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Culturally Based Intervention Development: The Case of Latino Families Dealing With Schizophrenia

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Abstract

Objectives—This article describes the process of developing a culturally based family intervention for Spanish-speaking Latino families with a relative diagnosed with schizophrenia.

Method—Our iterative intervention development process was guided by a cultural exchange framework and based on findings from an ethnographic study. We piloted this multifamily group 16-session intervention with 59 Latino families in a randomized control trial. Data were collected on family- and client-level outcomes, and poststudy focus groups were conducted with intervention participants.

Results—Preliminary evidence indicates that the intervention is effective by increasing illness knowledge and reducing family burden.

Conclusions—This work can provide a model for how to integrate cultural factors into psychosocial services and enhance interventions in real-world settings for culturally diverse populations.

Keywords

cultural competence; Hispanics; ethnic minority families; severe mental illness; multifamily psychoeducation group intervention; family caregivers

Family involvement in services for persons with schizophrenia has consistently shown strong positive outcomes for both families and clients (Dixon et al., 2001; Jewell, Downing, & McFarlane, 2009). Numerous effectiveness studies have demonstrated that family-based psychoeducation models improve the lives of families and have positive implications for clients as well (Dixon et al., 2001; McFarlane, Dixon, Lukens, & Lucksted, 2003; Miklowitz et al., 2000; Mueser, Torrey, Lynde, Singer, & Drake, 2003). Family-based programs have proven effective in reducing relapse rates, facilitating recovery of clients, improving family well-being, alleviating family burden, and increasing the quality of family relationships (Dixon et al., 2001; McFarlane et al., 2003; Mueser et al., 2003). However, these models tend to be based on Western-based assumptions about mental illness and have not considered the influence of the cultural context and practices in service delivery to persons from collectivistic ethnic backgrounds. Despite the fact that Latino and other ethnic minority cultures are known to be more family centered in comparison with Western-based cultures, only one controlled family-based study has been conducted with Latinos dealing with schizophrenia (Telles et al., 1995). There is a great need for family work in this area because

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studies have consistently found that most Latino clients are more likely to live with their families compared to nonminorities (Barrio et al., 2003; Guarnaccia, 1998; Kopelowicz, 1998). To address this gap, we developed a beginning version of an intervention, which we titled, a Culturally based Family Intervention for Mexican Americans (CFIMA). This intervention has roots in the evidence-based elements of multifamily group psychoeducation with adaptations and new components for use with Spanish-speaking Latino families. Non-English-speaking Latinos are typically ineligible for participation in innovative assessment and care programs designed to determine which treatment options for which individuals produce the best clinical and functional outcomes at the lowest cost. This exclusion of a large segment of the Latino population from mental health research severely limits the generalizability of findings from clinical studies (Jani, Ortiz, & Aranda, 2009). Intervention development was necessary as family programs need to be developed that are socioculturally synchronous with the care-giving ideology of Latino culture and that are linguistically and culturally congruent with the needs, preferences, and cultural learning styles of this largely underserved, underresearched growing population (Barrio, 2000; Barrio & Yamada, 2005).

The Development and Cultural Adaptation of Interventions for Latinos With Schizophrenia

Strategies have been delineated for developing culturally relevant treatments for ethnic minorities (Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009; Kumpfer, Alvarado, Smith, & Bellamy, 2002; López, Kopelowicz, & Cañive, 2002). Table 1 provides an overview of three empirically supported studies of culturally adapted psychosocial interventions for Latinos with psychotic disorders (Kopelowicz, Zarate, Smith, Mintz, & Liberman, 2003; Patterson et al., 2005; Telles et al., 1995).

The process of cultural adaptation can include a surface structure or a deeper structure approach. Surface structure strategies refer to outward modifications that may include gaining general knowledge about ethnocultural factors and sociostructural needs of the families' culture and incorporating these into service system modifications to increase cultural responsiveness and access to program services by including bilingual/bicultural staffing, using Latino interpersonal cultural style (*personalismo*), and community outreach. Typically, community mental health treatment programs that serve large numbers of Latinos utilize a basic surface structure approach to the cultural adaptation of their services. Deeper structure strategies go further by incorporating values, traditions, and practices consistent with the worldview and help-seeking patterns of the cultural group (Kumpfer et al., 2002).

López et al. (2002) outlined two methods that have been used to develop culturally congruent family-based interventions for Latinos dealing with schizophrenia. (a) The cultural adaptation approach modifies an existing intervention that has been validated with European Americans for use with Latinos (Kopelowicz et al., 2003; Patterson et al., 2005; Telles et al., 1995). As the mixed findings from these studies indicate (see Table 1), it cannot be assumed that treatments that have empirical support with nonminorities will work for ethnic minorities (Chambless et al., 1996; Miranda, Nakamura, & Bernal, 2003). Specifically, the negative findings from the study by Telles et al. (1995) suggest that some of the Western-based structured elements may have limited applicability for low-aculturated Mexican American clients and families. (b) The second method is to develop new interventions based on the findings from basic and cross-cultural research. For example, the cross-cultural research on expressed emotion and protective factors (e.g., family warmth, a prosocial orientation; López et al., 2004) could inform the development of family-based approaches that focus on conserving and cultivating Latino cultural resources rather than on reducing family conflict as is supported for non-Latino Whites. Miranda et al. (2003)

advocate the development of innovative, theoretically driven culturally centered approaches that tailor mental health care so that it coincides more with specific ethnocultural characteristics and the testing of these interventions in real-world settings.

This article documents the process of developing a culturally based family intervention for Spanish-speaking Mexican American families of a person diagnosed with schizophrenia. We provide a description of the intervention development informed by our extensive clinical experience with Latinos, evidence-based practices, the literature on protective factors, a heuristic framework we developed and findings from an ethnographic study with Spanish-speaking Mexican origin Latinos.

Culturally Based Family Intervention for Mexican Americans (CFIMA)

In this study, the stage model developed by behavioral intervention scientists (Addis & Waltz, 2002; Carroll & Nuro, 2002; Rounsaville, Carroll, & Onken, 2001) guided the development of the intervention. The stage model divides studies into phases ranging from initial pilot testing to dissemination of effectiveness trials but allows for flexibility in intervention development to focus on internal and external validity issues that are critical to culturally tailored treatments at all stages. The iterative development of the CFIMA adhered to Stage I tasks of manual development, preliminary feasibility evaluation, and pilot testing.

CFIMA Intervention Development Informed by Ethnographic Findings

Prior to developing the intervention, we conducted a qualitative study to explore the multiple perspectives of Spanish-speaking Mexican American clients with schizophrenia, their family members, and providers of mental health services to persons with severe mental illness. Data from 45 participants were collected through focus groups and in-depth interviews with clients, family members, and providers. Data were also collected from field notes from a participant observation of community-based psychosocial and medication services, clinical staff meetings, and routine activities (Barrio et al., 2010 has a description of the methods). We uncovered five salient cultural resources that emerged as protective factors against family burden and interpersonal problems with the relative with schizophrenia used by Mexican Americans families in coping with the impact of the illness: (a) the centrality of familism, (b) the role of spirituality and religiousness, (c) nonjudgmental cultural attributions that convey interpersonal warmth, (d) biculturalism, and (e) cross-border resources. Results indicated that family cultural resources are valuable but largely untapped by existing interventions. As such, the CFIMA development included extensive planned involvement of family members to ensure a consistent appraisal and inclusion of their salient sociocultural strengths and resources in the treatment process.

CFIMA Sessions Modeled on a Heuristic Model of Family Provider Cultural Exchange

We developed a heuristic model that specifies the process of cultural exchange between the Latino family and the provider system, leading to desired outcomes for the family and the client. This model is based on the principles of grounded theory and draws from Higginbotham's (1984) culture assessment-accommodation model, Kleinman's (1988) culture theory on explanatory models, cultural exchange theory (Palinkas et al., 2009; Palinkas, Allred, & Landsverk, 2005), and the tenets of strength-oriented approaches (Rapp, 1998). Culture refers to shared value orientations, beliefs systems, behaviors, and practices, and it is also conceptualized as dynamic, continually changing, and responding to the demands of the social world (López & Guarnaccia, 2000). The intervention process is pictured as a cultural exchange that within mental health services can be understood as a

transaction of knowledge, attitudes, and practices that occurs when providers on the one hand, and clients and their families on the other, interact and engage with each other (Palinkas et al., 2009). It is within this bidirectional process that participants derive something from and are changed as a result of the transaction.

The CFIMA sessions were grouped by the three identified stages of cultural exchange in the intervention process: (a) cultural assessment; (b) cultural accommodation; and (c) cultural integration of strengths and resources (see Figure 1).

Cultural Assessment (Nine Sessions in Three Components)

Assessment entails uncovering of strengths, resilience, and culture-based coping strategies for each family member to gain insight into family explanatory models without imposing the values of the provider culture. Emergent themes can be anticipated to relate to the cultural domains described above (familism, spirituality/religiousness, nonjudgmental cultural attributions, biculturalism, and cross-border living and resources), but providers are to remain open to uncovering other cultural factors, strengths, and resources specific to each group of family members. The therapists facilitating the group will self-disclose about their own cultural heritage, their education, and their experience in working with Latino clients and families. The cultural exchange process is a continuous one in guiding therapeutic transactions. Providers gain a greater understanding about the cultural resource domains from the perspective of the families. The insights families gain from three assessment components inform providers on how to support and build on existing cultural resources in the next stage of treatment.

Joining and engagement component (three sessions)—This phase is meant to gain and build families' trust, cooperation, rapport, group cohesion, and provide an orientation to the CFIMA and its psychoeducational and supportive approach. A main goal is to obtain a cultural assessment of family participants consistent with the principles of grounded theory. For that reason, the three joining sessions resemble focus groups using qualitative exploratory techniques to learn from each family member's view about their cultural background, history of the relative's illness, coping strategies, goals, and expectations of treatment, needs, and desires of family members.

Psychoeducational component (four sessions)—This component will be introduced representing a more formal exchange of knowledge from the provider side. Sessions follow a psychoeducational curricula that had been culturally adapted for low-aculturated Mexican Americans in a previous study (Kopelowicz et al., 2003). The focus is on increasing illness knowledge and problem-solving skills and consists of educational content on the etiology, biology, symptoms, and treatment of schizophrenia and coping skills guidelines. Each session allows for an initial engagement period, the structured didactic curricula, and an interactive period to process learned material.

Cross-cultural education component (two sessions)—These sessions focus on sharing cross-cultural research on ethnocultural factors and schizophrenia. The purpose of this component is to raise awareness about the culturally mediated coping resources embedded in Latino family culture including (a) findings about the sociocentric nature of collectivistic societies and the more favorable course and outcome of the illness in such cultures (Hopper & Wanderling, 2000; Lin, 1996); (b) findings showing lower expressed emotion among Mexican Americans (Karno & Jenkins, 1993); (c) the significance of family warmth and pro-social factors among Mexican Americans (López et al., 2004); (d) findings on empathy, social competence, the salience of spirituality/religiousness, and other protective factors specific to Mexican Americans (Brekke & Barrio, 1997; Karno & Jenkins,

1993; Neff & Hoppe, 1993; Weisman et al., 2000); (e) the Latino paradox (Escobar, 1998; Markides & Coreil, 1986); and (f) the caregiving ideology of Latino culture exemplified by most Latino clients living with their families (Guarnaccia, 1998).

Cultural Accommodation (Four Sessions)

The CFIMA operationalizes the cultural accommodation phase through a cultural exchange process that recognizes the therapeutic value of working with the family's cultural strengths (protective and prosocial factors) and toward the integration of these cultural resources. A strength-oriented perspective replaces the “imagery of deficits and pathology with the imagery of strengths and resilience” (Rapp, 1998, p. 17). Essentially, the provider system must recognize the family's own positive resources as well as the resources of the family's sociocultural system and community.

In this stage, the cultural material derived above together with information from the psychoeducational curricula continue to be covered while providers also share about what they have learned from family members. In facilitating group process and building on existing strengths, relevant elements that emerged from the cultural assessment stage (e.g., the cultural domains: familism, spirituality and religiousness, nonjudgmental cultural attributions, biculturalism, and cross-border living and resources) are to be woven into discussions in an illustrative and supportive manner. Family members are encouraged to share their experiences with life issues and about their coping with their loved one's mental illness in a nonjudgmental and culturally sensitive learning environment. In so doing, they will show an increasing self-awareness and understanding of how protective factors operate within the family, buffering against family burden and interpersonal problems with their loved one. Interventionists purposefully highlight and validate cultural strengths and resources in dealing with mental illness in the family. The aims are to accommodate to the family culture, help families accommodate to the knowledge base of provider culture, and achieve a closer cultural fit between the cultural systems. Knowledge about the illness can be expected to increase, while families and providers appraise the inherent cultural resources within the family to deal with the illness and thereby decrease stress in the family, foster social support and empathy, and focus on functional improvements for family members and their loved one with the illness (Mueser et al., 2003).

Cultural Integration (Three Sessions)

The last stage of the CFIMA is one in which the processes of understanding and accommodation produce a unified intervention process that fully integrates the family's own positive resources into the treatment by the provider. The process culminates in a greater cultural integration between the ethnic culture of the families and the psychoeducational knowledge base of providers. At this stage, family members and providers share lessons learned with the other in reviewing and consolidating treatment gains and plans for the future. Avenues for a continuing collaborative relationship between the family and provider system and the treatment program are fostered as well as the value of peer support and extended connections among families outside of the treatment setting.

The purpose of this study was to determine the feasibility and preliminary impact of the CFIMA for use with predominantly Spanish-speaking Latino families. We provide initial findings of the randomized controlled trial comparing a culturally based multifamily group intervention (CFIMA) with usual care in community mental health settings.

Method

The steps described here were conducted over a 3-year-period within two community mental health centers (CMHCs) serving large numbers of Spanish-speaking Latino clients in Southern California. All study procedures were approved by the Institutional Review Board of the University of Southern California and the County Mental Health Research Committee.

Feasibility Test

To assess acceptability and initial feasibility of the CFIMA, we implemented a condensed version of the intervention within a 6-week time frame with five low-acculturated family members. The intervention was facilitated by the first author and a Master-level research staff. All were Spanish language dominant Latinos of Mexican origin. The feedback period at the end of every session and poststudy review indicated high ratings for the content, structure, and approach of the intervention (i.e., length of sessions, flexibility, cultural exchange process, integration of psychoeducation and cultural knowledge, and supportive approach). Evaluative comments reflected that family members believed they benefited greatly from their participation, reported high satisfaction with the experience, and liked the concept of the CFIMA. Family members expressed a desire for continuation of the intervention. In all, the findings of this initial feasibility test indicated the intervention's acceptability, its potential for improvement in family outcomes, and support for its further development in a larger trial.

Consultation on the components of the intervention was also sought from a community advisory board comprised of client, family, provider participants, and consumer advocates. Findings from this phase of development were used to refine the manual to further develop the research and therapist training protocol for the next phase.

Overview of the CFIMA Format

The CFIMA utilizes a multifamily group format lasting 16 sessions. Groups meet weekly and each session is 2 hr long. Group sessions are held within the familiar environment of the service setting and in the early evening to accommodate work schedules. Light refreshments and traditional foods are offered to reflect hospitality and to provide natural opportunities to socialize at the beginning and at the end of each session. Each CFIMA group consists of 10–15 family members (see Figure 2—logic model).

CFIMA Randomized Trial

The next step involved the recruitment of client and family participants, training of interventionists, and implementation of a randomized trial to test the preliminary effectiveness of the manualized CFIMA in real-world practice settings.

Recruitment

Given the small sample size typical in pilot studies, the selection of target participants needs to be narrowly restricted to optimize treatment effect and maximize available power (Rounsaville et al., 2001). For these reasons, the target family population for this study was limited to one Latino subgroup—Spanish-speaking Mexican Americans.

Successful recruitment was facilitated by established collaborations with administrators and clinical staff from the two sites. Prospective study participants were identified by clinical staff and after permission was obtained, they were contacted by culturally and clinically competent research staff. Eligible client participants had to be 18 years or older, have a Diagnostic and Statistical Manual of Mental Disorders (*Fourth Edition*; *DSM-IV*) diagnosis

of schizophrenia or schizoaffective disorder, be Latino of Mexican origin, Spanish or English speaking or both, live with family or have frequent contact with at least one key family member, provide informed consent, and provide permission to contact the key family member. Eligible family participants had to be 18 years or older, be Latino of Mexican origin, Spanish-language dominant, have frequent contact with the client, and provide informed consent. Both the client and family member needed to provide consent for either to participate in the study.

Procedure

This study used a randomized controlled pretest, posttest control group design with a 3-month follow-up to compare the effectiveness of the CFIMA to usual care in CMHCs with Mexican American Spanish-speaking families. This design was anticipated to provide a fair test of the cultural modification hypothesis—that the integration of cultural components into a family-based approach would improve its effectiveness for Mexican American families and clients compared to the usual care condition that does not purposively and centrally incorporate culture.

A total of 63 dyads (client–family member) were randomly assigned to either the CFIMA or usual care for 6 months. Prior to the beginning of the intervention, four dyads withdrew from the study (two moved to Mexico and two moved out of the area and discontinued services). Data were collected from a total of 59 dyads (26 in the intervention and 33 in the usual care condition). Client and family assessments were conducted in both conditions at baseline, poststudy (6 months for usual care), and 3-month follow-up. Family-level outcomes encompassed knowledge of the illness, family burden, family well-being, family warmth, expressed emotion, coping, social support, cultural concepts domains, and treatment satisfaction. Client-level outcomes included symptom severity, quality of life, family warmth, medication compliance, and service use. In addition, qualitative in-depth interviews were conducted with a selected number of dyads and poststudy focus groups were conducted with CFIMA participants.

Customary community care for clients with schizophrenia typically consists of ongoing medication services (at minimum) and an array of psychosocial services that range from case management, family, individual, and group treatment, referrals and linkage. Providers in both conditions were bilingual clinicians. For the CFIMA intervention, three Master-level Latino bilingual social workers of Mexican origin volunteered and were trained and supervised by the first author during the course of the study.

We conducted two CFIMA multifamily intervention groups (16 sessions each with booster sessions for family members missing more than 2 sessions) in the intervention phase. Two postintervention focus group sessions with family participants were conducted within 1 month after each group ended (a total of four focus groups with 92% of 26 family members attending). We completed 14 poststudy qualitative in-depth 2-hr interviews with family members from the intervention group.

Results

Participants

Enrolled participants were 59 client–family dyads, 26 in the intervention and 33 in the usual care condition. Consistent with eligibility criteria, all clients were diagnosed with schizophrenia or schizoaffective disorder at baseline. A majority of the clients were male ($n = 46$, 71%), whereas a majority of family members were female ($n = 51$, 84%). The average educational level for clients was 10 years and an average of 7 years for family members. All clients were living with family or had frequent contact with the key family member. All

family members were Spanish language dominant, with low acculturation as were some of the clients, although the majority of clients were bilingual. Most family members were born in Mexico (82%) whereas the majority of clients were born in the United States (52%). Family members consisted of parents (mothers, fathers, stepparents), spouses, daughters, sisters, and a grandmother.

Qualitative Results

Focus groups and in-depth interviews used open-ended questions to explore family members' perceived changes in knowledge, attitudes, and practices (KAP) related to their participation in the intervention and to gather ideas and suggestions regarding the intervention structure, format, content, and process. The findings on KAP are interrelated but presented separately. From a review of field notes and of CFIMA videotapes, we also included findings related to the content and implementation of the intervention.

Perceived Change in Knowledge

Across focus groups, individual interviews, and feedback during the intervention, family participants unanimously reported increased illness knowledge and the great benefit of what they learned within a culturally sensitive, supportive, and therapeutic group. They liked the psychoeducational material that elucidated a biopsychosocial perspective while validating their Latino family cultural context. A father commented that what helped his relationship with his son the most was learning about the symptoms of the illness. He learned to recognize the days when his son is well and others when he is not, and that striving to be patient is the best he can do for his son. A representative comment from a mother emphasized that with increased "knowledge" came increased "understanding" and described this process as "transformative" in viewing their loved one as a "person" separate from the "illness." Families also recognized increased self-knowledge and cultural knowledge. They often remarked that their "eyes had been opened" and that self-knowledge had helped them become a better person, parent, and friend. Increased cultural knowledge was attributed to a culturally supportive environment with other families dealing with similar challenges and to the cultural validation they experienced via the cultural exchange process, the cross-cultural educational component, and that they could in turn help the interventionists learn about their own family's cultural approaches in dealing with their loved one's mental illness. Families readily shared cultural examples of family warmth and unity, unconditional acceptance, setting rituals for prayer, and spiritual involvement in helping them to deal with the illness. They expressed a renewed cultural pride in their Mexican heritage whereas prior to the intervention they had considered that European Americans were better equipped intellectually and culturally in dealing with the challenges of mental illness. They commented on gaining insight into their inner strengths as immigrants who had endured hardships and additionally now felt fortified by finding greater meaning in the richness and protective qualities of Mexican culture.

Perceived Change in Attitude

Many participants indicated that the group experience helped them reframe their view of their loved one, as it helped them understand that their behavior was due to the illness. A wife stated a shift in attitude, "I learned to have more patience with my husband, to know that it is an illness what he has and it isn't because he wants to do the things that he does." Examples were offered of how their group participation had changed their attitude from one of stigma attached to the illness to one of acceptance and understanding not only regarding psychiatric illness but also regarding other disabilities. One father indicated that due to his new outlook he was able to comfort a friend who has a son with both mental and physical disabilities, and thus encouraged him to include his son in social activities, and to seek information and professional help. Family members often referred to their improved attitude

as an “educated” perspective benefiting themselves and their relationship with their loved one. Many associated their new outlook with a decreased sense of burden.

Perceived Change in Practices and Behaviors

Related to their increased knowledge and changes in attitude, many participants provided examples of how the CFIMA impacted their behaviors in their personal lives. Family members expressed a greater sense of empowerment in becoming more assertive about seeking treatment. Representative statements by family members indicated, “Now I know what I have to do if he gets sick . . . I’m more alert . . . I know to ask for help when he’s getting sick.” One mother’s statement reflected an increased confidence in taking action as well as an increase in hope, “Everything that I learned gave me a lot of hope, strength, and security to take action.” Many provided examples of how they apply their increased knowledge by teaching other family members about the illness, how to deal with it, and to appreciate their family cultural resources. One sister indicated that she teaches by example in modeling patience toward her mother when other siblings visit. Similarly, a mother shared, “I have become more tolerant because the group helped me remember that it is an illness Our relationship has improved a lot.” This mother also added that in addition to having more hope for the future, she has gained peace for herself.

In sum, the preliminary qualitative findings indicate that the CFIMA appears to increase illness knowledge, improve attitude toward the mental illness, reduce stigma, improve family relationships, and potentially reduce family burden.

Feedback and Recommendations

Consistently, family members expressed gratitude for the cultural exchange framework. To them the cultural exchange referred to education and knowledge, learning from different points of view, receiving and providing support, and fostering growth and hope in each other. While they valued the professional expertise of the interventionists, they also gained from sharing “testimonials” about their family’s cultural resources particularly regarding their spiritual and religious beliefs and practices. Their expression of gratitude was commonly followed by their desire that the group continue to meet. The most common remarks praised the group interventionists for their interpersonal warmth and respectful manner with the term, “tan amable” (very amiable), and that the group was well organized, structured, and allowed for enjoyable socialization. They liked the three treatment phases and that the modules were guided by an agenda for every session. They appreciated the length of each session and the early evening schedule that made their attendance possible.

Regarding the composition of the group, participants unanimously agreed that the group continue to be for family members only. They expressed that this experience provided a space of their own and in turn many of their loved ones commented on their appreciation that as family members they were showing love and concern by making time for a group that centered on their illness. Finally, they liked the size of the group and liked that they were able to invite additional family members to attend sessions with them.

Cultural Domains

We learned that the five cultural domains from our earlier ethnographic study were salient but at different levels. Most cultural references and examples notably centered on familism and spirituality-religiousness. These cultural resources were the most prevalent topics dominating the cultural exchange process. However, cultural attributions—conveying acceptance and affection for their loved one—were salient in typical communication. Issues of biculturation and references to cross-border living were present but appeared to be more

in the background. For the last three domains, it was helpful for the interventionists to have an awareness of them and to competently highlight them in the group process.

Discussion and Applications to Practice

This study documented the process of culturally based intervention development for Spanish-speaking Mexican American families dealing with schizophrenia in a loved one. The development of the CFIMA was motivated and informed by the ethnographic findings on five salient cultural domains that underscored the need for more meaningful involvement of families with an approach that prioritizes previously untapped familial cultural resources. The CFIMA employs a family group format that progresses through three treatment stages as guided by the heuristic framework we developed. The intervention identifies and cultivates cultural resources and strengths that can play an influential role in improving outcomes for families and clients.

To our knowledge, this is the first culturally based intervention to be developed for this largely understudied population. This study was situated in Stage I research utilizing an iterative process of intervention development that was theoretically driven in guiding the cultural tailoring of intervention components and process. Through the three phases of treatment, the CFIMA model centrally recognizes and assesses, accommodates to, and integrates inherent cultural resources (five cultural domains) while also building on culturally adapted evidence components (psychoeducational curricula and multifamily group structure) leading to positive outcomes for families and clients, and improving the cultural relevance of treatment services.

The qualitative results showed that the CFIMA's strength-based approach is promising for boosting family well-being for low-aculturated Mexican Americans. Our preliminary evidence showing positive changes in knowledge, attitudes, and practices suggest that the intervention effectively responds to the needs and desires of families for their meaningful and productive involvement in the treatment process.

Our field experience in the development and implementation of the CFIMA confirmed its real-world applicability and provided insights into further refinement of the manualized intervention for a larger randomized trial. Lessons learned from every step of the intervention will be used to further refine the intervention manual. Quantitative and qualitative data analysis will be used to assess the effectiveness of this intervention trial and to support a future larger study with a larger sample of Latino family participants dealing with severe mental illness. We can anticipate that additional analysis of quantitative and qualitative data will show the effectiveness of the intervention on several client and family outcome domains. As such, this work can provide a model for how to integrate cultural factors into psychosocial services and enhance interventions in real-world settings for culturally diverse populations.

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Figure 1.
A heuristic model of family provider cultural exchange.

Figure 2. Logic model for the culturally based family intervention for Mexican Americans (CFIMA). Latino family system includes cultural domains, explanatory models, treatment needs, and preferences. Provider system includes provider/treatment culture and explanatory models.

Table 1**Research on Culturally Adapted Models for Latinos With Psychotic Disorders**

Authors	Study Design/Methods	Cultural Adaptation	Results
Patterson et al., 2005	Life skills intervention versus support group (6 months) <i>Sample</i> : Older Mexican American Spanish-speaking clients with schizophrenia	Culturally adapted content; incorporated Latino interpersonal style, values, and scripts	Life skills intervention improved performance on everyday living skills at 6 and 12 months
Kopelowicz, Zarate, Smith, Mintz, & Liberman, 2003	Skills training versus customary outpatient care (3 months) <i>Sample</i> : Latino outpatients (mostly Mexican origin) and a key family member	Culturally relevant translation, ethnic/language matching, flexible teaching style, inclusion of key relatives, and home visits	Skills training intervention had better outcomes on some symptom measures, skill acquisition and generalization, level of functioning, and rates of rehospitalization No differences in quality of life and no change in family variables
Telles et al., 1995	Behavioral family treatment versus case management (6 months) <i>Sample</i> : Mexican American Spanish-speaking immigrant families and clients	Translated into Spanish—no other information on cultural modification	No difference in clinical outcomes; at follow-up low-acculturated clients and families had worse outcomes