MEASURING READINESS FOR CHANGE IN TWO NORTHERN BORDER MEXICAN COMMUNITIES

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ABSTRACT

Community readiness for change was determined from a cross-sectional study performed in two United States-Mexico border communities—one new and one old—in Ciudad Juárez, Mexico during August 1999. The views of 53 community members were gathered via a semi-structured survey based on the Community Readiness Model (CRM), which was developed by the Tri-Ethnic Center for Prevention Research at Colorado State University. The CRM was used to identify issues of community concern, determine stages of community readiness for change, and identify courses of action to facilitate community-level change. Analysis of the data revealed that survey respondents in both target communities identified similar social issues, such as violence, as being problematic while they differed in the identification of infrastructure issues. Both communities earned a community readiness score in the denial stage for the social issues, but their scores for the infrastructure issues differed apparently due to age of the community. Although there were differences in the particular infrastructure issues, the newer community was in the vague awareness to preplanning stages, while the older community was in a denial stage in their issues. The CRM proved to be useful in these Mexican communities for quickly identifying community members’ perceptions of important local issues and problems. The model can provide policy makers with a rapid, inexpensive and reliable measurement tool to help the planning, implementation, and evaluation of community based intervention policies and programs.

INTRODUCTION

Health and social service organizations along the United States-Mexico border encounter exceptional challenges when they attempt to facilitate community-level change, due in part to high migration, variation in social norms, and influence from the neighboring country (El Paso Community Foundation, 1996). Ciudad Juárez, the sister city of El Paso, Texas, is no stranger to these phenomena, nor is it stranger to humanitarian interest; over 200 health and social service organizations are presently attempting to address dozens of border health issues in Ciudad Juárez (Scherer, 1999). Often times these efforts end unsatisfactorily due to lack of community knowledge about the health interventions and a scarcity of resources to maintain prevention programs in the target neighborhoods, each of which are often handicapped by inadequate program leadership and inconsistent support.

Community-Level Change and the Community Readiness Model

Change at the community level is particularly complex because it involves many interrelated factors, such as having a “champion” (Steckler & Goodman, 1989), sustaining citizen participation and empowerment (Florin & Wandersman, 1990), and maintaining long term funding (Steckler & Goodman, 1989). It also involves

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change across several strata such as individuals, small groups, and organizations that together make up a community. Other models and theories, such as the Transtheoretical Model (Prochaska & DiClemente, 1986), Diffusion of Innovation Theory (Rogers 1983), and Social Action Process (Warren 1978) have been used to assist community change but none fully address the complexity of community-level dynamics and processes.

One way of gaining a better understanding of a community’s potential success with health interventions is by measuring a community’s readiness for change. The Community Readiness Model (CRM) developed at the Tri-Ethnic Center for Prevention Research at Colorado State University provides a theoretical basis for change. It utilizes grassroots processes, is based upon the participation of multiple community sectors, and employs resources and strengths from within the community (Plested et al., 1998; Plested et al., 1999; Edwards et al., 2000). Using this model community leaders identify potential problem solving barriers in their own language and cultural context, and collaborate with professionals to develop interventions that are consistent with their own community population and stage of readiness for change (Plested et al., 1998; Edwards et al., 2000). The CRM also offers mobilization strategies for communities to progress through stages to higher levels of readiness. The CRM is the first method that describes community readiness in an integrated framework that is useful for the field practitioner (Edwards et al., 2000).

The CRM identifies six community dimensions that need to be addressed in order for community level change to be most successful. Community leaders are asked to identify interview questions oriented toward community efforts, community knowledge of efforts, leadership, community climate, community knowledge about the issue, and resources. Each dimension is scored by using descriptive statements on an anchored scale (Jumper-Thurman et al., in press).

The Community Readiness Model proposes nine stages that describe the progression of community involvement from tolerance of a problematic issue to the institutionalization and professionalization of programs that deal with its solution (Oetting et al., 1995). At the first stage, there exists a sense of no awareness of the problem. At this stage, the norms of the community condone certain behaviors and community leaders do not recognize that particular issue is a problem, but rather it is “just the way things are”. When the community recognizes to a certain degree that there is a problem, but there is little or no recognition that the problem is local, the community is in a denial stage. People often describe the issue as “not our problem” or they say, “we can’t do anything about it”. Violence in the community, for instance, is commonly thought as a police problem and not a community problem. Raising awareness that the target problem does indeed exist in the community can facilitate advancement to the vague awareness stage and can be accomplished by discussing local incidents frankly and openly within the community. Mid-level stages in the process are the preplanning and preparation stages. At these stages there is a clear recognition that the problem exists and that something should be done about the problem, and detailed plans start to be made to address the problem. There is generalized knowledge that the problem is local and about the pros and cons of dealing with the problem. At the preplanning stage some activities or policies to deal with the problem are discussed, but concrete data that shows the extent of the problem or specific actions to solve it are not yet available. Community leaders are active and energetic and are making decisions about who is going to perform what activities to solve the problem. Key strategies to move from this stage towards a more active stage focus on gathering existing information with which to plan strategies to deal with the problem. At this stage, surveys should be conducted to make in-depth local statistics available and presented to the community. The cost of the problem to the community should be emphasized, key leaders and influential community members should speak to groups, and radio or television programs dealing with the problem should be designed and disseminated. At the initiation stage a program to deal with the problem has been designed and started and a “trial” run is being conducted. If successful, the program becomes stabilized and becomes accepted as a routine activity in the community. After some time the program is viewed as valuable for the authorities and a period of expansion and improvement ensues. The program
is funded and other demographic groups replicate the efforts. The final stage is one of professionalization when the program infrastructure and a professional staff supported by the authorities and the involvement of the community is high. At this stage the program becomes a locus of epidemiological data and a training ground to other programs.

If interventions are designed without taking into consideration the community preparedness to carry the needed work, they may be ineffective, waste resources, and lose the hopelessness among members of the community. This is a cause of failure for many well-designed and well-intentioned programs, and one that can be avoided if the community's readiness for change is carefully assessed.

Study objectives

The study objectives were to: 1) identify the most important community problems in the old Colonia Bellavista and the newer Colonia Plutarco Elias Calles; 2) document any differences in community perceptions of prevention activities in the new and old communities; 3) identify community characteristics relevant to the success or failure of prevention programs; 4) offer recommendations for future prevention efforts. This study was conducted in Ciudad Juarez, Chihuahua, Mexico, and is one of very few investigations that examine readiness for change stages in a country other than the United States.

METHODS

Setting

Colonia Bellavista has a population of about 5000 inhabitants and is located adjacent to the downtown section of Ciudad Juarez. The neighborhood was established 70 years ago and is regarded as one of the older communities in the city. The people of Colonia Bellavista are considered to be on the higher end of the lower class income spectrum (Herrera-Robles, 1999). Many people who live in Bellavista work in El Paso and commute daily across the international border. Based on field observations Colonia Bellavista has a fairly well developed infrastructure as paved roads; access to water, drainage, gas, and electricity; phone lines; evident business activity; and fairly regular city maintenance. The only community organization running prevention and treatment programs in Colonia Bellavista is Programa Compañeros. For two years, Compañeros has been participating in the National Civic League’s Healthy Communities program with three main program initiatives: drug and alcohol prevention, drug and alcohol treatment, and community development.

Colonia Plutarco Elias Calles is located five kilometers from Colonia Bellavista in an area considered to be one of the more impoverished regions of the city. Established about 13 years ago, it sits high up on a rocky hillside on terrain that is difficult to develop. There are some governmental housing projects being constructed, but most of the houses are shanty-like—hastily constructed with cement, wood, and cardboard. Plutarco Elias Calles lacks a piped water system, drainage system, and telephone lines. When walking around this community, one first notices the condition of the unpaved roads full of ruts, strewn with debris, and snaking between buildings marked with graffiti. Plutarco Elias Calles has long been a target for community development and health intervention efforts. There are three organizations whose work is quite evident in the community: Antorcha Popular addresses environmental issues of clean water supply and drainage; Organización Popular Independiente (OPI) works on community organizing and utilizing promotoras (community health workers); and Centro de Asesoría y Promoción Juvenil (CASA) focuses on youth activities, family centered issues, and education.

Procedure

Data for this analysis originated from semi-structured interviews conducted with community key informants in August 1999 by ten students of the School of Social Work at the Universidad Autonoma de Ciudad Juarez completing their final field practicum before graduation. The students were trained by the researchers to follow a key informant selection plan and participated in practice sessions to develop their ability to apply the procedures and accurately complete the surveys used to record the interview data. Key informants were defined as individuals in the target community who possess specific interest in community development and well-being, and enough familiarity with the community that they could provide specific information on community dynamics. Examples of key informants are teachers, clergy, business owners, politicians, or...
community activists. In a snowball fashion, upon completion of the interview the participant was asked to identify other possible key informants in the community; those people were then contacted and asked to participate in the study. This continued until no new key informant names were elicited. The key informants in each of the two communities were asked to identify the problem they thought was most important in the community, and the survey was completed in reference to this self-identified problem. Thirty key informants in each community were interviewed, but due to inconsistent reference to one single community problem, data was analyzed from 24 respondents in Colonia Bellavista and 29 respondents in Plutarco Elias Calles. Interviews were conducted in community settings such as residences, hair salons, schools, stores, businesses, churches, and street corners. All participants gave verbal consent to participate in the confidential interview.

Data analysis

The interviews were scored using an evaluative process developed by researchers at the Tri-Ethnic Center for Prevention Research. Two evaluators who were familiar with the Community Readiness Model (CRM), the target communities, and the local culture scored the surveys independently. The surveys were first sorted according to the community-identified issue (such as robbery, gangs, or drainage). Next, each survey was assigned a dimensional score based on the CRM Community Scoring Scales. The evaluators compared the scores and re-reviewed them in the case of disagreement with the help of one of the researchers who acted as a moderator. This is an accepted procedure in the CRM, since the objective is to find consensus in the evaluation of the scores. The scores for each dimension were then averaged to give a final score for each dimension. Averaging the six final dimensional scores derives the final Community Readiness Score, which is then associated with a CRM stage of readiness. This procedure was derived from the work of Oetting et al. (1995) at the Tri-Ethnic Center at Colorado State University.

RESULTS

While reviewing the community readiness interviews, it became very clear that the problems of concern for the two communities fell into one of two distinct categories: social issues or infrastructure issues. The social issues comprised problems such as drug or alcohol misuse, robbery, and general public insecurity. The infrastructure issues were problems that arose from lack of adequate basic technology such as drainage systems. Depending on the issue, the final community readiness scores for Bellavista and Plutarco Elias Calles ranged from Denial Stage to Preplanning Stage.

Social Issues

Both communities, regardless of the time that they were established, identified similar social issues that revolved around public insecurity such as delinquency and robbery (see Table 1). In Colonia Bellavista twenty out of twenty-four respondents indicated a social issue as the community's greatest problem. In Plutarco Elias Calles, only about half of the respondents indicated a social issue. Both communi-
ties scored in the Denial Stage for the social issues. A community in Denial Stage typically recognizes that the issue in question is indeed a problem, but the community does not admit that the problem is local, nor sense that local action is important (Edwards et al., 2000). Responses indicated that community members are unclear not only about successful solutions to the public insecurity problem, but also about current prevention efforts. This somewhat static reaction of a community in Denial Stage was clearly demonstrated in this study where combined results (n=36) for social issues from both colonies show that 25 respondents indicated that “nobody has gotten together” to discuss the public security problems in their community. The remaining 11 said that some efforts had been made, but they later indicated that community leaders hadn’t done anything about the problem. Many people also stated that they “don’t know what to do” about the delinquency problems in their community.

Infrastructure Issues

Half of the respondents in Plutarco Elias Calles identified lack of a drainage system to be the greatest community problem. Colonia Plutarco Elias Calles scored in the Preplanning Stage for this issue, a result of scores that were noticeably higher than those of any other community problem identified in this study. The dimensions of “community efforts” and “community climate” were particularly strong, characterizing a community that is prepared to address the drainage problem. However, it is also apparent that respondents are unclear of the next steps and that they view lack of support by city authorities to be their primary obstacle to getting a drainage system.

Plutarco Elias Calles also exhibits some characteristics of a community in Preparation Stage. Data from the “community efforts” dimension show that 11 of 13 respondents said they were aware of community efforts to address the problem, and that meetings to discuss the issue took place every two weeks. Some say the community has been addressing the drainage issue for around 15 years. Respondents gave specific details of some of the efforts, which include writing letters to and visiting with the local water authorities, city mayor, and state governor. They also indicated that local community based organizations were heading up efforts. Not all respondents viewed these meetings as successful, however. Consider the words of one survey respondent who said, “A strength of the people of Plutarco Elias Calles is to hold community meetings while a weakness is their inability to unite [behind a solution].”

The most commonly mentioned infrastructure problem in Colonia Bellavista was the issue of garbage fines, as identified by three of 24 respondents. Respondents indicated that they were fined for not picking up the garbage in front of their houses, and were irritated because the garbage that accumulated in front of their house didn’t always belong to them. They claim that usually garbage had blown down the street from other houses whose tenants don’t keep their property clean. The colonia scored in the higher end of Denial Stage with regards to this issue, largely due to the influence of an extremely high score in the community knowledge about the issue dimension, which scored a 3.7 out of 4. The respondents also indicated that there were not enough garbage dumpsters, and that the garbage did not get picked up regularly enough.

DISCUSSION

Age of the Communities

One of the aims of this study was to identify differences in readiness for change in older established communities compared to younger communities. We were unable to clearly show that the Community Readiness Model (CRM) methods could distinguish overall differences in readiness based solely on the age of the community. Alternatively, we suggest that the length of existence as a community influences upon how the survey respondents identified issues. The older community, Bellavista, was more concerned with social issues, while the newer community, Plutarco Elias Calles was still struggling to obtain basic municipal services such as water and drainage. We believe that once Plutarco Elias Calles has a suitable drainage system, social problems will come to the forefront and residents of this colonia will become more concerned with the social issues affecting their lives.

Infrastructure Issues—The Next Steps

Some community groups have been lobbying for over a decade to bring a drainage system to Plutarco Elias Calles. Responses to questions relating to the CRM resources dimension indicate that the community is not completely sure what resources are
needed to bring a drainage system to fruition. The CRM predicts that this uncertainty can be remedied by establishing effective partnerships with professionals who are familiar with the engineering and financial components of installing a drainage system. The professionals would help raise knowledge about the drainage issue by presenting a prospective plan at one of Plutarco Elias Calles’ biweekly community meetings. Increased media exposure detailing concrete plans for future activities will help raise awareness of the drainage problem and maintain community interest (Edwards et al., 2000).

Community representatives are now facing powerful obstacles, such as lack of governmental support and continuity that hinder the advancement of community plans. When there is a change in government, the responsible personnel turns over and so do the social networks available to the community leaders. Leaders need to reestablish, develop and maintain strong social networks with the new policy makers who have the tactical connections and knowledge of governmental protocol so that the project can get approved and underway without delay. The immediate goal in this community is to mobilize their efforts toward obtaining a local drainage system. Although petitions and town meetings are important activities, the community has shown preparedness to step beyond these community organizing methods and focus on more sophisticated initiatives.

Addressing the Social Issues: The Role of Leadership

Results from this study support the effectiveness of the CRM in determining community readiness for prevention. The study indicates that both target communities were in low CRM stages of readiness in the social issue category. That social issues receive low readiness scores in not unusual. A study performed by Pliested et al., (1999) also indicated that Native American, Mexican American, and White communities were usually at a low stage of readiness when dealing with similar social problems. Because of the personal nature of these social issues, one can expect readiness scores to be low. One explanation is that people don’t want to accept that social issues are a local problem, thus they score them at the lower end of the scale. Another explanation could be that some social issues are not perceived to be community problems at all, but rather individual problems. Responses to our interviews clearly indicate that community members know that delinquency, robbery, and substance abuse are local problems...at least local enough to be happening to their neighbors. Few people said that these problems personally affect them, while many people said they affect “everyone”. It appears that people don’t consider crime and delinquency a local problem until they are personally affected, which is something that few people are willing to admit. Careful analysis and interpretation of these issues is necessary in order to develop appropriate workable intervention programs.

It is clear that crime is on people’s minds, since community members plainly identified it as one of their main concerns. However, people are hesitant to participate in crime prevention activities. Many said they are frightened of repercussions by the criminals. According to the Community Readiness Model, in order for communities such as Bellavista and Plutarco Elias Calles to advance out of Denial Stage there needs to be increased awareness within the community that change can be invoked (Edwards et al. 2000). Community leaders must address this hesitancy within the community, but they will be unsuccessful unless the leaders become more visibly involved.

There are community leaders, as shown by a handful of organizations working in the communities, but in general, respondents were unable to readily identify a program “champion”. The leaders’ visibility within the community must be accentuated so that the community awareness and community climate dimensions can remain strong. This can be accomplished by leaders personally circulating details of activities and local program successes (Edwards et al., 2000). When community members are more aware of the local details of the crime problem they will be more interested—or at least better informed—on the topic, which will correspond to greater participation in local prevention efforts (Edwards et al., 2000).

Key Informants vs. Community Members: The Case of Leadership

In previous community readiness studies using the CRM, key informants were defined as established community leaders who were highly informed and involved in community efforts regarding a pre-determined community issue. When this is the case, only four or five key informants were

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needed to gather information about community readiness perceptions. In the present study, key informants were not strictly formal community leaders; rather they were everyday community members who were concerned about their neighborhoods and the health and social development issues with which the community was confronted. The changes made in the key informant selection could account for some of the variance in the readiness scores. Key informants in the traditional sense would likely give survey responses translating to higher scores in the leadership and resources dimensions, for example, because it is the job of the key informants to know about these topics and ongoing programs. Asking the community members themselves about the problems provides a different perspective on the readiness scores, resulting in data directly reflecting the performance of leadership units. As shown by generally low scores in the leadership dimension, the perceptions are that the organization of interventions is only semi-operational. In the present study, culture could play an important role in the explanation of the scores. In Native American communities, where the CRM has been previously used, the social structure may be more hierarchical with clearly defined leaders and leadership roles. In Mexico, however, people are historically accustomed to a more transitory leadership (Krauze, 1997) and consequently leadership may be less valued to the citizenry.

**Norma’s Neighborhood Watch**

Not withstanding the transitory nature of Mexican leadership, programs do work. The following is an example of a program in Colonia Bellavista that was picked up by the CRM survey. Programa Compañeros, the community-based organization challenging adolescent drug use and promoting HIV prevention in Colonia Bellavista has recently begun addressing the issue of public insecurity—namely robbery. One of Compañeros’ social workers, “Norma”, a resident of the Colonia, responded to community requests for increased security and facilitated the development of a neighborhood watch in certain neighborhoods of Bellavista. The intervention began without a formal leader organizing the event—a few neighbors informally gathered in each other’s homes to discuss crime in their neighborhoods. They shared stories and brainstormed ideas as to how to combat the problem. They began a neighborhood phone list to call each other if they perceived any questionable behavior. Furthermore, they notified their neighbors of their daily schedules so that they could be “on the lookout” for any suspicious behavior while they were working or out of town. By word of mouth, the neighborhood watch grew to include families throughout several city blocks. Neighborhood leaders now carry hand-held radios so that they can immediately contact the police or ambulance when the need arises.

This intervention has proven successful in Colonia Bellavista. In fact, in the infrequent incidence that survey respondents were able to name a community leader, they often identified Norma. Norma’s intervention shows how aspects of the CRM can be utilized to facilitate the sophistication of prevention efforts. She listened to community concerns and helped a small group of concerned citizens brainstorm ideas to meet their needs. By getting together, they were able to share local and personal stories of crime in their community. The original group began visiting their neighbors to share their local experiences and increase community knowledge about crime as well as increase community knowledge about the new neighborhood watch prevention efforts. Participation in the neighborhood watch program quickly grew, and a sense of shared responsibility for the crime prevention efforts prevailed. In the area of resources, the hand-held radios have proven an effective means of communication for those who do not have immediate access to telephone services, as well as an efficient means of networking neighborhood leaders.

This effort, although preceding the CRM study, has closely followed the steps of the model. After stages of no awareness and denial, with the help of a catalyst (Norma) robberies were identified as a local problem (vague awareness) and the stages of preplanning, preparation and initiation followed. The community appears to be at a stabilization stage, and on its way for an expansion and possible professionalization, if the authorities used the model citywide. This model of community cooperation is not rare in traditional small villages in Mexico, and as community leaders (represented by Norma in the example) become catalysts for change, they evolve as invaluable allies to those trying to solve community-level problems.
CONCLUSION
The community problems identified by the survey respondents in Colonias Bellavista and Plutarco Elias Calles are issues that are common to many parts of the Mexico-United States border region and poor regions in most countries. Many of these problems can be solved or reduced with the appropriate intervention strategies. As suggested, the use of the Community Readiness Model (CRM) can allow us to determine the stage of readiness for change in a community and be able, with the help of community members, to facilitate the design of an appropriate intervention.

In the case of Plutarco Elias Calles, the immediate goal is to address the lack of a drainage system in their community; the community should be to raise awareness with concrete ideas to address their situation. Local presentations, media coverage, and focus groups to stimulate the generation of ideas and strategies are all recommended approaches. When a heightened level of community awareness of the drainage issue is reached, community members may then be ready to gather information with which to plan community-specific strategies, thereby strengthening their case when they approach city officials regarding their concerns.

For residents of Bellavista to successfully address the social issues that plague their community, there first needs to be community awareness and "ownership" of the problems. A suggested strategy could be to strengthen the capacity of community leaders to be leaders. Leaders could become involved in issue-awareness activities such as leading small community discussion groups about robbery or presenting information to already established community groups about drug and alcohol abuse in the neighborhood. The benefits of this simple strategy are twofold. First, community leaders will become observable and perceived by the community members to be actively engaged in addressing the community problems. Second, once they are acknowledged as leaders, they will have more social influence and community support, thus leading to increased participation in events that will make it possible to raise awareness that the community can develop tailor-made solutions to addressing their own problems. Leaders will then have information they can use to guide their community through activities that will take them through subsequent stages of readiness.

The Community Readiness Model, in this study, has proven to be an effective tool for identifying community issues and pinpointing specific community dimensions to which specialized and appropriate intervention techniques can be applied to provide maximum readiness and program success. The application of the Community Readiness Model in Colonias Bellavista and Plutarco Elias Calles has not only revealed information about community readiness, but it has also provided crucial insight into the community beliefs and norms. The CRM has also proven to be sensitive to a wide range of community problems and concerns. It has the capacity of being applied to poor and minority communities where intervention efforts often do not have much input from the community during the design and implementation phases.

Additionally, the study shows that when adapted to incorporate the perspectives of "regular" community members, as opposed to a select few key informants, the CRM offers access to the sometimes unstructured insights of the true community members. The perspectives of these "everyday citizens" are particularly made clear in the dimensions of leadership, community climate, and community knowledge of the issue. Indeed, the CRM tool can be valuable for community-based organizations, foundations, and other organizations searching for ways to improve the prevention efforts of communities along the Mexico-United States border as well as other developing regions around the globe.

RESOURCES


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