

# TAILORING AN INTERVENTION MODEL TO HELP INDIGENOUS FAMILIES COPE WITH EXCESSIVE DRINKING IN CENTRAL MEXICO\*

Guillermina Natera Rey\*\*, Marcela Tiburcio Sainz\*\*\*

## SUMMARY

Alcohol has been acknowledged as one of the psychotropic drugs consumed in nearly all cultures. The study of alcohol use among indigenous and rural communities from an anthropological perspective highlights the function of alcohol in the social cohesion, and tends to minimize the consequences of consumption.

This research adopts a complementary paradigm more closely linked to the acknowledgement of the significant increase in alcohol availability, coupled with its excessive promotion and the lack of support services for other related social, economic and even religious problems.

Two groups are affected by excessive drinking: consumers and their closest social nucleus, i.e. the family, both of which require assistance. The aim of this article is to describe the process followed to adapt to the indigenous context a brief intervention model to support the drinkers' families, which is based upon the stress-strain-coping-support model and has proved useful in helping to deal with the dilemmas faced by relatives concerned with a family member's excessive drinking.

The adaptation process included four research phases involving different qualitative methods: 1. feasibility, which includes the initial ethnographic research, 2. the adaptation of instruments and psycho-educational materials, 3. the development of an intervention manual and finally, 4. the development of cost-benefit evaluation indicators.

The data are drawn from two small indigenous communities located in the arid zone of Valle del Mezquital, in the state of Hidalgo, 300 km from Mexico City. Various strategies drawn from qualitative methods were used in the different phases, i.e. individual interviews with key informants and community members, focus groups, field notes, cognitive laboratories, and the application of semi-structured and structured questionnaires.

Different factors were identified as potential challenges for intervention: The existence of a patriarchal organization, fear of gossip, the different perceptions of alcohol consumption, linguistic connotations, poverty, time constraints, and the right not to inform the participants exert.

It is crucial to increase awareness in order to improve well-being through various means. Women must be offered alternative responses to a dominant patriarchal structure, by helping them overcome the fear of discussing their problems, taking care not to offend their traditions and encouraging mechanisms that will weaken the power of gossip. Likewise, men must be convinced of the harmfulness of alcohol consumption and its effects on the family.

**Key words:** Intervention, indigenous population, alcohol abuse, family, Mexico.

## RESUMEN

El alcohol se reconoce como una de las drogas psicotrópicas que se consumen en casi todas las culturas. El estudio del consumo de alcohol en las comunidades indígenas y rurales desde la perspectiva antropológica resalta el papel del alcohol en la cohesión social y tiende a minimizar las consecuencias del consumo.

Esta investigación adopta un paradigma complementario que considera el incremento significativo en la disponibilidad del alcohol y la excesiva promoción que recibe, así como la falta de servicios de apoyo para atender otros problemas sociales, económicos e incluso religiosos que se relacionan con el consumo.

Al menos dos grupos son afectados por el consumo excesivo de alcohol: los bebedores y su núcleo social más cercano, es decir, la familia, y ambos requieren atención. El objetivo de este artículo es describir el proceso que se siguió para adaptar al contexto indígena un modelo de intervención breve para apoyar a las familias de los consumidores. La intervención se basa en el modelo estrés-tensión-enfrentamiento-apoyo, y ha mostrado ser útil para ayudar a las familias a lidiar con los dilemas que enfrentan en relación con el consumo de alcohol de alguno de sus integrantes.

El proceso de adaptación consta de cuatro fases de investigación: 1. factibilidad, que incluye una investigación etnográfica inicial, 2. adaptación de instrumentos y material psicodidáctico, 3. desarrollo de un manual de intervención, 4. desarrollo de indicadores para la evaluación del costo-beneficio.

\*A preliminary version of this article was presented at the I Meeting "Antropología física, salud y sociedad", Escuela Nacional de Antropología e Historia, September 11-12, 2006, Mexico City.

\*\* Coordinadora de Investigaciones Psicosociales del Instituto Nacional de Psiquiatría Ramón de la Fuente.

\*\*\* Investigadora del Instituto Nacional de Psiquiatría Ramón de la Fuente.

Correspondencia: Guillermina Natera Rey. Instituto Nacional de Psiquiatría Ramón de la Fuente. Calzada México-Xochimilco 101, San Lorenzo Huipulco, Tlalpan, 14370, México DF. E-mail: naterar@imp.edu.mx

Recibido: 11 de julio de 2007. Aceptado: 31 de julio de 2007.

La información proviene de dos pequeñas comunidades localizadas en la región árida del Valle del Mezquital, en el estado de Hidalgo, a 300 km de la Ciudad de México. En la investigación se emplearon diferentes métodos cualitativos: entrevistas individuales con informantes clave y miembros de la comunidad, grupos focales, laboratorios cognitivos y la aplicación de cuestionarios semiestructurados y estructurados.

Se identificaron diferentes retos para la intervención; entre ellos, la existencia de una estructura de organización patriarcal, el temor al chisme, las percepciones del consumo de alcohol, las connotaciones lingüísticas, la pobreza, las limitaciones de tiempo y el derecho a no informar que ejercen los participantes.

Es crucial incrementar la conciencia en relación con la necesidad de lograr mayor bienestar. También es necesario ofrecer a las mujeres respuestas alternativas frente a la estructura patriarcal dominante sin transgredir sus tradiciones ni debilitar el poder del chisme. Por último se requiere sensibilizar a los hombres respecto a los daños que se asocian al consumo excesivo de alcohol y la forma en que éste afecta a la familia.

**Palabras clave:** Intervención, población indígena, familia, abuso de alcohol, México.

## INTRODUCTION

Although alcohol has been acknowledged as one of the psychotropic drugs consumed in nearly all cultures, its study from an anthropological point of view has tended to minimize the consequences of consumption. It is only in the past twenty years that the need for a more complex recognition of the problem of alcohol in rural and indigenous zones has been raised (15).\*

Although it is useful to determine the function of alcohol in the social cohesion of indigenous and rural communities, particularly among the male population, this does not mean that alcohol consumption does not have consequences on health or family and social life. This view does not seek to medicalize the problem of alcoholism or to turn it into an individual disease dissociated from the socio-economic conditions of the context.

This complementary paradigm is more closely linked to the acknowledgement of the significant increase in alcohol availability coupled with its excessive promotion and the lack of support services for other related social, economic and even religious problems.

There are many reasons why rural indigenous communities, the poorest in Mexico, still lack treatment services, including the fact that these communities are widely dispersed and difficult to reach in addition to the insufficient resources assigned to these populations for health matters.

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\* The most recent epidemiological research in Mexico (1) indicates that everyday consumption among the rural population is 1.2%, with usual consumption being 4.5%, whereas that of the urban population is 1.7% and 5.7%, respectively.

Nevertheless, it is well known that this population can be extremely vulnerable due, on the one hand, to the free availability of alcoholic beverages which are often produced at home without proper sanitary precautions and intended for home consumption and, on the other, to the easy access to beverages such as beer. Despite the distance and poor roads, beer manufacturers dominate the rural market. As a consequence, in many places it is easier to obtain beer than water, and it is replacing traditional beverages. Consumers mistakenly believe that beer is less harmful than the latter, which in turn has led to an increase in consumption. Moreover, poverty, which limits people's nutritional intake and other indices of well-being, means that these consumers are less able to cope with the effects of excessive consumption than other populations with similar consumption levels.

Two groups are affected by excessive consumption: consumers and their closest social nucleus, i.e. the family, both of which require assistance (3). By family we mean any type and structure of coexistence, comprising the individuals each person regards as a family member. Some studies show that when family members receive help to develop healthier ways of coping with this problem, this may help create greater well-being for all family members and may even influence the consumer's behavior and encourage him or her to seek help to reduce drinking. For this reason, this article does not target consumers but rather their families as the group that suffers the immediate consequences of alcohol abuse.

The aim is to account for the process implemented to adapt a brief intervention model to support the drinkers' families to the indigenous context. Such process includes four research phases involving different qualitative methods: feasibility, which includes the initial ethnographic research, the adaptation of instruments and psycho-educational materials, the development of an intervention manual and, finally, the development of cost-benefit evaluation indicators.

In many respects, drinking patterns among the indigenous population are thought to be closely linked to historical influences and cultural norms which constitute a common origin, give them a feeling of belonging and compel them to provide support and loyalty. Thus, when researchers attempt to explore alcohol consumption and its consequences, community members may feel that this practice is threatened by a potential intervention that will force them to stop drinking, as a result of which we assume they will fail to promote this intervention model.

Any intervention, understood as a meaning-creation process, is an extrinsic act standing apart of the autonomous development of the collectivity, which distur-

bs a stable regime. However much we attempt to consider their members' history and values, we will always be "outside the collective, private memory" and the link will always be asymmetric. Intervention processes require "the implementation of a framework of unusual norms in a universe that already has its own guidelines, which necessarily creates a sphere of confrontation" (7). It was therefore essential to conduct a feasibility study to determine the main behavior surrounding alcohol consumption and the habits, beliefs and possible barriers to the intervention, assuming that this knowledge may reduce the "sphere of confrontation" of any unsolicited intervention.

**Brief description of study zone.** The data are drawn from two small indigenous communities located in the arid zone of Valle del Mezquital, in the state of Hidalgo, 300 km from Mexico City. Sixty per cent of the population aged over five in this municipality speak an indigenous language, while 85% speak Spanish. The overall population in both communities is 1191 inhabitants, 55% of whom are women and 45%, men. The economically active population comprises 27.1% of the total number of inhabitants, while 476 individuals aged 15 or over are illiterate (4). Due to the lack of jobs, both men and women have begun emigrating to the United States. Paradoxically, this has led to the economic development of both individuals and communities, since emigrants bring or send resources for building their houses or working in the corn fields or *milpas*, for which they hire those that remain. Local inhabitants are primarily engaged in farm work, meaning that they take care of their own plots of land or work as day workers in nearby areas. Growing *maguey* is part of their everyday lives, as well as being one of the main sources of income, since it provides food, *aguamiel* (agave juice) and *pulque* (fermented agave juice) for their own consumption and sale, fiber for producing various woven articles, as well as cattle fodder. Although dried maguey leaves are also used for building traditional homes, this practice has fallen into disuse since nowadays most houses are made from brick and cement. Excessive alcohol consumption is a widespread practice, particularly among the male population, the beverage of choice being beer, although *pulque* consumption remains significant. The region in which these communities are located has a mortality rate from hepatic cirrhosis of 40 for every 100000 inhabitants (8).

In order to be admitted to the communities, researchers had to submit a work plan to the Community Assemblies and their inhabitants had to vote to allow us to carry out field work. Moreover, informed consent had to be obtained for each form of participation, i.e. interviews, focus groups, etc. Voluntary parti-

cipation was always requested from the participants, to whom the objectives of each phase of the study were explained, together with their authorization to record them, when necessary.

**Brief description of the intervention model to be adapted.** The intervention model is aimed at helping family members to identify and reflect around the ways they have coped with consumption and its consequences, in order to find more effective ones that could also reduce the stress they experience. It comprises five stages: 1. Listening and exploring the perceptions and circumstances surrounding the way consumption affects families; 2. providing objective, relevant information on substances and their effects; 3. identifying the natural mechanisms of the ways of coping with dilemmas and analyzing their advantages and disadvantages; 4. exploring the support received and seeking other alternatives and 5. referring relatives to sources of specialized help (9). This model originally arose from a research project undertaken with urban population from Mexico City (11) from which three main areas were drawn, comprising eight different ways of coping with the problem of heavy drinking relatives: emotional, controlling, tolerant, inaction, avoidance, support, assertiveness and independence. Such ways of responding could be regarded as universal variforms according to the cultural context. The intervention follows the stress-strain-coping-support model and has proved extremely useful in helping to deal with the inevitable dilemmas faced by relatives concerned with a family member's excessive alcohol use (16). These dilemmas are dealt with through a cognitive analysis of the ways of responding, by analyzing the advantages and disadvantages of each of the eight coping strategies (13). Now that its efficiency in the urban zone has been proved, it will be adapted to rural zones. Below is a description of the phases involved in the adaptation process together with a brief account of the technique, participants and main results.

### **Phase 1. Feasibility study**

Various strategies drawn from qualitative methods were used in this ethnographic study: a) conversations held during researchers' stay in the communities; b) application of a semi-structured questionnaire on general health and the perception of alcohol consumption to 80 members of the community aged over 18; drinking practices and effects of drinking; c) twelve interviews with community members; d) six focus groups, including four with women and two with men; d) field diary records on everyday life based on the visits to both communities from 2003 to 2005; e) observation of places and public events involving consumption of

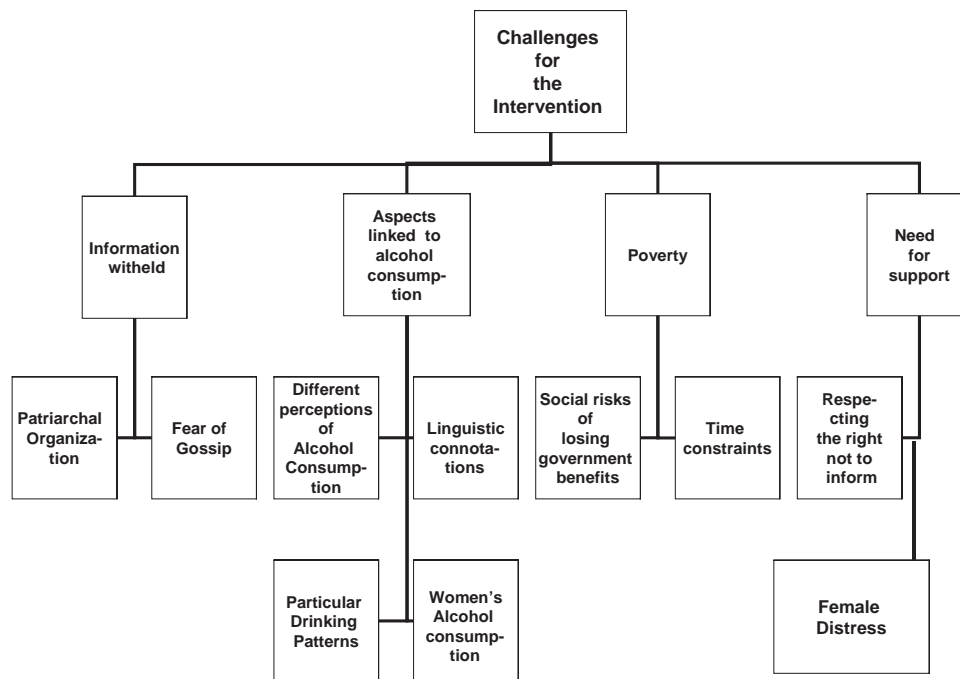


Fig.1. Results of Phase 1. Challenges for the intervention

alcoholic beverages, family celebrations, and traditional community festivities, and f) interviews with key informants involved in health, education and administrative activities of the communities.

All the interviews and the filling in of the questionnaires were carried out in private, in different spheres: during waiting times at the health center, at home, in the street and in small stores when there was no one else around. The interviews lasted one hour and a half on average, while completion of the questionnaires took between 30 and 45 minutes. The field work was carried out by trained social psychologists. The section analyzed here contains information on the perception, attitudes and dynamics of alcohol consumption and its consequences.

The first striking finding was the difficulty to determine the perception of the impact and scope of alcohol consumption in the communities. The questions, "Is alcohol consumption in the community a problem?" and "Does anyone in your family drink?" elicited contradictory answers. Neither female nor male inhabitants mentioned this as a problem, an women avoided the issue by saying "nobody" or that it was not a problem. In their view, the problem lay more in the excessive workload, lack of money, the fact that young people emigrated, problems with children, the distances they had to travel, the lack of time for other things, and another major factor, which was the amount of dust, meaning that "as soon as they finished cleaning, the house was dirty again," being abandoned by their husbands, gossip, which prevented them from doing things and to a far

lesser extent, alcohol consumption. They tended to mention alcohol consumption when it was acknowledged by the entire community, particularly when it was associated with another problem, such as violence.

Conversely, qualified informers cited alcohol abuse as the main problem in families and the source of all their problems. However, the reasons for the two points of view gradually emerged. Among the latter group, it reflected the need to justify their scant achievements in their respective jobs; their children's poor academic performance, the neglect of their health, the few changes in the community, their failure to progress and family violence.

It proved more difficult to determine community members' position. Men showed that they did not want others to influence their drinking patterns, although they welcomed interventions for young people. A group of men declared, "Don't try to change us, that's the way we are and that's how we'll be when we die," which reflects the powerlessness they would feel at having to accept "a new concept of health" (such as counting the number of drinks they had), although they added, "Go and see the young people".

In turn, women's refusal to admit alcohol abuse to "strangers" proved more difficult to understand. Below is an explanation of some of the most important issues involved in the failure to acknowledge alcohol-related problems (figure 1).

*The existence of a patriarchal organization.* Patriarchy, the most widespread form of family organization in the world, involves subordination to male authority, norms and values that are psychologically and/or physically

imposed by men. We know that the patriarchal system can be extremely powerful, since its authority is reinforced by institutions, meaning that community activities follow this hierarchical organization (6). Some forms of patriarchal control may be more obvious, others more subtle and therefore more difficult to observe, which is what happened at the beginning of the research. Men fear that the intervention will change women's behavior. Sometimes they could be seen in the street talking to the researchers, saying, "*Don't change her.*" This scared them and made them distrustful about discussing their problems. During a focus group, when asked to discuss alcohol consumption, it was significant that women said, half jokingly, "*Let's not talk about alcohol because the men get angry*", although they eventually ended up discussing the issue.

*Gossip* is used as another form of social control that prevents women from admitting their problems for fear the information will spread. One of their restrictions includes not discussing problems related to alcohol, since this means that they are accusing their husbands. Women were keen to discuss their problems, yet worried that the information would spread beyond the sphere of the interview and that everything would end up as gossip. The role played by gossip, the content of which is usually linked to the violation of a rule, is based in this case on an unwritten, albeit very common rule, namely female infidelity, but it is never related to male infidelity. It is a form of control over women's lives by both the men living in the community and those that temporarily emigrate. These men often send messages such as, "*I've heard that you've been misbehaving*", although they know this is not true. Men are hardly ever mentioned in gossip, which is nearly always oriented towards "ruining a woman's reputation" (2).

*Perceptions of alcohol consumption.* Another factor that hampered the flow of information on the perception of alcohol consumption is that people are used to pulque consumption. They grew up with it as part of their food and subsistence, which is why it is hardly surprising that people should drink pulque. People are now aware that it contains alcohol and can cause damage, and even mention the fact that this is why it is no longer given to babies.

*Language.* Together with this argument, another issue involving language difficulties emerged. If people that do not have much contact with the outside world, i.e. who have not emigrated or do not visit urban zones, are asked whether they drink alcohol, the answer is likely to be no, because alcohol is understood to mean 96° proof, which is not drunk here to the extent that it

is in other parts of Mexico. If asked whether "*anyone in their home drinks*" unless that person does so to excess, they are likely to answer "*no*".

The term "alcoholic" is not used, since people prefer to call them "drunks". Heavy drinking is also identified with the term "*getting lost*" or when these behaviors have been associated with serious illnesses such as cirrhosis, pancreatitis or extreme violence.

*Drinking patterns.* Attempting to determine drinking patterns is closely linked to the semantics of language and is extremely difficult. A person's amount of drinking tends to be classified as "*a lot*", "*a little*", and "*none*". Consumers have difficulty specifying the amount of alcohol they drink per occasion. There seems to be a consensus that feeling drunk requires approximately ten beers containing 900 ml each, although according to the following testimony, frequency would appear to be more important than amount.

*Drinking*(which is synonymous with "getting drunk") involves having eight drinks a day, since the body gets used to it and it's really difficult to stop...! (Group of men, ages 36-47.)

In any case, quite apart from language use, people are unlikely to discuss heavy drinking with a stranger. Teetotalism is understood in a fairly tolerant fashion. *Alcohol and women.* Women are usually responsible for running the small establishments where beer and other products are sold. These places often have chairs and tables where men can drink in the afternoons.

Women, together with children aged 12, also scrape the maguey twice a day to remove the sap from the heart of the plant to sell it to intermediaries that turn it into pulque. They do not associate this with putting young people at risk of becoming familiarized with pulque.

*Women that do not drink are respected. For example, they say that Doña X has never, ever had a drink and men admire her for that, they really do.* (Focus group, 4 housewives.)

In view of the above, one could easily think that almost everyone drinks, even if only in small amounts. Although very few women are heavy drinkers, even if they are, the matter is not discussed. Two women, however, asked to be helped to stop drinking. When asked what they would suggest to help other people with similar problems, one of them replied:

*If only the women and men that drink would take care of themselves. If they don't look after each other, who's going to look after them? No one, not even their mothers or fathers or brothers and sisters. People say, "Let him drink, if he dies, it's his choice". But they shouldn't do that...My mother never told me how to stop drinking pulque... Why do I drink? It's my life and my choice. But no, you shouldn't drink. The truth is that you should take care of yourself, now that you're alive, before it's too late...(30-year-old woman.)*

*The culture of poverty as a challenge to any intervention.* People often failed to turn up for a single interview, even if they needed help or had requested it and were convinced they would be able to attend. However, they always had a good reason for not going, since they gave priority to their immediate basic needs. If they have to work or cook or have any other family emergency that further affects their meager economy, they will probably postpone the interview and obviously have no way of calling to cancel it (there are only five public telephones in the community). This means that interventions should be brief and provide rapid, practical solutions to their problems. In addition, the facilitator should be tolerant and flexible as regards the use and meaning of time and justified absences.

*Social risks of losing government benefits.* When a population has enormous socio-economic disadvantages and is finally receiving some form of social benefit for overcoming them, it is afraid of losing them. Thus, the entire community feels or perceives that providing information may jeopardize this social benefit. The community therefore responds in a desirable fashion by trying to be reserved and providing limited, cautious information.

We sometimes felt that people suspected that the information they gave us could be used to deprive them of their pensions if they failed to periodically check their health. Although the term "alcoholism" was not mentioned, they felt that if they admitted being heavy drinkers, they would either have their pensions cut off or be obliged to start treatment.

*Need for support.* In addition to what women said about the need for help, one of the informants provided the following summary:

*... drinking is a serious problem. Everyone drinks but no one wants to stop doing it even though it causes serious problems of domestic violence. You say that people are very distrustful and perhaps they do not tell you the whole truth because they are worried that other people will find out and involve them in gossip. Anyway, it's precisely the people with the most problems that are least willing to talk about them.*

Nevertheless, indigenous women are seeking refuge in Evangelical churches as a means of coping with their husbands' alcoholism. The men sometimes follow them, although rarely.

Women join the Evangelical Church (approximately 8% of them are evangelicals) as a coping strategy and in the hope of relieving the suffering caused by alcohol abuse or violence. This led "B", aged 35, who had just converted to this religion, to say, *"I thank the Lord that we don't suffer any more, now we are happy"*. Both she and her husband used to drink pulque and she often used

to get drunk, although once again, she was unable to say how often. This may however explain the community's rejection of the Evangelical Church; parents forbid their children to speak to the few Evangelicals in the village. For one informant, the fact that his wife had converted to Evangelism during his absence was *"worse than if she had gone off with another man"*. He rejected her and spent his time getting drunk. Both communities are Catholic, as opposed to those in the surrounding area, which are Evangelical, who have been forced to change their drinking habits, which they feel the Catholic Church does not oblige them to do.

It is not easy to convince men to modify their behavior, even if they suffer consequences such as cirrhosis or diabetes. Some follow their doctor's instructions, but others do not. If they know that the illness will kill them, without thinking about any of the other consequences this could have for their families, they say, *"I'll die if I drink, but I'll also die if I don't drink, but it's nobody's business but mine, I'm not asking anyone for anything"* (50-year-old man).

*Respecting the right not to inform.* Community members obviously have the right not to provide information, due to the reasons mentioned earlier, or simply because they do not wish to inform, given their experience of not receiving anything in exchange. If the researcher forces the interview, he or her may achieve what he wants. This may, however, be uncomfortable for both parties and have negative consequences in the future. It would also violate the ethical principle of respect for the other.

One can infer from this stage that women in particular wish to receive assistance and that men's attitude may constitute a bastion of resistance. Alcohol abuse is a problem that should be considered when training facilitators, who should be made aware of the main forms of resistance they may face and helped to solve the dilemma of changing women's ancestral role of obeying and protecting their husbands, and men's role of being forced to decide what they should or should not do. The best route is to win their trust and not let them down.

## **Phase II. Adaptation of instruments and psycho-educational materials for transforming the intervention model**

In order to assess the psychological distress and the different ways in which excessive drinking is coped with in these communities, it was necessary to adapt a set of instruments that have previously proved reliable: the Coping Questionnaire (CQ [12]), the Symptom Rating Test (SRT [5]) and the Center for Epidemiologic Studies Depression Scale CES-D [14].

The instrument adaptation involved two phases: 1. cultural semantic adaptation, which yielded easier to

understand versions; 2. validation and identification of the psychometric properties of the new versions, where acceptable reliability levels were observed: CQ  $\alpha=0.8707$ , SRT  $\alpha=0.9012$ , CES-D  $\alpha=0.9105$ . A more detailed description of the whole process has been published elsewhere (17).

On the other hand, the psycho-didactic material of the intervention model comprises drawings representing each of the eight different ways in which relatives can cope with substance abuse and enables the participants to identify the actions, cognitions and emotions that characterize each coping.

The use of images as a psycho-didactic resource has a number of advantages: 1. it allows an enormous amount of information on the environment to enter people's awareness; 2. it creates the cognitive basis for anchoring a wide range of symbolic conceptualizations, and 3. it has an enormous power of evocation; in other words, the use of images facilitates the appropriation of knowledge (20).

The specific objectives of the study reported here include: 1. obtaining a description of the images comprising the psycho-didactic material; 2. analyzing how the images are understood; 3. comparing the description of each image with the original conceptual definition of the eight coping mechanisms; 4. identifying the advantages and disadvantages attributed to each coping strategy in this specific cultural context; 5. identifying the terms used by this group to name each of the coping strategies; 6. developing an adapted version of the images by recovering features of the physical characteristics of the environment and the population (18).

Eighteen women took part in this stage, seven were interviewed individually and the remaining 11 were interviewed in three groups of 3, 6 and 2 members. The women were aged between 30 and 56, most had completed elementary school and five had completed secondary school. Most of them were either housewives or worked in shops. Five of the interviewees lived or had lived with relatives that were heavy drinkers.

This qualitative phase was based on the methodology of cognitive laboratories (10, 21, 22). Two main aspects are considered in cognitive laboratories. Participants must engage in a cognitive task that may involve asking or solving a problem, while particular attention is placed on the cognitive process the subject undertakes in solving the task, which is why the subject must verbalize the mental process followed to reach the solution (10, 22). The researcher asks questions about a particular aspect (e.g. What did you understand? How did you arrive at the solution? Could you tell me how you would explain that in your own words?).

The individual and group forms of the concurrent cognitive laboratory methodology were used to obtain

a description of the images. Participants were asked to describe the advantages and disadvantages of each coping strategy.

To begin the interviews, the participants were told that a story would be read in which they would have to choose a man and a woman's name for each of the protagonists. The story depicts the hypothetical case of a family in which one of the members is a heavy drinker:

*Pedro and Rosa married 10 years ago and have three children. When Pedro has a beer or any other alcoholic beverage, he cannot stop and although the others tell him to stop or he'll start to feel bad, he goes on drinking until he collapses or goes to sleep. The next day he doesn't remember anything he did or feels so bad he cannot go to work until he has another beer. Sometimes Pedro does things he wouldn't do if he were sober such as fight with his children, brothers and sisters and wife. He has had accidents while he was drunk and has sometimes had to go to the doctor because of the strong pains in his stomach.*

With this story as a reference, the participants were shown each of the drawings one by one, in no particular order, and were asked the following questions:

1. What's happening in this drawing?
2. What could happen if a person behaves like this?
3. What are the advantages and disadvantages of behaving like this?
4. What title would you give this drawing?

The interviews were transcribed and the interviewees' interpretations of each image were subsequently analyzed. The categories used for the analysis were drawn from the four basic questions in the interview guide.

The frequency with which the female interviewees referred to concepts that may be crucial in defining each of the coping mechanisms, depicted in the drawings, was obtained and compared to the original conceptual definition of each coping mechanism.

Advantages and disadvantages of each coping mechanism were also analyzed as means of exploring the dilemmas involved in dealing with a heavy drinker. The original concepts of "advantages" and "disadvantages" used with the urban population were not easily understood, which is why they suggested the terms "good results" instead of advantages and "bad results" instead of disadvantages; these concepts were used in subsequent interviews.

Every picture and coping mechanism entailed different difficulties. For example, the images of emotional coping mechanism, inaction, avoidance and independence were changed after the first individual and first group interview, since the interviewees proved to have difficulty identifying with these images. The drawings were used to replace the original images shown in Appendix 1. In the case of emotional coping and avoidance, the difficulty was due to the fact that original

TABLE 1. Emotional coping. Comparison of conceptual definition and description of picture

<i>Conceptual definition</i>	<i>Information from cognitive laboratory</i>
<p>This is the direct, outright expression of the relative's emotions aimed at the user. For example, it includes starting arguments about his alcohol/drug consumption, threatening, crying, begging and accusing. It implies a loss of control on the part of the relative, who acts impulsively and often resorts to physical and verbal aggression, such as hitting, shouting or taunting the user. The relative often makes empty threats as well as accusing the user of not loving or of disappointing him or her.</p>	<p>They are discussing their problems and they are both annoyed. There is no agreement; the woman is worried because she feels bad, and I think they are quarreling, aren't they?                      They are talking, chatting, having a conversation. They both look annoyed.                      I imagine they are quarreling. I imagine they spend a long time arguing because the man is drunk.                      I imagine she is telling him not to drink. She is talking to him and is annoyed and is asking her husband to stop drinking.</p>

drawings only showed men. The drawing used to represent inaction showed a woman with short hair wearing trousers. Since very few women in the community wear trousers and they all have long hair, the image had very little in common with them. Finally, the drawing depicting independence was changed due to the fact that it fails to represent the diversity of actions related to this coping mechanism.\* Moreover, this image is interpreted as the possibility of continuing to study. Although there are adult education options in the community, very few women make use of them, since their husbands do not allow them to, which is why the image is not entirely suitable.

Below are just some of the examples of how each of the mechanisms were analyzed, together with an analysis of the description of each image and its congruence with the conceptual definition of each coping mechanism.

**Emotional coping.** Both individual and group interviews yielded information that coincided with the emotional coping mechanism, such as the references to anger, concern and arguments (table 1). The key concepts in which there was the greatest consensus over the individual and group responses were anger or annoyance and arguments. This corresponds to what it is attempting to depict, since emotional coping involves conflict, fighting and arguments, etc.

As for identifying the consequences of this type of coping and evaluating them, the interviewees described the possibility of the user's rethinking his actions and stopping drinking as "good results", while two women agreed that this coping mechanism would not have good results.

At the same time, the most frequently identified "bad results" were the possibility that the user might get angry and hit the relative, the separation of the couple and the fact that the woman would have an attack of

nerves. Suggested titles for this drawing included "The man that suffers", "The bad-tempered man", "The angry man", "María, the cross woman", because in the drawing she looks very cross, "The first stage of the problem, because it is when it starts", "The couple that fails to communicate".

**Avoidance coping.** The concepts most frequently related to these images were: a) escaping from the problem, b) despair and c) anger/ire/being annoyed. The word "scared" also appeared once (table 2).

The interviewees acknowledged the fact that the most important "good result" of this type of reaction is the sense of relief for the woman that runs away from her heavy-drinking husband. Another advantage is the possibility of finding help, although two women thought that nothing good would come of avoiding the user.

As for "bad results", they mentioned the fact that this coping mechanism actually did nothing to help the user, could affect their children, who would be left behind and might get scared or else the woman might run the risk of doing something crazy (such as committing suicide). Suggested titles for this picture were "The desperate woman," "The desperate lady," "Trauma," "María seeks help," "Plucking up courage," "Rosa in despair," "The upset woman," and "The desperate woman."

One of the main contributions of the cognitive laboratories was to provide terms for describing each coping mechanism in a simpler language that was commonly used in the community. For example, the concept of assertiveness could be translated as "*Talking without fighting*". The definitive titles for each picture will be tested during the next stage of research.

### Phase III. Contents of manual

The first version of the manual (19) was drawn upon the basis of the previous two stages. It is designed to train health or education personnel or facilitators from any other social discipline. The aim is for the facilitators to live in the surrounding communities, so that they will become familiarized with the context, since although many of these people have left the area to study, when they return they often believe that the

\* The independence mechanism implies continuing with one's own interests and those of other family members who are not drinkers, despite the fact that the user continues drinking. This may include becoming involved in sports, political, religious and community activities or finding an activity that contributes to the relative's well-being (12).



TABLE 2. Avoidance coping. Comparison of conceptual definition and description of picture

<i>Conceptual description</i>	<i>Information from cognitive laboratory</i>
Refers to the actions, desires and intentions of the relative that tend to distance him or her physically and emotionally from the user. The relative tries to act as though the user did not exist. She is deliberately cold and distant to him, ignoring him, trying not to speak to him and asking him to leave home. Sometimes the relative avoids the presence of the user by staying in different rooms or leaving the house for short or long periods.	He's running away from the problem, isn't he, he goes away, he is not facing the problem squarely. She runs away because her husband is drunk. She is running, she is scared because she saw something happened after seeing him get drunk so often, she decides to go away, I think she feels scared. She is running away because they had a quarrel and I think she's scared. She's running but who knows where she's going. She doesn't want to have anything to do with the husband, she's gone, she wants to run away as far as she can. She feels desperate. She's desperate because of all the problems she's had because her husband's been drunk... and people would like to get help when they need it.

others have not progressed because they do not want to or entertain other stereotypes characteristic of urban zones about indigenous people in general.

For this reason, all the modules in the manual stress the fact that the characteristics and types of behavior of the community are something that should not be judged, since they are neither good nor bad. They also highlight the role of patriarchal culture in preventing women from dealing with their health problems and as something that facilitators will also have to deal with. Emphasis is placed on the fear of gossip and the need to continually reaffirm the fact that confidentiality will be preserved. Facilitators are also reminded of the need for empathy so that they can understand relatives' feelings from their point of view.

The first module invites readers to reflect on why they want to become facilitators, so that they can identify their motivation. It is not unusual for some of these people interested in training to be suffering from a similar problem. Once they have clarified their situation, they may either feel better and take what is useful for them or agree to seek help.

The following five steps were subsequently developed in the following modules: a) How to listen to and understand the relative; b) providing the necessary information on alcohol consumption; c) analyzing the means of coping with the problem and discovering ways of improving them; d) analyzing one's sources of support and e) how to refer people to a specialist if necessary. Ideally, the intervention would be carried out in five sessions. However, given what has been reported in this article, we suggest that it is important for participants to be able to analyze these elements in the least possible number of sessions.

Each session is illustrated by using examples from the population being studied, which reflect relatives' thoughts and feelings towards the drinking relative. Emphasis is placed on gender relations and the manual is fully illustrated.

Incorrectly, the criterion for success is often based on the woman's ability to make her husband or ano-

ther relative stop drinking. This was also observed in the urban population and is an important fact, since the aim of this intervention is not to make the user stop drinking but rather to improve the relatives' psychological well-being. The text emphasizes the need to overcome that deeply-rooted idea and it is one of the skills that must be constantly verified both during the training stage and the intervention itself.

**Phase IV. Evaluation indicators**

In order to have objective measures for evidence-based decision-making, it is essential to create indicators that will ascertain validity, reliability, relevance, specificity and sensitivity, with the aim of obtaining information on cost-effectiveness. In other words, to prove that the results justify the investment in time and other resources in indigenous communities. The indicators designed are both quantitative and qualitative, and they will provide the necessary input for suggesting policies and priorities on the alcohol abuse subject.

Families will be selected by publicizing the intervention and by visiting health centers, where a large sector of the population seeks treatment. If sufficient resources are available, this group will be compared with a similar Alcoholics Anonymous group.

The following constructs have been considered for evaluating cost-effectiveness, while this phase is scheduled to begin during the second half of 2007.

1. Indicators for evaluating personnel training, which involves choosing personnel from the health and education sectors. *Evaluation of learning* through the acquisition of skills, abilities and the formation of attitudes.
2. Developing indicators to observe facilitators during the intervention process in order to obtain clues that will help distinguish between the *properties of the manual and the facilitator's empathic capacity and experience*.
3. *Opportunity costs for the health sector* regarding trained personnel.
4. *Evaluation of relative's opportunity costs*, taking into account the time invested in seeking treatment, the effects on the family, transport costs and time invol-

ved, as well as the activities that must be cancelled in order to attend treatment sessions.

5. *Efficacy of treatment.* The relative's well-being before and immediately after the intervention will be assessed. The indicators that will be evaluated are: depressive symptoms, physical and psychological symptoms and coping strategies. In addition to this quantitative evaluation, a qualitative evaluation will be carried out through interviews. At the same time, qualitative benefits will be evaluated by measuring the extent to which participants use the cognitive strategy of advantages and disadvantages analysis as a generalization for solving other kind of problems.
6. *Three-month follow-up.* It is expected that participants will continue using the most beneficial strategies for all family members and that they will observe changes in their families as regards mental health aspects and family cohesion, together with improved work performance and contribution to the family economy, studies and any other indicator that may change as a result of the intervention. Although the intervention is not designed to change the user's behavior, after three months it is important to observe whether, as a result of the new coping strategies, the user's alcohol consumption has changed.
7. If new *regional health policies* are implemented during the intervention process, facilitators will record the way they affect or are different from the intervention program.

## CONCLUSIONS

Being admitted to the communities through the Community Assemblies and the Health Center was an essential part of being accepted by all the members. Nonetheless, women were more willing to be interviewed than men.

The asymmetry in the relationship between the researcher and the participants involved in the research arose as a significant issue. However, ethics dictate that the "authority" represented by the researcher should not be misused in order to obtain the information needed. Finding the best way to show them some alternatives that might contribute to solve a common problem remains a major challenge.

What we have learnt from this experience is the importance of the traditions and values of the socio-cultural context as possible challenges to implement an intervention program. In the face of the resistance that the latter elicits, it is crucial to increase awareness in order to improve well-being through various means. On the one hand, women must be offered alternative responses to a dominant patriarchal structure by hel-

ping them overcome the fear of discussing their problems, taking care not to offend their traditions and have this backfire against them and encouraging mechanisms that will weaken the influence and credibility of gossip. On the other hand, men must be convinced of the harmfulness of alcohol consumption and of its effects on others.

The use and meaning of language must always be clarified prior to an intervention, particularly since we are usually unfamiliar with the mother tongue of the various indigenous groups. According to this observation, interventions must be brief, lasting an hour at most, with the best possible use being made of the sessions patients are able to attend.

No intervention should jeopardize cultural elements such as language and memory, or historical, cosmogonic and religious knowledge. Although the Evangelical religion has proved effective in improving behaviors related to alcoholism, one should not lose sight of the fact that many communities have come to regard it as a foreign invention that fails to consider their history. They feel that it betrays them and that it alters the values of their families, wives and children.

The role of poverty and marginality must also be considered when analyzing the community's response to health services; in this sense, a brief intervention which requires little infrastructure might be feasible.

The intervention is more likely to elicit the support of both men and women in their role as parents seeking help for coping with their children's drinking, which is their main concern, than for solving adults' problems. The various techniques used yielded valuable information: the cognitive laboratories proved extremely useful in identifying the key concepts associated with the coping mechanisms depicted in each of the pictures, meaning that the images can be said to successfully represent coping mechanisms, since those interviewed associated them with the emotions and actions they attempted to depict.

Various methods were used to determine whether women follow patriarchal patterns, such as self-sacrifice, which is highly valued in this context despite the fact that it does not contribute to their well-being. This, in turn, reflects the deeply-rooted influence of asymmetrical gender relations. This aspect is one of the most important challenges and implications to be considered in the intervention.

## Acknowledgments

This study was supported by CONACyT grant No. G36266-H. The authors wish to thank Elsa García, Yesica Valeriano, Pilar Bernal and Perla Medina for their contribution during the different stages of the research. We specially thank the participants of both communities for sharing their experiences with us.

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