DISSEMINATING RESEARCH ON COMMUNITY HEALTH AND WELL-BEING: A COLLABORATION BETWEEN ALASKA NATIVE VILLAGES AND THE ACADEME

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Abstract: Collaboration between Alaska Native communities and the academe is very important. This project focused on disseminating research findings to communities in a manner that is culturally appropriate and useful in planning the communities' next steps. The project relied on a collaborative process, described in terms of the activities that transpired, the approaches taken, the challenges, the lessons learned, and some examples of the final disseminated material.

Community collaboration improves the quality of research and makes it more relevant to the community. However, past research efforts with Native people have rarely been collaborative in terms of design, conduct, and interpretation (Mohatt et al., 2004). When collaboration does exist, there often is little participation beyond data collection, and results are viewed in non-Native theoretical frameworks (Baldwin, 1999). For collaborative research endeavors, little guidance is offered about collaboration in data dissemination, specifically in creating the presentations to communities and the issues and challenges likely to be encountered in the process.

The Rationale and Aim of the Paper

There are two limitations about collaboration and dissemination. First, in spite of the importance of collaboration among researchers, communities, and community-based organizations, few have detailed the process of developing and maintaining these collaborative relationships (Harper et al., 2004). A second limitation is that most

dissemination efforts utilize a "linear conception" based on "getting the word out" (Farkas, Jette, Tennstedt, Haley, & Quinn, 2003). However, there is little evidence showing that people will use good ideas once they have access to information (Farkas et al., 2003).

This paper addresses these two limitations. We document the process involved in a collaborative dissemination by describing the iterative process of preparing and disseminating results. We realize that this dissemination is not the final step, but rather one of the intermediary steps in this long-running collaboration among the Alaska Native (AN) villages, the regional health corporation, and the Center for Alaska Native Health Research (CANHR). We describe these processes in the context of collaborative research highlighting the cultural specificity of disseminating preliminary data, the challenges, and lessons learned.

Rationale for Collaboration

There are many reasons why research collaboration is important. For one, interventions and assessment become more culture-specific if done within the tribal participatory research model (Fisher & Ball, 2003). In collaboration, there is complete immersion of local residents in every stage of the research (Beamish & Bryer, 1999) resulting in a diminished cultural distance between the partners (Trickett & Espino, 2004) and an active demystification of research as community members see themselves as a source of knowledge (Mardiros, 2001). In addition, there is greater clarity in roles and expectations of all partners, and both process and product are given importance (Shiu-Thornton, 2003). As all these qualities are enhanced, there is improvement in the overall quality and validity of the research (Trickett & Espino, 2004). Finally, the outsider (usually the researcher) begins to perceive the phenomenon as an insider and use a framework more consistent with that of the insider (Santiago & Enriquez, 1982).

Beyond collaborative research in general, there are reasons behind collaborative dissemination. It is part of providing an adequate description of the research, which leads to a high degree of cooperation and further collaboration (Beauvais, 1999). Collaborative dissemination is consistent with the need to adapt preventive intervention approaches to American Indian (AI) (and Alaska Native) cultures, which is one recurrent theme that Baldwin (1999) identified in the work with American Indians. Collaborative dissemination is also consistent with a goal of the Alaska Native Science Commission in providing a feedback mechanism of research results (Alaska Native Science Commission, 2001).

There are several perspectives on collaborative research, such as participatory action research, empowerment research, community-based participatory research, and tribal participatory research. Trickett and Espino (2004) believe these perspectives reflect an interchangeable nature as described in the literature. We describe collaboration without distinguishing the approaches.

The Center for Alaska Native Health Research

CANHR was established through a five-year grant awarded by the National Institutes of Health, National Center for Research Resources to the University of Alaska Fairbanks. CANHR's purpose is to investigate weight, nutrition, and health in Alaska Natives, specifically those living in the Yup'ik- and Cup'ik-speaking region. CANHR approaches this thematic focus from genetic, dietary, and cultural-behavioral perspectives through a partnership with the Yukon-Kuskokwim Health Corporation (YKHC). The YKHC is a non-profit organization that provides programs for primary care, prevention, and health promotion serving 58 western Alaska villages. CANHR includes faculty and staff from the University of Alaska Fairbanks and the University of Alaska Anchorage, field research assistants from the villages and based in the villages, and cultural consultants. Some members of CANHR are from the villages of the region.

CANHR reflects the crucial elements of participatory action research, such as collaboration, incorporation of local knowledge, a multidisciplinary focus, eclecticism, case orientation, use of emergent process, and the linking of science with social action (Greenwood, Whyte, & Harkavy, 1993). Our process tries to avoid creating a dominant role for the professional expert in the decision-making process and increases the likelihood of the non-professional's ownership in the decisions and learning (Whyte, 1989).

A Short History of the Dissemination Process

In early 2004, CANHR presented preliminary results to a community using PowerPoint, as requested by the tribal council. Results were presented in English by the principal investigators (PIs) with sequential translation into Yup'ik by one research assistant. This presentation was patterned after the academic data presentation with PowerPoint slides using bar graphs, pie charts, descriptive statistics, national comparisons, and text. The feedback from the tribal council was that the presentation of data was too Western and the sequential

translation of the data from English to Yup'ik made it difficult to convey the idea. They challenged CANHR to share information in a more culturally appropriate manner in order to make the information understandable.

A data dissemination team was thus formed to work on a culturally meaningful presentation. For the team, a culturally meaningful presentation meant (a) identifying Yup'ik concepts and terms that conveyed the idea, (b) presenting the information in the Yup'ik language using local symbols and images, and (c) focusing on results that local residents could use for subsequent action. The data dissemination team used this opportunity to train the Yup'ik team members in presenting biomedical and social science data, and for the non-Yup'ik team members to continue learning about Yup'ik culture and conceptions of health and wellness. This team was composed of the head of the center, cultural consultants (four of whom were the same people who presented to the villages), three PIs, statisticians, a field coordinator, a graphic artist, and a coordinator of the dissemination team. The team members were located in Alaska villages, Fairbanks, Anchorage, and California. The cultural consultants were community members from our research assistant pool; tribal council members; and members of the staff who were Yup'ik and Cup'ik who lived in the villages, Fairbanks, or Anchorage. Most had worked with CANHR for five years. Cultural consultants became part of the group in different ways. Some were from our research assistant pool and were asked if they would fulfill this additional role. Some were recruited for the specific role of helping form the presentations and actually present to the villages. We asked tribal council members if we could approach them for their comments and ideas throughout the research, which included soliciting their feedback for these presentations.

The results we presented to the villages were the initial outcomes of three projects: (a) physical health factors – risk and protection, (b) diet and physical activity, and (c) lifestyle and the cultural understanding of health. This information will assist the village residents to create their own specific interventions, while studying this dissemination process will inform the ongoing CANHR collaboration research.

The objectives of disseminating the preliminary results were to provide information on the participants' health and to provide the village residents a basis for action they saw fit. As the preliminary presentations in the last villages were winding down, one of the villages in which the team had earlier disseminated results had started planning community activities that would bring greater awareness of the need to be more physically active. We believe the collaborative approach in developing

and disseminating the results contributed to the development of this community plan. In said village, the meeting in which the initial results were disseminated included feedback from community members on how to make presentations to subsequent villages more understandable. This meeting also became the initial forum in which community members started sharing ideas on what actions their community could take. The CANHR researchers most directly involved in the data collection built on this evident interest by arranging follow-up consultations and planning with the community members.

The Collaborative Process

The Presentation Process as Planned

The plan was to create a presentation template we could use for all villages. The team decided to follow a step-by-step procedure. First, the PIs would put together the information they wanted to present and turn in PowerPoint slides to the coordinator. The coordinator would work with a subgroup composed of the cultural consultants, graphic designer, and field coordinator. This subgroup would work on drafting the presentation, then share it with the whole team for comments on the content and format of the slides. Finally, we would practice the presentations in the local language. Once we were comfortable with the outcome, we would use this template for all the village presentations while incorporating village-specific results.

The Actual Presentation Development Process

The actual process greatly deviated from the plan. It became clear that the planned process was still too sequential. Although the team tried to follow the procedure outlined above, we had to allow for a more iterative process of drafting, practice, feedback, reflection, re-doing the presentations, and so on. It also became clear that the process did not just involve translating the results. Rather, it was allowing the emergence of a local framework of thinking about biomedical and cultural conceptions of health, and about determining important information and the manner by which to convey the information.

Because presenting biomedical and social scientific information in the Yup'ik culture was still new, we needed more input and a greater amount of time to learn from this iterative process. The team solicited

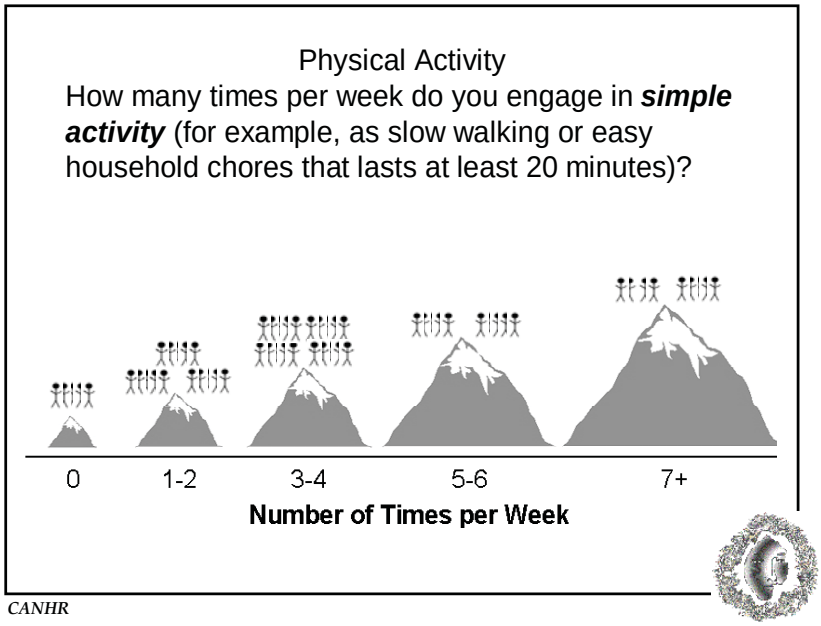
comments, questions, and suggestions in trial presentations within the group. When possible, some team members practiced parts of the presentations during their fieldwork and got valuable feedback from community members. Because of the distance between the cultural consultants, not all of them could be present whenever the group met in person. However, teleconferencing allowed them to join most discussions. During one particularly helpful practice session, all four presenters were able to be together in one place to discuss and brainstorm ideas. Each one fed on the ideas and feedback of others, and they informed each other of possible local concepts to use. We also used the first village presentation to refine the message and style. Throughout the process, we had to consider and manage all input that came from different members at different times. Revising what we thought was the final template became the routine until, after six months, we had a workable template. This process continues because we have only presented the preliminary data to the villages and to the YKHC.

Some Examples of Culturally Relevant Content and Style

A huge challenge the team faced was converting biomedical and socio-cultural data into information using very basic statistics, images, and minimal text. For example, we removed statistical means and percentages because they are not commonly understood among community members. We therefore used frequencies. However, the presentation to the regional health corporation included more statistics because the board members were familiar with such information. We had to tailor the presentation to the needs of the audience.

We needed to present numbers through familiar images, and we provide a few examples here without using real data. The group decided to use several local images to represent numbers in order to broaden familiarity. These were the images that the cultural consultants agreed would most facilitate understanding of the results. For example, instead of bars in a chart, we used snow-capped mountains to indicate amount of physical activity (see Figure 1). In this case, however, the height of the mountain did not indicate the number of participants but rather the number of times a respondent engaged in simple activities for a week (i.e., amount of physical activity exerted). The number of stick figures represented the actual number of respondents for each level of activity.

Figure 1
Sample Slide Showing Physical Activity



In other slides, we used diamond shapes – a pattern found in parkas – to replace the bars in a graph (see Figure 2). The size of the diamond indicated the number of participants who gave that particular response. Figure 2 shows the number of participants who indicated that they ate the equivalent of one to four servings of fruit per day. We likewise changed the presentation of a pie chart. Although the villagers are familiar with pies, we constructed pie charts as the face of a hand drum, as seen in Figure 3. In addition to using local images, we also incorporated feedback with regard to labels. For example, Figure 3 uses *healthy* as opposed to *normal*, which we had originally used. The cultural consultants pointed out that using normal would imply that those beyond this range are abnormal and would thus be stigmatizing.

The use of PowerPoint greatly facilitated the presentations. The presenters were able to present to both English- and Yup'ik-speaking community members at the same time. This was done by having the slides mostly in English (with the key concepts in Yup'ik) while the presenters spoke in Yup'ik. This was based on several considerations. First, elders know more Yup'ik than English while younger people tend to know both. Second, not everyone can read Yup'ik, but they can translate English into Yup'ik quickly. Third, the presenters felt it would take

Figure 2
Sample Slide Showing Consumption of Fruits

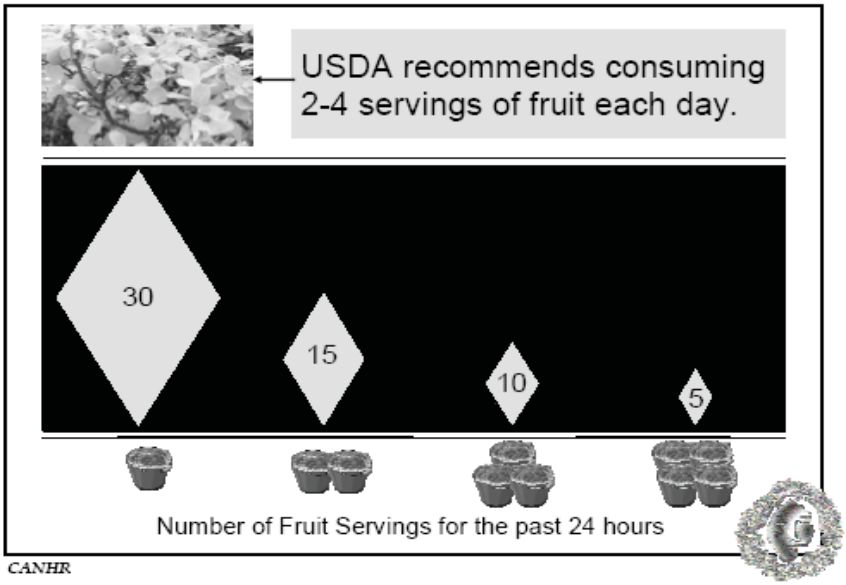
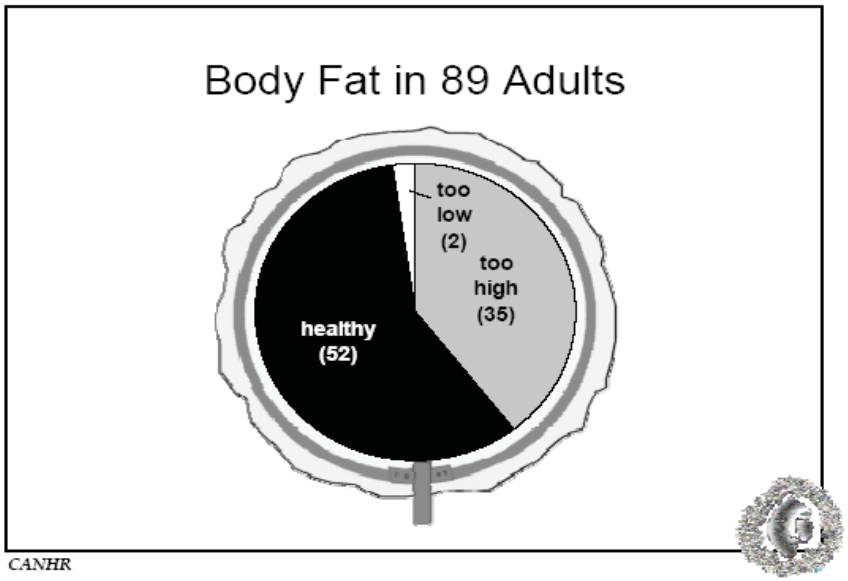


Figure 3
Sample Slide Showing Body Fat Levels



longer to read the slides if they were in Yup'ik. Fourth, some of the English concepts and words had no direct Yup'ik equivalent and, therefore, the presenter had to explain and provide examples to convey the idea. Using PowerPoint allowed the presenters to show the key ideas on the screen while the audience focused on the presenters. With PowerPoint, we were able to include animations of a heart attack and the processing of cholesterol. These animations made explaining the physiological processes much easier. Including photos of the villages and images familiar within the Yup'ik region also added to the appeal and familiarity of the content.

There was no assessment specifically to test the level of understanding of the presentations. However, the team conducted a survey assessing the broader process of data collection, result dissemination, and perceived changes in the community. One question asked about the community's satisfaction with the research team's explanation of the results to the community. All five communities in which CANHR had presented by then had above-average satisfaction. In addition, the informal conversations that occurred after the presentations revealed that the audience liked the manner in which frequency results were presented. They appreciated that CANHR took the time to present the results in a way that made them easier to understand, especially using pictures rather than numerous tables and much text.

Helpful Approaches in Collaborative Dissemination

The objective of the collaborative dissemination was to provide culturally relevant and useful information, while protecting the interests of the villages and the regional health corporation. Six approaches that emerged along the process helped in attaining this objective. The first was increasing the local community's participation in all phases of the process. The first attempt to directly disseminate the information straight from the PIs' output, with a nominal local role, was a misstep. It became clear that we needed early and continuous involvement of the cultural consultants.

A second approach was the team's willingness to answer questions about the methodology, content, and use of the findings. Such questions did not end when the villages and the health corporation gave their approval for the research to proceed. In fact, in the dissemination team meetings, questions arose from inside and outside the team about the intent and reasons for our research strategy, research questions, and translation of ideas. Everyone saw this questioning as part of the

uncertainties involved in collaboration between the villages and the university. The team took these questions as opportunities to reiterate the objectives of CANHR and its commitment to collaboration.

A third approach was the research team's openness to the local residents' criticisms, and at times suspicions, regarding the intentions of another set of outsiders doing research in the community. This openness was very important, as allaying suspicion about research and outside researchers is one challenge in research with AI/AN communities (Baldwin, 1999). Given some of the negative consequences of past research done in AI/AN communities (Manson, 1989), the researchers had the onus of proving their sincerity. We believe that the degree to which we shared information and decisions, and acknowledged criticisms, helped allay the fears of the communities and the regional health corporation.

Fourth, the amicable discussions and open exchange of ideas between the members of the team permitted the inclusion and winnowing of different ideas. This openness allowed us to focus the information we presented, identify the key concepts and terms that captured what we wanted to convey, and adapt the presentations to the villages. There was a two-way learning relationship where everyone was ready to learn and to guide (Suarez-Balcazar et al., 2004).

The importance of allowing debate cannot be overemphasized even if it means longer meetings and more revisions in the face of approaching deadlines. One example revolved around presenting comparative data. Although the team decided that there would be no between-village comparisons when presenting to a village, we had more discussion on presenting comparative national data. The preliminary draft of the village presentation contained several comparative national data items. However, the cultural consultants insisted that national data be removed because villagers wanted to focus on their village and specific actions that they could take. On the other hand, others felt that village data would make more sense within the national context. After much discussion and several drafts, the team agreed on a version that included just one national comparison using a short note that the number of overweight/obese individuals reflected a trend that is similar to the national data. This one example took several revisions of the presentation. A decision by one or two members would have made the process expedient but not necessarily helpful.

A fifth approach was encouraging the iterative and feedback-driven nature of the dissemination process. The constant feedback and reworking on the template allowed us to create a presentation based

on community needs (Suarez-Balcazar, et al., 2004) and thus of greater value to the community (Beauvais, 1999). This is consistent with the theme in Indigenous psychology that the culture be the source, not the target, of information (Enriquez, 1982). This process is also consistent with participatory action research, which involves an iterative process of action and reflection among community members and the research team (Fisher & Ball, 2003) from which meaning is derived. One meaning that was derived in this case came in the form of intervention projects to promote health and well-being.

The sixth approach, which dovetailed with the other approaches, was the intent and readiness by the non-AN members of the group to learn more about the Yup'ik culture. Our process went beyond linguistic interpretations, translation, and inclusion of local residents. Instead there was – and there still is – a continuous and dynamic process of interaction and learning (Shiu-Thornton, 2003) among the members of the research group, and between the group and the communities. A few principles of cultural competence identified by Shiu-Thornton (2003) were evident in the process, such as diversity and understanding the dynamics of differences. There was a continuous attempt to be aware of and be attentive to the cultural differences that arose. This effort was evident in the openness in responding to questions, criticisms, and suspicions from local residents and members of the team. Another principle was integrating lessons we learned into an ongoing development of skills. We discussed mistakes and oversights and planned on how to avoid errors (such as the initial data presentation that led to the creation of this dissemination team) in the future.

We learned through these approaches as they emerged. Other researchers have used them successfully when working with AI/AN communities and we recommend that others can also benefit from considering these ideas in their work. The following list summarizes the elements and approaches that helped the dissemination team create the desired presentations:

- Having cultural consultants from the villages, including a few who are members of the team;
- Participation of the cultural consultants and the community in all phases of the process;
- Openness of the research team to answer questions and address criticism from the communities;
- Encouraging an iterative process of presentation development among members of the team and cultural consultants;

- Giving each team member an equal voice while recognizing the special skills, knowledge, and expertise of each; and advocating open sharing and discussion of ideas; and
- Readiness to learn about the Yup'ik culture.

The dissemination process and approaches we followed closely mirrors the dissemination framework components identified by Carpenter, Nieva, Albaghal, and Sorra (n.d.). First, we clearly identified the findings we wanted to disseminate. This part of the process took the most time and energy of the dissemination team. Second, we considered the end-users who would apply the findings in practice, and their needs. With the community members in mind as the end-user, we presented the information in everyday language and visuals, with the least amount of technical information, as much as possible. Third, we identified and worked with the partners involved in the whole research enterprise and not just in the dissemination phase. We worked with the YKHC, the village elders, the Tribal Council, cultural consultants, and villagers who wanted to be involved in the research and consequent action. Fourth, we communicated often with the partners most involved with the dissemination process. In this case, these partners were mainly the community members and cultural consultants for the village presentations. Fifth, we incorporated a brief question about the dissemination presentations into an evaluation of the whole research process conducted by other members of CANHR. (A limitation of this evaluation is that it was done months after the initial presentation. As the dissemination of other results will occur in the near future, a more directed and timely evaluation of such presentations will need to be developed.) Finally, a dissemination plan was outlined but not specifically written down. The plan evolved as we created drafts and practiced the presentations. Early in the process, there were many suggestions as to every possible and desired use of the information we wanted to present, which was confusing for everyone. Finally, the team recognized the need to present basic information that the village residents could use to inform action. We learned that we need to be more intentional with our planning in future dissemination endeavors. In addition, having a lead person and small group responsible for ensuring that tasks were planned and performed greatly assisted the team in its efforts.

Challenges and Implications of the Collaborative Process

Challenges Encountered and the Learning Involved

We encountered five major challenges related to outcome and process:

- Presenting biomedical and sociocultural data in an easily understood manner and from which action can be derived by the community,
- Respecting and considering divergent viewpoints about how to present the results in a meaningful and useful way,
- Resolving initial confusion about the roles of the dissemination team and the researchers,
- Coordinating a large and dispersed team, and
- Finding comparative state and national data.

The major outcome-related challenge was to present results that were meaningful and useful to the community. The group was very fortunate to have the mindset that the presentations were for the villages and not for the researchers. We believe this focus helped create a healthy detachment on the part of the investigators over the final output, and let the cultural consultants take the lead in developing content and style.

In terms of process, one challenge was to ensure that each viewpoint was respected and considered. We had to learn the patience involved in understanding individual and cultural nuances embedded in the comments. For example, the second author commented that academic researchers present too much dissected detail. The rest of the team had to learn that the villagers do not usually analyze nor worry about that much detail, and change the presentations accordingly. On the other hand, encouraging multiple voices and perspectives often made it difficult to determine when the template was final. Major and minor changes were continually suggested within and outside meetings and practice runs. Continuous updates about the status of the presentations (e.g., placing the most recent version on the shared drive) helped keep everyone aware of the changes and thus minimized surprises.

Another challenge in the collaboration process was the initial confusion over roles and duties within the team. Some initially feared that changing the slides of the PIs would undermine the PIs' work. Through discussion via e-mail and during meetings, it became clear that all team members were trying to clarify their roles, and that this process

of clarification was acceptable and necessary. The PIs identified the key results and message they wanted to present. However, they were very open to suggestions about changes in content and style. Although the cultural consultants' original role had been to figure out the best way to present the information, they also provided input about what information should and should not be included. This expanded role allowed the group members to function as peers with equality of expertise.

A fourth challenge concerned logistics and coordination of a large team. Given the roadless system of the region and the expense of flying, frequent gathering of feedback from the villages was not possible. Some staff who went to the villages for other reasons tried out parts of the presentation before we finalized the template. The first village presentation partly became a feedback session. We then used the feedback to revise the template for the succeeding villages.

A fifth challenge was finding state and national data or standards for comparisons. Even if there was an agreement to minimize comparisons, the majority felt a need for a comparison regarding vegetable and fruit intake, given that fresh fruits and vegetables are not always available in the villages. The diet and nutrition specialists in the group felt that the recommended servings in the Alaska food pyramid were still not very useful for the Alaska Native population. Therefore, even if the group wanted to present a comparison in this case, the lack of a useful standard meant that the group had to contend with a short note in the presentation indicating the USDA recommended servings for fruits and vegetables. Finding useful standards remains a challenge for the team.

Lessons Learned and Implications for Doing Community-based Participatory Research

We learned a few lessons from the dissemination of the initial results that we intend to use in our continuing collaboration. Considering the emergent process that involved significant new learning for the team, we are quite wary in assuming that the process we went through and the presentations that arose can be used with other populations. However, we believe there is value in sharing the challenges we encountered and the lessons learned.

One lesson is that preparing information for dissemination needs much more time than what we normally would allot for preparing PowerPoint presentations. Although time is rarely adequate in any research, we learned we need to provide more time and opportunity

for dialogue between the cultural consultants, and between the cultural consultants and the communities. Given the physical distance between the team members, personal meetings occurred infrequently, although teleconferencing was a great substitute. Looming deadlines exacerbated this situation with presenters feeling the pressure to make quick decisions. Most of the input came from two of the four presenters who were most available for meetings. Giving presenters more time for discussion could have allowed them to more adequately think through the most important information to present and how to convey the ideas in their own language. It was obvious that in the few meetings where more than two of the cultural consultants were present, the dynamics changed and there were more opinions shared and suggestions considered.

Another lesson learned was not to think of the cultural consultants as the spokespersons for the villages, and thus a quick source of answers to questions about the Yup'ik region or the villages. The cultural consultants made this clear to the team. Although the cultural consultants are from the region, they are not all equally familiar with all the participating villages. There is much diversity among the communities and particularly between the villages and the urban settings or small rural hub cities in which most of the group members lived. The consultants did not assume they knew all the intricacies of each village.

We learned that this collaborative dissemination process is one way to allay suspicion about research and outside researchers, which is a challenge when doing research in AI/AN communities (Baldwin, 1999). The cultural consultants felt that presenting the information in the manner we did was very useful in helping the villagers and the village council understand the activities of CANHR. They also felt that the process respects and hears the concerns of the village residents. Having a Yup'ik presenter allowed the villagers to more readily ask questions and request clarification. One presenter felt that some villagers are shy to ask a non-Yup'ik, fearing they might incorrectly state their question, but they can easily make themselves understood with a Yup'ik presenter. In addition, having the cultural consultants present to the villages resulted in them becoming one of the research team's bridges to the communities.

We also learned that changes can happen to the cultural consultants through this process. One of them, who had lived in an urban area for many years, reconnected with her community after a

long absence from the village, relearned the subtleties of her language, and learned to be comfortable presenting scientific results to her home community.

Another important lesson the team learned was the need for the cultural consultants' involvement earlier in the dissemination process. As it was, the slides were first created by the PIs, who decided what information to present. The cultural consultants came afterward to work on this presentation. Their initial role centered on winnowing the information to a manageable amount and creating a culturally appropriate and meaningful presentation. This was one of the role confusions that occurred early in the process. Cultural consultants should be actively involved in the planning stage of data analysis in order to provide direction in determining the information useful for the community. They eventually did have input on the content. However, it would have saved the team much time if that role had been incorporated earlier, during the planning for data analysis.

What happens when it does not go well? Even with the best intentions for sharing ownership of the process, slips can occur. When we had an opportunity to present our experience (and other projects within CANHR) at a conference, we moved quickly to create the presentation. We had indicated co-authorship of the presentation by the group. However, as the date approached, we realized that not one of the Alaska Native members of the group was going. We realized that no one had asked them and none of them had voiced an interest in going, or at least voiced it strongly enough for the rest of the team to realize. This was clearly a lapse in sensitivity among the non-Yup'ik team members. As leader of the dissemination project, the first author had not been more cognizant of ensuring participation from those who wanted to participate. One of the cultural consultants pointed out that this was another example of the divide between the academic researchers and the other members of the team. She felt the academic researchers get more of the acknowledgement and make decisions automatically without referring to the larger collaborative group, especially those outside the academe. We learned the importance of vigilance in involving the entire group in decision making and being aware of the differential power between university researchers and that of community members. Privilege and status are powerful factors that rapidly erode a community-based participatory research process. The group talked about this violation of trust, made apologies, and set a process in place

with regard to roles in publishing and presenting. It was a testimony to the evolution of collaboration in the group that this type of violation could be repaired by the group itself.

We continue with the process of collecting further data and disseminating results to the communities. We continue to identify Yup'ik conceptions of health and well-being that will eventually help us understand and share the information as culturally accurate as we can. The learning from this dissemination process will inform subsequent dissemination of other results. In addition, feedback will be continuously collected with regard to the different phases of the research to add to our continuous learning about working collaboratively with AN villages.

Summary

We shared our experience in making a collaborative data dissemination process work. The creation of a small group to focus on dissemination occurred after community members provided feedback on the initial presentation of results – the information was not easily understood, nor did it inform the village residents of any action they could take. The dissemination process will continue, as CANHR only presented preliminary results to the villages. We faced many difficulties inherent in doing research from a community-based participatory research perspective while crossing disciplines, languages, and cultures. We further realized that dissemination itself is a complex interaction and cultural process needing careful attention. Our team learned many lessons and must keep them in mind for the continued success of this collaboration and our dissemination of results. We hope what we have learned can inform other collaborative dissemination endeavors.

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References

Alaska Native Science Commission (2001). *Goals and Concerns.* Retrieved May 23, 2005, from http://www.nativescience.org/html/goals_and_concerns.html

Baldwin, J. A. (1999). Conducting drug abuse prevention research in partnership with Native American communities: Meeting challenges through collaborative approaches. *Drugs & Society, 14,* 77-92.

Beamish, W., & Bryer, F. (1999). Programme quality in Australian early special education: An example of participatory action research [Electronic version]. *Child: Care, Health and Development, 25*(6), 457.

Beauvais, F. (1999). Obtaining consent and other ethical issues in the conduct of research in American Indian communities. *Drugs & Society, 14,* 167-184.

Carpenter, D., Nieva, V., Albaghal, T., & Sorra, J. (n.d.). Development of a planning tool to guide research dissemination. Retrieved November 15, 2006, from http://www.ahrq.gov/downloads/pub/advances/vol4/Carpenter.pdf

Enriquez, V. G. (1982). Towards cross-cultural knowledge through cross-indigenous methods and perspectives. In R. Pe-Pua (Ed.), *Sikolohiyang Pilipino: Teorya, metodo, at gamit* (pp 120-130). Quezon City, Philippines: Philippine Psychology Research and Training House.

Farkas M., Jette, A. M., Tennstedt, S., Haley, S. M., & Quinn, V. (2003). Knowledge dissemination and utilization in gerontology: An organizing framework. *The Gerontologist, 43*(Special Issue I), 47-56.

Fisher, P. A., & Ball, T. J. (2003). Tribal participatory research: Mechanisms of a collaborative model. *American Journal of Community Psychology, 32*(3/4), 207-216.

Greenwood, D. J., Whyte, W. F., & Harkavy, I. (1993). Participatory action research as a process and as a goal. *Human Relations, 46*(2), 175-193.

Harper, G. W., Bangi, A. K., Contreras, R., Pedraza, A., Tolliver, M., & Vess, L. (2004). Diverse phases of collaboration: Working together to improve community-based HIV interventions for adolescents. *American Journal of Community Psychology, 33*(3/4), 193-204.

Manson, S. M. (1989). Editorial: The Barrow alcohol study. *American Indian and Alaska Native Mental Health Research, 2*(3), 5-6.

Mardiros, M. (2001). Reconnecting communities through community-based action research. *International Journal of Mental Health, 30*(2), 58-78.

Mohatt, G.V., Hazel, K.L., Allen, J., Stachelrodt, M., Hensel, C., & Fath, R. (2004). Unheard Alaska: Culturally anchored participatory action research on sobriety with Alaska Natives. *American Journal of Community Psychology, 33*(3/4), 263-273.

Santiago, C., & Enriquez, V. G. (1982). Tungo sa makaPilipinong pananaliksik [Towards a Filipino-focused research]. In R. Pe-Pua (Ed.), *Sikolohiyang Pilipino: Teorya, metodo, at gamit* (pp 155-160). Quezon City, Philippines: Philippine Psychology Research and Training House.

Shiu-Thornton, S. (2003). Addressing cultural competency in research: Integrating a community-based participatory research approach. *Alcoholism: Clinical and Experimental Research, 27*(8), 1361-1364.

Suarez-Balcazar, Y., Davis, M. I., Ferrari, J., Nyden, P., Olson, B., Alvarez, J., et al. (2004). University-community partnerships: A framework and an exemplar. In L. A. Jason, C. B. Keys, Y. Suarez-Balcazar, R. R. Taylor, & M. I. Davis (Eds.), *Participatory community research: Theories and methods in action* (pp. 105-120). Washington, DC: American Psychological Association.

Trickett, E. J., & Espino, S. L. R. (2004). Collaboration and social inquiry: Multiple meanings of a construct and its role in creating useful and valid knowledge [Electronic version]. *American Journal of Community Psychology, 34*(1/2), 1-69.

Whyte, W. F. (1989). Advancing scientific knowledge through participatory action research [Electronic version]. *Sociological Forum, 4*(3), 367-385.

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