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Findings for a CBT Support Group for Latina Migrant Farmworkers in Western Colorado

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Abstract Despite previous research findings that suggested that migrant farmworkers are at great risk for mental health problems, no published research has evaluated mental health interventions in migrant farmworkers. The purpose of the present study was to evaluate a culturally-responsive cognitive-behavioral support group for migrant farmworker women of Mexican descent. Six participants with elevated depression and migrant farmworker stress underwent a 6-session intervention conducted in Spanish by a licensed clinical psychologist and a lay health worker (promotora). Participants completed baseline, posttreatment and 6-month followup assessments. Baseline and outcome measures included the Center for Epidemiologic Studies Depression Scale, Migrant Farmworker Stress Inventory, Personality Assessment Inventory Anxiety Scale, Beck Hopelessness Scale, and Rosenburg Self-Esteem Inventory. Wilcoxon Signed Ranks Tests indicated significant reductions in depression, anxiety, migrant farmworker stress, and hopelessness and increased self-esteem scores at posttreatment and followup. Eighty-three percent of participants achieved clinically significant pretreatment-posttreatment change and 100 % achieved clinically significant pretreatment-followup change. Our overall findings provide support for the usage of culturally-responsive support groups as an effective short-term intervention for migrant farmworkers. Our use of a promotora appeared especially helpful in decreasing stigma and promoting trust. Although our intervention shows promise, future research should evaluate the intervention in a more controlled manner.

Keywords Migrant farmworkers · Cognitive-behavioral support group · Depression · Anxiety · Migrant farmworker stress

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Migrant farmworkers are individuals who travel from one location to another to earn a living in agriculture. Typically, migrant farmworkers live in the southern half of the country during winter and migrate north before the planting and harvesting seasons. It has been estimated that there are between three million and five million migrant farmworkers in the United States and that as many as 90 % of the migrant farmworkers are of Mexican origin (Larson 2000).

Research suggests that migrant farmworkers are at risk for mental health problems. For example, researchers (Alderete et al. 1999; Grzywacz et al. 2006a, b; Hovey and Magaña 2000, 2002a, b) have found high levels of anxiety and depression symptoms in migrant farmworkers and that their anxiety and depression were associated with acculturative stress, family dysfunction, lack of social support, ambivalence about being away from family, low self-esteem, low religiosity, and lack of control and choice in the decision to live a migrant farmworker lifestyle. Moreover, Hovey and associates (Hovey and Magaña 2003; Magaña and Hovey 2003) identified 23 stressors commonly experienced by migrant farmworkers. The most commonly reported stressors were language barriers, unpredictable work or housing/being uprooted, being away from family/friends, rigid work demands, hard physical labor, poor housing, low income, geographical/social isolation, unreliable transportation, discrimination and exploitation, limited access to health care, and worries about education and socialization of children. Research findings (e.g., Grzywacz et al. 2006a, b; Hiott et al. 2008; Hovey 2004; Hovey et al. 2003; Hovey and Seligman 2006) have since indicated that the stress that emanates from these stressors is associated with hopelessness, anxiety, depression and suicide behaviors in migrant farmworkers.

Barriers to Mental Health Services Utilization

Although migrant farmworkers are at apparent mental health risk, their access to mental health care is often limited. Some barriers are structural (e.g., lack of treatment facilities, bilingual providers, health insurance and available finances, transportation to services, and time outside of work to seek help) and other obstacles are culturally-based. For example, having a mental illness and seeking mental health treatment are highly stigmatized among many Latino/as (Hovey et al. 2000; Interian et al. 2010). These stigma concerns may deter migrant farmworkers from seeking mental health services (Nadeem et al. 2007). Moreover, migrant farmworkers with mental disorders who do seek treatment are more likely to seek assistance from general health practitioners than from mental health providers (Vega et al. 1999). This may be due to the former being perceived as more culturally appropriate and because Latino/as often experience anxiety and depression symptoms as somatic in nature (Castillo et al. 1995).

Cognitive Behavioral & Group Therapies for Latino/as

Several authors (e.g., Interian and Diaz-Martinez 2007; Organista and Muñoz 1996) have advocated the use of culturally responsive cognitive-behavioral therapy (CBT) for Latino/as experiencing anxiety and depression. They believe that CBT is particularly suitable for Latino/as due to its directive, problem-solving approach that fits well with

traditional expectations of immediate symptom relief and guidance; and its didactic style that helps to quickly orient clients to treatment and helps to demystify therapy, thus alleviating stigma. Indeed, both individual and group CBT have been found effective for reducing anxiety and depression in Latino/as (e.g., Cardemil et al. 2005; Comas-Diaz 1981; Gallagher-Thompson et al. 2008; Interian et al. 2008; Miranda et al. 2003; Organista et al. 1994).

Purpose of Present Study

In our treatment, we focused on female migrant farmworkers because previous research (e.g., Hovey and Magaña 2002a, b) suggested that female migrant farmworkers were at greater risk for depression and anxiety than were male migrant farmworkers. The purpose of the present study was to assess the impact of a six-week culturally responsive group CBT for female migrant farmworkers in western Colorado. In specific, we assessed for changes in migrant farmworker stress, anxiety, depressive symptoms, hopelessness, and self-esteem at post-treatment and at six-month followup.

Methods

Participants & Procedure

Participants were six female migrant farmworkers of Mexican descent from the Montrose area in Colorado. Their mean age was 31.8 years (SD=8.1) (range=22–44). All participants were born in Mexico; four had been in the U.S. for less than a year and the other two had been in the U.S. for seven and 34 years. Because we did not ask participants about whether they were documented workers, their documentation status is unknown. All participants were mothers; five were currently married and one was separated. Five participants were Catholic; the other reported not being religious. All participants reported primarily speaking Spanish at home and with friends. Three participants were high school graduates; two reported attending high school without graduating; and one reported attending middle school without graduating.

The participants were recruited as part of a project that assessed the mental health of 157 migrant farmworkers in the Montrose area. Of these migrant farmworkers, 20 women who appeared at risk for mental health difficulties (according to elevated migrant farmworker stress and depressive symptom scores) were invited to participate in the support group. Of these women, six decided to participate. All six women completed the six-week intervention; four of six women provided six-month followup data. The average age of the six women (31.8; SD=8.1) appeared to be representative of the migrant farmworkers in the area as the average age of the 157 migrant farmworkers in the larger study was 33.2 (SD=13.2). All research procedures were approved by the relevant Institutional Review Board and all participants gave written consent before the start of treatment.

Of the women who declined participation, one woman said that she “didn’t trust the group” and the other 13 stated that they “didn’t have the time.” The group leaders believed however that they too may have lacked trust and/or were hesitant to participate

due to mental health stigma. The women who declined participation reported greater levels of religiosity than did women who participated (t=3.9, p<.01). (To note, religiosity was assessed by asking, "How religious are you?" Responses were rated on a 4-point scale ranging from "not at all religious" to "very religious.") The two groups however did not significantly differ in age, years living in the U.S., education, income, language use, migrant farmworker stress, self-esteem, hopelessness, anxiety and depressive symptoms.

Measures

Migrant Farmworker Stress Inventory (MFWSI) The MFWSI (Hovey 2001) was used to measure the quality and severity of stress inherent in migrant farmwork. It consists of 39 items scored on a 5-point scale ("have not experienced" to "extremely stressful") which respondents are asked to rate according to how stressful they find the experience described in each item. Possible overall scores range from 0 to 156. The MFWSI has been found (e.g., Grzywacz et al. 2006a; Hiott et al. 2008; Hovey 2001; Hovey et al. 2003; Kim-Godwin and Bechtel 2004) to have adequate internal consistency (Cronbach α's ranging from .92 to .93) and convergent validity (as indicated by its significant positive correlations with the theoretically-related constructs of anxiety, depression, and hopelessness) in samples of Mexican migrant farmworkers.

Personality Assessment Inventory (PAI), Anxiety Scale The anxiety scale of the PAI (Morey 1991) consists of 24 items rated on a 4-point scale ("false, not at all true" to "very true") that are transformed into T-scores. In samples of Mexican migrant farmworkers, the PAI anxiety scale has been found (e.g., Hiott et al. 2008; Hovey and Magaña 2000, 2002b) to have adequate internal consistency (Cronbach α's ranging from .87 to .91) and convergent validity as indicated by its significant positive correlations with depression and alcohol dependence and significant negative correlations with social support and self-esteem.

Center for Epidemiologic Studies Depression Scale (CES-D) The CES-D (Radloff 1977) was used to measure depressive symptoms. The CES-D consists of 20 items rated on a 4-point scale ("rarely or none of the time" to "most or all of the time"), with possible overall scores ranging from 0 to 60. Four of the items are reverse-scored (e.g., "I was happy"). In samples of Mexican migrant farmworkers, the CES-D has been found (Grzywacz et al. 2006a; Hiott et al. 2008; Hovey and Magaña 2000, 2002a) to have adequate internal consistency (Cronbach α's ranging from .80 to .87) and convergent validity as indicated by its significant positive correlations with anxiety and alcohol dependence and significant negative correlations with social support and self-esteem.

Beck Hopelessness Scale (BHS) The BHS (Beck and Steer 1988) was used to measure hopelessness. The BHS consists of 20 true-false items that assess the respondents' level of negative attitudes about their short- and long-term future. The BHS has been found (Hovey and Magaña 2003) to have adequate internal consistency (Cronbach α=.84) and convergent validity (as indicated by its strong positive relationship with depression and stress) among Mexican migrant farmworkers.

Rosenberg Self-Esteem Inventory (Rosenberg 1989). The Rosenberg Self-Esteem Inventory consists of 10 items rated on a 4-point scale ("strongly disagree" to "strongly agree"). Respondents are asked to rate each item according to how well the item is representative of her or him. The items are summed and then divided by 10; thus the overall score represents the mean of the 10 items. The scale has been found (e.g., Dennis et al. 2010) to have adequate internal consistency (Cronbach α=.87) and convergent validity (as indicated by its positive correlations with depression and stress and its negative correlation with social support) among Mexican individuals.

All participants completed Spanish versions of the measures. All measures had been previously translated (Hovey 2000a, b) into Spanish using the double-translation procedure (Brislin et al. 1973). All measures were given at baseline and followup. The MFWSI and CES-D were given at post treatment.

Treatment

The support groups were co-led by a licensed female clinical psychologist and a female promotora from the Midwestern Colorado Mental Health Center (MCMHC) in Montrose, CO. Promotoras are current or former migrant farmworkers who are trained as health educators. Sessions were held weekly on Thursday evenings and were of 1 ½ hours duration. Transportation was provided to and from the sessions by MCMHC. Because of the migratory nature of the migrant farmworkers' work and lifestyle, the treatment was short-term and consisted of six sessions.

Each group leader was bilingual and bicultural. The psychologist was experienced in running culturally-adapted CBT groups. In preparation for the groups, the promotora received training through MCMHC and from the first author on mental health symptoms and disorders, risk and protective factors for mental and physical health, child development and parenting issues, medication, therapy techniques, and the administration and scoring of paper-and-pencil psychological tests. In regards to the duties of each group leader, the psychologist was responsible for preparing and formally presenting educational material to the group, establishing treatment goals, making major decisions regarding group members' welfare (e.g., providing referrals), providing interventions during session, and providing supervision to the promotora. The promotora was responsible for the group's logistics (e.g., scheduling the room; arranging transportation, etc.) and she helped prepare the educational material. During the sessions, the promotora provided interventions and—when appropriate for cognitive and behavioral change—she self-disclosed relevant life experiences (e.g., discrimination) that she shared with group members.

During the first session, the group leaders and members discussed possible topics for intervention. Including the group members in the decision about what topics to cover appeared to help the members feel that their contributions were valued and helped them become invested in the group. By the end of the six weeks, many of the women spoke about how their time spent in the group was "sacred."

Sessions two through six were structured in a similar fashion. First, as mentioned, the psychologist would provide an educational presentation on that week's topic and then the group leaders would open the conversation to the group. Topics covered were (1) understanding and coping against stress, anxiety and depression; (2) increasing

hopefulness and self-esteem ("developing one's own style and personality"); (3) empowering group members to better individuate, assert themselves, and succeed in the larger society; (4) family issues related to nurturance and childrearing, discipline, family functioning and communication, and acculturation gaps (i.e., children acculturating at a quicker pace than parents); and (5) understanding and recovering from domestic violence and other traumatic experiences.

In working with the group on these issues, the group leaders used CBT techniques. In addition to the educational pieces, these included imaginal and in vivo exposure; assertiveness training; cognitive strategies such as problem solving, cognitive restructuring, and learning to recognize factors that contribute to stress, anxiety, and depression; and behavioral strategies such as increasing group members' engagement in pleasurable activities, positive activity scheduling, and the bolstering of coping skills. The following are examples of the use of these techniques. During week three's discussion on individuation, a group member spoke about her desire to leave the migrant stream and start her own business as an event planner. Because she was familiar with the area, she had been able to make initial preparations towards her goal but she had recently encountered obstacles and had become more fatalistic about her business plans. She stated that it was difficult for her to imagine her plans working. She spoke of being afraid of failing and worried that her "creativity and time would not be worth anything." Because of her anxiety surrounding her plans, she had begun to lose pleasure in the actual work itself. In response, the psychologist noted that in order for the group member to succeed, she had to face her fears. The psychologist then had the group member identify her most fear-inducing obstacles and then had her imagine working through these obstacles effectively. In addition, the promotora discussed how it might help if the group member increased her efforts to focus on the pleasure of work—rather than to overly focus on her worries about whether her plans would be successful. The group leaders and other group members also encouraged the woman to follow-through on her plans and, over the next couple of weeks, they praised her for "facing her fears" and "not giving up." By the end of treatment, the group member experienced some early business success (e.g., payment for a job; referrals for two other jobs) which, in turn, appeared to further reinforce her efforts, reduce her fears, and increase her confidence and pleasure in her work activities.

As an example of cognitive restructuring, during the session on self-esteem, a group member spoke about her negative views of herself and how she felt she had never accomplished anything in life and that she probably never would. In response, the promotora noted that, based on her own experience, she knows that learning a new language and adapting to new cultural norms are huge accomplishments and that these were things to be proud of. The group member then stated that she had not thought of these as accomplishments but now saw that they were. Such cognitive reappraisal interventions allowed the women to evaluate their negative thoughts and they learned to replace them with more positive thoughts and images. These interventions were often the beginning steps toward better coping, increased self-esteem and assertiveness, and taking more responsibility in role functioning.

Finally, the treatment incorporated several cultural considerations to help provide for a culturally appropriate treatment. In addition to the treatment being conducted in Spanish and a promotora being used as a group leader, the treatment was framed in a nonthreatening manner, held at a local church, and, as mentioned, efforts were made to

include clients in decision-making. Rather than being called "group treatment," the group was framed as an opportunity for the women to talk about their difficulties as a farmworker. The group leaders also emphasized culturally-valued interactions characterized, for example, by *simpatia* (warmth and kindness), *respeto* (respect), and *personalismo* (personalized). Overall, these considerations appeared to increase levels of comfort and trust and helped to decrease the stigma associated with mental health. As an example, during week four's session on family issues, a group member spoke about her confusion regarding child discipline. Although the woman spoke Spanish well, she was from an indigenous culture in Mexico and her life experiences differed greatly from the other women. From the beginning of treatment, the group leaders showed respect for these differences and let the woman know that she and her views were welcome in the group. This level of warmth, kindness and respect for her experiences created trust and an increased sense of belonging to the group. She thus felt comfortable to disclose her worries and confusion about how some of her child-rearing practices that were appropriate in her indigenous culture were seen as inappropriate in the U.S. Without this level of trust and belonging, the group member may not have learned the norms of the larger society.

Results

Table 1 shows the mean scores on the outcome measures at pretreatment, posttreatment, and 6-month followup. Because of our small sample size and the assumption that the scores were not normally distributed, we used Wilcoxon Signed Ranks Tests to assess changes in outcome measure scores. Migrant farmworker stress (Z=2.2, p=.01) and depressive symptom scores (Z=2.0, p=.02) were significantly reduced at posttreatment and migrant farmworker stress (Z=1.6, p=.058) and depressive symptoms (Z=2.0, p=.02) remained reduced at followup. Cohen's effect sizes for migrant farmworker stress and depressive symptoms ranged from .64 to 1.6, thus suggesting that the support group intervention had a significant influence on reducing migrant farmworker stress and depressive symptoms. The table also shows a decrease in anxiety (Z=1.1, p=.13) and hopelessness (Z=.8, p=.23) and an increase in self-esteem (Z=1.5, p=.07) at followup with Cohen's effect sizes ranging from .55 for hopelessness to 1.75 for self-esteem.

Table 1 Differences in mean scores of mental health variables at pretreatment, posttreatment, and six-month followup

Variables	Pre	Post	*d*	Followup	*d*
Migrant farmworker stress	80.0 (25.6)	64.5 (21.4)	.64	58.5 (18.1)	.72
Depression	34.4 (14.1)	16.6 (8.0)	1.54	15.5 (4.7)	1.60
Anxiety	75.3 (19.1)	–	–	65.0 (6.4)	.72
Hopelessness	4.8 (3.8)	–	–	3.2 (1.0)	.55
Self-esteem	2.3 (0.5)	–	–	3.1 (0.5)	1.75

d = Cohen's effect size. *d* values of .2, .5, and .8 represent small, medium, and large effect sizes, respectively

According to the criteria set forth by Jacobson and Truax (1991), 83 % of the women achieved clinically significant pretreatment-posttreatment change and end-state functioning for migrant farmworker stress and depressive symptoms. For pretreatment-followup, 100 % of women achieved clinically significant change and end-state functioning for migrant farmworker stress and depressive symptoms; 75 % for self-esteem; and 50 % for anxiety and hopelessness.

Discussion

Because of the numerous barriers to treatment that we mentioned earlier, we cannot expect migrant farmworkers in need of mental health services to attend treatment in the traditional sense. The present study was an attempt to work within the constraints inherent in the lives of migrant farmworkers. To our knowledge, these are the first reported findings for the mental health treatment of migrant farmworkers.

The findings indicated that migrant farmworker women experienced decreases in migrant farmworker stress and depressive symptoms at posttreatment and followup and that they experienced an increase in self-esteem and decreases in anxiety and hopelessness at followup. These changes were likely due to various specific and nonspecific factors.

In Magaña and Hovey's (2003) study of stressors in migrant farmworkers, several of the migrant farmworkers reported that they experienced a sense of learned helplessness and lack of control in reaction to stress. The current treatment's emphasis on problem-solving, assertiveness and skill-building may have served to increase coping competence in the women by helping them regain a sense of control, thus alleviating learned helplessness and resulting in reduced stress, anxiety, and depressive symptoms.

The group treatment format utilized in the present study may have contributed to the group's success. Because the group format is consistent with Latin cultural values (e.g., its collectivist nature; emphasis on extended family and social support), the women may have experienced the group as less threatening and stigmatizing than individual treatment. The group format may also have allowed each participant to transition into therapy at a comfortable pace. Finally, the group allowed the women to meet other peers thus increasing their social connections and helping to combat the social isolation common to migrant farmworkers. For these reasons and because of its cost-effectiveness, we recommend group treatment for migrant farmworkers.

As mentioned earlier, we incorporated several cultural considerations into the treatment process. To ensure that the women were eligible to attend therapy, we worked around their schedule by holding the groups during evening hours (after work) and we offered transportation to and from the sessions. The groups were held at a local church, a setting that was familiar to the women. In regards to the therapy itself, the sessions were conducted in Spanish by group leaders who were knowledgeable about the farmworkers' culture. Moreover, each session focused on issues that were identified by the women as being relevant to them and the group leaders utilized culturally-valued interactions in their interventions with the migrant farmworkers. We believe that these cultural considerations helped to strengthen levels of comfort, trust, and alliance, decrease possible stigma and therapy dropout, and enhance the effectiveness of the CBT techniques.

Our use of a promotora as a group leader appeared key to the success of the group. A review of the research literature on the use of promotoras (Rhodes et al. 2007) demonstrated that, due to their familiarity and understanding of particular community- and culturally-based issues, promotoras have been found to be effective in various roles. These include supporting research participant recruitment and data collection, serving as health advisors and referral sources, distributing health-related materials, serving as community role models, and advocating for community members. Because research (e.g., Patel et al. 2010) has found that properly trained lay individuals can provide effective mental health therapy, it is not surprising that the use of a promotora in our study appeared to augment the success of the group. Not only did the promotora help establish alliance and decrease stigma by promoting trust, understanding, and empathy—she served as a role model for the clients and they often spoke about how they felt that they could relate to the promotora. The presence of the promotora may also have helped with retention as none of the women dropped out of therapy.

A final reason why we recommend the adjunctive use of promotoras in treatment is because promotora programs for migrant farmworkers are already well-established (Booker et al. 1997; Rhodes et al. 2007). It may therefore be more feasible to incorporate mental health interventions into the pre-existing structure of ongoing programs than to create "new" programs from the ground up.

Limitations and Implications for Clinical Work and Research

Limitations of our study include its small sample and lack of a control group. The small sample, along with its particular characteristics, limits the generalizability of the findings. Because of the lack of a control group, we cannot rule out the possibility that changes were due to time and/or local external events (outside the therapy) that were experienced by the women. The present findings should thus be considered preliminary.

In generalizing our findings, future research should use larger samples with randomized control group comparisons. However, due to the often short duration of migrant farmworkers' stay in a given geographical area, we believe that delayed control conditions (e.g., waitlist) may not be practical. Moreover, given the migratory nature of migrant farmworkers' lives, special care should be taken when designing followup assessment methods.

As discussed above, our findings have applied implications for not only mental health care workers, but for administrators, policy makers, and grant agencies who have the authority to invest resources into promotora and other health-related programs for migrant farmworkers. In order to fully develop and implement evidence-based mental health treatment for migrant farmworkers, greater resources are necessary. Because, as mentioned earlier, many migrant farmworkers are likely to seek mental health assistance from primary care providers (Vega et al. 1999), one example of how to incorporate resources into migrant farmworker mental health care is through the use of integrated behavioral health care (Bridges et al. 2013). This would involve primary health care settings having the resources to quickly refer and serve (under the same roof) the mental health needs of migrant farmworkers.

Finally, because of their migratory lifestyle, the nationwide integration of mental health services for migrant farmworkers should be a long-term goal. Because many

migrant farmworkers are at risk for mental health problems, further development and evaluation of mental health interventions for migrant farmworkers is imperative. It is our hope that our findings can be used as a stepping stone toward this direction.

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