Study Group, US, 1999), a reliable and valid self-report assessment of depressive symptoms that is used by VA (Corson, Gerrity, & Dobscha, 2004). *Post-Traumatic Stress Disorder (PTSD)* was measured using the PTSD Checklist Civilian Version (PCL-C) (Weathers, Ruscio, & Keane, 1999), a reliable and valid self-report assessment of PTSD symptoms (Keen, Kutter, Niles, & Krinsley, 2008) that is used with veterans (Hankin, Spiro, Miller, & Kazis, 1999). *Alcohol abuse* was assessed with the Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), a self-report measure designed to assess hazardous alcohol use that is reliable and valid in veterans (K. A. Bradley et al., 1998). Drug abuse was assessed using Drug Abuse Screening Test (DAST-10) (Skinner, 1982), which is reliable and valid and has been used with veterans (Justice et al., 2004).

## Clinicians, Intervention, and Fidelity

The primary author, a Ph.D. in clinical psychology, provided MI-SI to ten participants, and licensed social workers treated three participants. The social workers read the MI text (Miller & Rollnick, 2002), the MI-SI manual and received 8 hours of training by the primary author, a Motivational Interviewing Network of Trainers (MINT) trainer. The training hours consist of 4 hours of training in general MI followed by 4 hours of training in MI-SI. Training consisted of a power-point presentation and recorded examples of MI-SI. The overarching goal of MI-SI is to shift motivation away from thinking about suicide and towards living and recovery. MI-SI remains consistent with the core principles and techniques of MI by taking a client-centered approach and using the techniques of reflection, open-ended questioning, affirmation, and non-judgmental summarizing (Miller & Rollnick, 2002). Like MI, MI-SI is also directive, with concrete objectives including reinforcing living talk (or talk that reflects a desire and intent to live) and talk about engaging in life-sustaining and enhancing behavior. The process of MI-SI consists of the following three phases: 1) exploring the presenting problems, 2) building the motivation to live, and 3) strengthening the commitment to live. In the first two phases, clinicians help patients identify their reasons for dying, which triggers an exploration of reasons for living and values to enhance their motivation to live and engage in life-saving and improving activities. In the third phase, clinicians instill hope and strengthen patients' confidence that they can establish a life that is worth living by developing a plan to engage in life enhancing and sustaining activities such as treatment.

Clinician fidelity to MI principles and techniques was assessed with the Motivational Interviewing Treatment Integrity coding system (MITI) by an independent rater (Moyers, Martin, Catley, Harris, & Ahluwalia, 2003). The MITI provides two sets of ratings, global ratings of MI Spirit which represents the characteristics of competent MI clinicians (i.e., evocative, collaborative, and autonomy supportive), and counts of MI-related behaviors (i.e., giving information, MI adherent behaviors, MI non-adherent behaviors, closed questions, open questions, simple reflections, complex reflections). To adapt the MITI to MI-SI, the target behaviors for global ratings were statements regarding 'living' and 'making life worth

living', rather than the original target of statements about changing substance use. The PI was MITI trained by a Project MATCH coder and trained a research assistant to code the interviews. Twenty recordings were double coded by the PI and research assistant to assess inter-rater reliability. Only the research assistant's ratings were used to determine fidelity. We used Intraclass Correlation Coefficients (ICC's) (Shrout & Fleiss, 1979), and Cicchetti's guidelines to interpret reliability as poor (≤.40), fair (.41-.59), good (.60-.74), or excellent (≥.75). Higher scores on the 5-point MI spirit scale are associated with greater adherence to MI principles. All ratings were above the 4-point cutoff for competency indicating that coders reliably agreed that the clinicians demonstrated competency; however, raters were unable to reliably distinguish between high (4) and extremely high (5) MI spirit (ICC = 0). Inter-rater reliability for the behavior codes ranged from good to excellent (ICC = 0.62-0.95). Clinicians used reflections 7.5 times more frequently than they asked questions (above the competency cutoff of 2), 67% of reflections were complex rather than simple (above the competency cutoff of 50%), 52% of questions were open rather than closed (above the competency cutoff of 50%), and 100% of the remaining coded behaviors were MI adherent in comparison to MI non-adherent (equal to the competency target of 100%).

### Analyses

Standard descriptive statistics were used to describe the sample. The mean score on the CSQ-8 was calculated to determine participant satisfaction with MI-SI. We also reviewed the responses to the feedback interview to identify themes, and a research assistant categorized each response into one of the themes. To assess change in the severity of suicidal ideation, pre-post effect sizes were calculated using the standard formula for Cohen's *d*: ES = $(M_{pre} - M_{post})/SD_{pre}$ (Cohen, 1988). Effect sizes were evaluated according to Cohen's guidelines for interpreting them as small (.20-.49), medium (.50-.79), or large (≥ .80). Because the SSI was used to assess the severity of suicidal ideation over different timeframes at post-treatment (past 48 hours) and follow-up assessments (past week), effect sizes were computed for each time point. A number of options for treating missing data were considered. The sample was too small for multiple imputation, and the baseline observation carried forward (BOCF) strategy can be biased when there is significant missing data (Kenward & Molenberghs, 2009). In this study it is likely to be conservative as it assumes that the severity of suicidal ideation does not improve after the baseline assessment. Both the conservative BOCF and list-wise deletion strategies were therefore reported to identify a range of effect sizes. To assess clinical significance, the percentage of participants whose SSI scores fell below the high-risk threshold (SSI > 2) was also calculated.

To measure treatment engagement, the percentage of participants that attended two sessions in each of the two months after discharge, was calculated. Listwise deletion was used to account for loss to follow-up. All analyses were conducted using SPSS 16.0 (SPSS Inc., 2008).

## Results

Nine of the 13 (70%) that received MI-SI completed both MI-SI sessions and the post-treatment assessment, with the remaining participants being discharged before the second

session. Follow-up data were collected for 11 of 13 (85%). One was admitted to an inpatient PTSD unit and was unable to return to Syracuse for follow-up, and the second withdrew from participating.

### Outcome

Participants who received MI-SI found it acceptable. The mean (SD) CSQ-8 score was 3.58 (.40), indicating participants were “3 = mostly” to “4 = very satisfied” with the intervention. Of the 9 participants who completed the post-treatment feedback interview, 8 (89%) noted that the sessions were insightful or helpful, 7 (78%) felt comfortable and able to talk freely, 4 (44%) felt listened to and understood, 4 (44%) wished they had had more time with the clinician, 2 (22%) liked the individual rather than group focus, 2 (22%) wished the clinician would have done more such as give advice, 2 (22%) found the sessions challenging, and 2 (22%) made comments that were not related to the session.

Participants also experienced reductions in the severity of their suicidal ideation with a large effect size that ranged from 1.36 (BOCF) to 3.39 (list-wise deletion) from baseline to post-treatment, indicating an immediate reduction (Table 2). The effect size from baseline to follow-up was also large and ranged from 1.66 to 1.95, indicating continued reduction. Among individuals with complete data at respective follow-up assessments, 23% to 33% of scores from baseline to post-treatment fell below the high-risk threshold, as did 54% to 64% of scores at follow-up. All participants attended one mental health or substance abuse treatment session after discharge.

Of the 11 participants with follow-up data, 8 (73%) completed two or more sessions in each of the two months after discharge. Three participants (27%) visited the emergency department (ED) in the two months over follow-up. These individuals had less combat experience than those not admitted to the ED, 0% vs. 62.5%, were more likely to have a suicide attempt history, 100% vs. 50%, more likely to have made multiple suicide attempts, 100% vs. 25%, had more severe suicidal ideation at baseline, mean (SD) = 29.00 (7.00) vs. 21.28 (9.41), and at follow-up, mean (SD) = 13.00 (13.53) vs. 2.75 (6.25), and were more likely to receive 2 session of MI-SI, 100% vs. 63.5%, indicating that they may have been a higher risk group. They were also more likely to complete 2 mental health sessions in each of the 2 months after discharge, 100% vs. 62.5%, suggesting they were engaged in treatment. All other variables were roughly equivalent between the groups. One of the three made a suicide attempt that was interrupted by police after he called 911.

## Discussion

Veterans who received MI-SI found the intervention to be acceptable. The majority also noted that they felt comfortable and able to talk freely, and found the sessions insightful and helpful. Their positive experience is congruent with MI’s client-centered foundation and its goal to create an empathic, collaborative, and supportive therapeutic relationship (Miller & Rollnick, 2002; Miller & Rose, 2009).

Those who received MI-SI also experienced reductions in the severity of suicidal ideation immediately following the second session. Follow-up data suggested that the severity of

suicidal ideation continued to fall over the two months following discharge, a period of extremely high risk (Desai et al., 2005; Valenstein et al., 2009). These reductions are recognized as large (Cohen, 1988), and secondary analyses indicated that they were also clinically significant.

A large proportion of veterans who received MI-SI also initiated and engaged in mental health or substance abuse treatment after discharge. Approximately 73% (8 of 11) of participants completed two or more sessions in each of the first two months after discharge. In comparison, 27% (3 of 11) completed two or more sessions in each of the two months before hospitalization, indicating an increased rate of treatment engagement. These results are similar to a study of psychiatric inpatients from 128 VHA hospitals which found that 71% of veterans completed two or more sessions in *two of the six* months after discharge, which was found to reduce risk for suicide (Desai et al., 2005). Given that 70% of veterans who received MI-SI needed 2 months to complete 2 sessions, and 6 months were needed for veterans who had not received MI-SI to complete 2 sessions, it is possible that veterans who received MI-SI engaged in treatment more quickly than those who did not.

These preliminary findings suggest that veterans were satisfied with the intervention, indicating that it is easily tolerated. Suicidal ideation fell significantly during their hospitalization and after discharge, and treatment engagement increased, indicating that MI-SI is not likely to be iatrogenic. As these findings are preliminary, additional research is needed to examine the efficacy of MI-SI in reducing suicide risk and increasing treatment engagement.

This study has a number of limitations that prevent stronger interpretation of its results. The lack of a control group was a major limitation, which prevents the attribution of the reduction in suicidal ideation or the observed rate of treatment engagement specifically to MI-SI. In this regard, the findings could have been a result of regression to the mean that is commonly observed in high-risk populations, a response to a setting that requires resolution of suicidal ideation prior to discharge, or the enhanced care VA provides veterans who are at elevated risk for suicide. In addition, although adequate for a pilot study, the number of participants was too small to suggest generalizabiltiy. There were also limitations with the post-treatment assessment (that do not apply to the follow-up assessment). The post-treatment SSI assessed a shorter timeframe (past 48 hours) than the baseline SSI (past week). Although the reduced time frame provided a strategy to focus on the period of time since treatment began, its impact on the validity of the measure and the degree of change in suicidal ideation following the intervention is unclear. Future studies might employ assessments that focus on both timeframes (past week and past 48 hours) to explore its influence. Nine of the thirteen participants completed one MI session and the number of sessions should be controlled for in future studies. The post-treatment assessment was conducted shortly after the conclusion of the second MI-SI session, and 2 of 9 assessments were completed by the clinician who conducted the intervention, which may have increased demand characteristics for participants. Another limitation was that the developer of the intervention was the primary clinician for the study, as well as one of the reliability MITI coders, although his codes were not used to determine fidelity. Clinician allegiance may therefore have also affected the outcomes. Although it was not critical for this particular

study, the assessment of suicide-related behavior could also have been more comprehensive. These limitations should be addressed in future investigations.

To our knowledge, this is the first study to use an adaptation of MI with suicidal patients. Moreover, it also used MI to directly address suicidal ideation rather than to reduce risk factors for suicide such as psychopathology or treatment engagement. Findings indicate that MI-SI is acceptable to psychiatrically hospitalized veterans with suicidal ideation, and is not likely to be iatrogenic. Studies using randomized controlled designs will be needed to authoritatively examine the efficacy of MI-SI in reducing risk for suicide-related outcomes and increasing treatment engagement.

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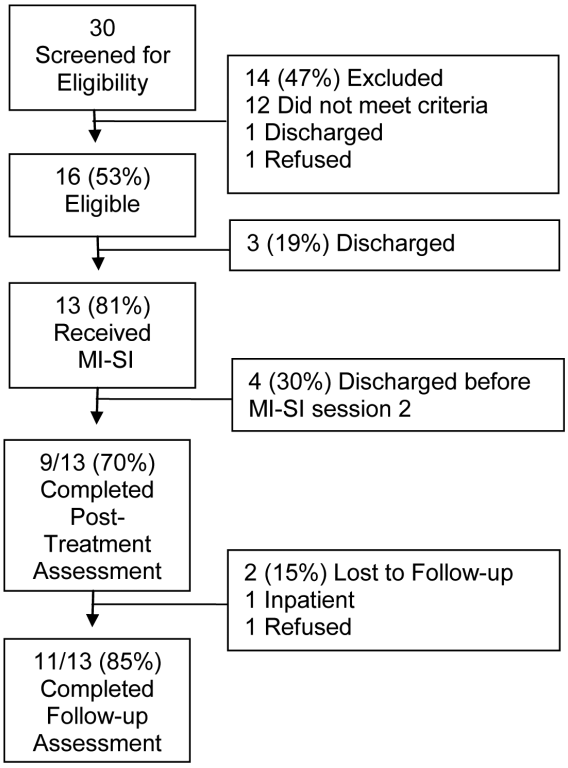


**Figure 1.**
Participant Flow Diagram

## Table 1

Study sample risk factors for suicide in Veterans (N=13)

| Measures | N (%) Mean (SD) | Cutoff | N (%) Above Cutoff |
|---|---|---|---|
| **Male** | **13 (100)** | -- | -- |
| Age | 46.77 (10.49) | -- | -- |
| White Non-Hispanic | 9 (69.23) | -- | -- |
| Combat Experience | 7 (53.85) | -- | -- |
| Suicide Attempt History | 8 (61.54) | -- | -- |
| Multiple Attempt History | 5 (38.46) | -- | -- |
| PHQ-9 | 21.46 (5.16) | ≥ 10 | 12 (92.31) |
| PCL-C | 63.08 (13.96) | ≥ 48 | 10 (76.92) |
| AUDIT | 14.77 (13.98) | ≥ 5 | 7 (53.85) |
| DAST-10 | 3.62 (3.40) | ≥ 3 | 6 (46.16) |

Note: PHQ-9 measures depression, PCL-C measures PTSD, AUDIT measures alcohol abuse, DAST-10 measures drug abuse

**Table 2**

Post-treatment and 60-day Follow-up Outcomes

| **Post-Treatment Assessment** | | | | | |
|---|---|---|---|---|---|
| Baseline Observations Carried Forward (N=13) | | | | | |
| Measure | Baseline Mean (SD) | Post-treatment Mean (SD) | Effect Size | Cutoff | N (%) Below Cutoff |
| SSI | 23.31 (8.40) | 11.85 (9.23) | 1.36 | < 3 | 3 (23.07) |
| Complete Data (N=9) | | | | | |
| Measure | Baseline Mean (SD) | Post-treatment Mean (SD) | Effect Size | Cutoff | N (%) Below Cutoff |
| SSI | 27.56 (4.88) | 11 (10.44) | 3.39 | < 3 | 3 (33.33) |
| **60-Day Follow-up Assessment** | | | | | |
| Baseline Observations Carried Forward (N=13) | | | | | |
| Measure | Baseline Mean (SD) | Post-treatment Mean (SD) | Effect Size | Cutoff | N (%) Below Cutoff |
| SSI | 23.31 (8.40) | 8.15 (10.63) | 1.66 | < 3 | 7 (53.85) |
| Participant with Complete Data at Follow-up (N=11) | | | | | |
| Measure | Baseline Mean (SD) | Post-treatment Mean (SD) | Effect Size | Cutoff | N (%) Below Cutoff |
| SSI | 23.45 (9.19) | 5.55 (9.32) | 1.95 | < 3 | 7 (63.64) |

Note: SSI measures severity of suicidal ideation