

Disseminating Research Findings Back to Partnering Communities: Lessons Learned from a Community-Based Participatory Research Approach

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Abstract

Reporting back research findings is a principle of community-based participatory research (CBPR) that is increasingly becoming an expectation of funding agencies, study participants, and their communities. Here, we describe how Community Action Against Asthma, a CBPR initiative focused on identifying and reducing environmental triggers of childhood asthma in Detroit, planned and conducted interactive forums to disseminate findings back to participants and the broader community. We then share lessons and implications for practice.

In recent years, a growing number of university-community partnerships employing community-based participatory research (CBPR) approaches have been described in the literature (Flaskerud and Anderson, 1999; Levy, Baldyga, and Jurkowski, 2003; Metzler, Higgins, Beeker, Freudenberg, and Lantz, 2003; O’Fallon and Dearry, 2002; Parker et al., 2003; Schulz, Parker et al., 1998). CBPR has been defined as a collaborative research approach equitably involving all partners as they contribute expertise and share ownership and responsibilities to enhance understanding of a given phenomenon, and translate the knowledge gained into policies and interventions that improve the health and quality of life of community members. As such, CBPR stresses engagement of community partners in all phases of the research process to ensure that the priority issues of the communities involved are addressed in a manner that is culturally appropriate and sensitive (Israel, Schulz, Parker, and Becker, 1998). Public health officials and funding agencies have described CBPR as a way to more effectively reduce health risks (O’Fallon and Dearry, 2002) and to reduce growing health disparities (Satcher, 2003).

Disseminating findings back to research participants and community partners is a key principle of CBPR that is increasingly becoming a requirement of funding agencies and an expectation of study participants and their communities (Ammerman et al., 2003). Traditionally, dissemination efforts have seldom been directed beyond scientific

journals and audiences (Flaskerud and Anderson, 1999). This failure to “give back” this important information to those involved in the research process has been described as a violation in the researcher-collaborator relationship, and a betrayal that has perpetuated the mistrust of academic and scientific inquiry by communities who have, historically, been marginalized and exploited through their research involvement (Gamble, 1993; Jackson, 2002).

Despite this emphasis in CBPR on dissemination of findings to community as well as academic audiences, little guidance exists for methods to report findings back to participants in ways that are timely, understandable, appropriate and useful. In this paper, we will use the Community Action Against Asthma (CAAA) project as a case example to illustrate how we applied CBPR principles while planning and conducting a series of interactive family and community forums to enable participants to learn about CAAA, hear findings from the project, help to determine priorities for future CAAA research and intervention activities, and become involved in community organizing activities.

We will then draw from evaluation information to share specific and practical lessons learned from our forum process. These lessons will focus on the challenges and gains experienced by community and academic partners while working ‘with’ (as opposed to ‘in’ or ‘on’) communities and their members. Finally, we will discuss some of the research and practice implications of disseminating findings through forums.

CAAA is a CBPR community-academic partnership focused on identifying and reducing environmental triggers of childhood asthma in communities in the southwest and eastside of Detroit. CAAA is a component of the National Institute of Environmental Health Sciences and the U.S. Environmental Protection Agency-funded Michigan Center for the Environment and Children’s Health (MCECH). MCECH grew out of the Detroit Community-Academic Urban Research Center (URC) (Israel et al, 2001; Lantz, Viruell-Fuentes, Israel, Softley, and Guzman, 2001; Schulz, Israel, Selig, Bayer, and Griffin, 1998), an already existing academic-community partnership, and was funded in 1998 for a five-year period to address childhood illnesses related to the environment. CAAA is composed of two interrelated components: 1) an epidemiological study of the relationship between ambient and indoor air quality exposures (e.g., ozone and particulate matter 2.5 and 10) and children’s lung function and other asthma-related health indicators, and 2) an intervention study to reduce environmental triggers for childhood asthma at the household and neighborhood levels that was evaluated using a randomized controlled design. The epidemiological and intervention studies were conducted with the same participant population and shared the same steering committee (described below) and therefore, were combined into one larger project, CAAA. To identify eligible participants for CAAA, self-administered screening questionnaires were mailed to parents of all children ages 6 through 10 years enrolled in the Detroit public schools in the eastside and southwest intervention areas. Initially, 328 families agreed to participate in CAAA. The epidemiological study analyzed the relationship between ambient and indoor air quality and the child’s asthma-related health status. The study included collection of data on asthma

symptoms, lung function, medication use, and health care utilization, together with exposure measures such as ambient PM₁₀ and PM_{2.5} (particulate matter with aerodynamic diameters of <10 microns and 2.5 microns, respectively) and ozone. (Keeler et al, 2002; Parker et al, 2003; Parker et al, in press).

The specific aim of the household intervention project was to reduce residents' exposure to the triggers of childhood asthma. The household component consisted of a minimum of nine visits over a one-year period by a "Community Environmental Specialist" or outreach worker, who provided education, materials (e.g., vacuum cleaners, non-allergen permeable bed covering), and when applicable, services (e.g., integrated pest management) needed for reduction of exposure to asthma triggers, and referrals for medical care, tenant issues, and smoking cessation. In the second year of the MCECH project, realizing that there were not sufficient funds to implement the neighborhood component of the CAAA intervention due to an initial cut in the MCECH budget, the CAAA steering committee applied for and received an additional grant from NIEHS. This project, which was incorporated into the CAAA activities involves community organizers working with community residents and organizations to reduce neighborhood and community-level physical and psychosocial stressor associated with childhood asthma. As part of their duties, the organizers have undertaken informational interviews with community organizations around their perceptions of important environmental issues facing the community. Information from these interviews has been combined with the results of the epidemiological and intervention studies to develop a list of priority environmental justice issues of interest to the community. The community organizers are also sharing CAAA findings with neighborhood groups and organizations to increase community awareness and knowledge of how broader environmental conditions impact health, and are eliciting their involvement in neighborhood-level activities. The neighborhood component is in its fifth year and final year of funding.

CAAA focuses its research activities in neighborhoods in eastside and southwest Detroit. The eastside of Detroit is predominately African-America (more than 90%), and southwest Detroit is the area of the city in which the largest percentage of Latinos resides (Wayne State University Center for Urban Studies, 2000).

CAAA is guided by a steering committee comprised of community members and representatives from community-based organizations, a local health department, an integrated health care system, and a local university. Committee members were chosen for their involvement in and knowledge of the community, and their interest and expertise in environmental health and asthma. The steering committee, which meets monthly at alternating partner organization sites, adopted the set of community-based participatory research principles originally approved by the Urban Research Center (Israel et al, 2001; Schulz, Israel et al, 1998). As such, steering committee members have been involved in all major decisions of CAAA, making certain that CAAA research is beneficial to the communities involved. To ensure equal participation of all partners in dissemination of project findings, the steering committee initially established a dissemination committee consisting of six community partners and six

university partners. This dissemination committee developed policies and procedures for the steering committee around dissemination of CAAA study findings.

It is through this guidance from the steering committee (including the policies and procedures developed by the ad hoc dissemination committee) that CAAA has established the practice of continuously sharing results from the various research component activities (e.g., allergy skin tests, pulmonary air functioning assessments, indoor air sampling) with study participants and the broader community. One example is that family participants received graphical displays of their child's lung function test results along with explanations for how to read and interpret the graphs. Another example is that the sub sample of families who agreed to have air sampling machines in their homes were invited to hear CAAA investigators present general findings and were provided the opportunity to meet individually with the researchers to discuss the air quality in their homes. In addition, CAAA results and information gained through project activities have also been used to develop informational materials (e.g., fact sheets, resource guides) that have been distributed to CAAA participants and in the broader community during community environmental specialists' home visits, at local health fairs, and during community and neighborhood meetings. (See Parker et al, in press, for more detail on the overall dissemination activities of CAAA).

Case study: CAAA Family and Community Forums

As CAAA entered its fifth and final year of initial funding, plans were set forth to develop and conduct a series of community forums to share epidemiological and intervention component findings with the study participants and the broader community. The overarching goals for the forums were to promote interaction and engagement, relay appreciation to CAAA family participants, and promote critical awareness of how broader environmental issues impact health as a means to help move individuals beyond individual-level participation to community-level participation. To achieve these goals, the specific forum objectives, as determined by the steering committee, were to:

- 1) Introduce the CAAA project, staff and researchers.
- 2) Report findings from the CAAA assessment and intervention components and provide opportunities for forum participants to ask questions.
- 3) Enable participants to discuss and interpret the findings.
- 4) Provide the opportunity for participants to help determine priorities for future intervention and research endeavors.
- 5) Introduce community organizers and the activities they are undertaking.
- 6) Invite participants to become involved in community organizing activities.

The forums were developed by a planning committee composed of university-based researchers and staff (CAAA project manager, a principal investigator, a post-doctoral fellow), community-based field staff (community environmental specialists, the community organizers, and the field supervisor), and periodic involvement from steering committee members. In line with CAAA's commitment to enhance community capacity, all community-based staff were hired from and worked within their

communities. As such, the planning committee represented a diversity of expertise that could speak to both academic and community perspectives. To accommodate busy work schedules and decentralized work locations, planning meetings were conducted primarily via conference telephone calls and were facilitated by the project manager. Adhering to community-based participatory research principles, all members of the planning committee held equal decision making power, and all major decisions, plans, and materials developed were presented and reviewed by the CAAA steering committee for approval and guidance.

The series of forums included two family forums for study participants and a community forum for local residents and policymakers, which were held between January and April 2003. Our rationale for holding separate family and community forums was the ethical obligation we felt to report findings back to the families who participated in CAAA prior to sharing these results with the broader community. We also decided to hold separate family forums for the east side and southwest neighborhoods because geographically it would be difficult to find one centrally accessible venue. Ultimately, the family forums were held at the sites of two CAAA partner organizations, one in eastside Detroit and one in southwest Detroit. The community forum was held at a local community college. These sites were chosen because they met a list of criteria developed by the planning committee to facilitate participation, interaction, comfort and engagement. As such, each venue offered ample, safe and close parking, was accessible to individuals with physical challenges, provided tables and chairs that could be easily moved and configured for large group presentations and small group activities, allowed access to a kitchen, restrooms, water fountains, and a separate room for child care, and was available on a Saturday morning when the steering committee surmised more families and community members would be available to attend.

We invited each family that participated in the CAAA household and epidemiological components to attend and bring guests to either or both of the family forums. To build upon the relationships forged by the community environmental specialists, we sent each family an invitation that was personalized with a color photograph of their community environmental specialist along with a personally written note from the community environmental specialist. To address potential barriers to attending the forum, we noted in the invitation that we would serve refreshments and provide special accommodations such as childcare and transportation upon request. One week after we mailed the initial invitation each community environmental telephoned or visited the families with whom she worked to extend another personal invitation, and to assess what special accommodations families would require. Ultimately, bi-lingual (Spanish and English) childcare workers, cab vouchers through a local cab company, and both a Spanish and American Sign Language translator were made available at the family forums. Because our funders did not allow expenditures for food and appreciation gifts, our community-based staff drew from their community connections and approached local organizations and establishments about donating refreshments and door prizes.

The southwest and eastside family forums were attended by 25 adults and 19 adults respectively. Forum participants included adult caregivers from CAAA participant families and their guests (friends and family). In addition, there were numerous children who either went to the childcare room or participated in forum activities, and several CAAA staff, researchers and steering committee members.

The invitation list for the community forum included CAAA family participants, individuals with whom community organizers had conducted informational interviews, representatives from other community organizations, locally elected officials, the community at large, and all university- and community-based staff (interviewers, data collectors, students) who had at any time worked with CAAA. Invitation letters and flyers were sent to this list. Instead of solely relying on donations for the community forum, the steering committee recommended that we also offer local agencies the opportunity to sponsor the event. This, as explained by the steering committee, is common practice in Detroit where organizations frequently contribute financially to events and lend their names and support to enhance credibility. Sponsorship involved making a donation of at least \$50, which would be used to purchase supplies, door prizes, and food. Ultimately, we received more than \$1,000 from six sponsors who, in return, were invited to set up informational displays, were acknowledged during the forum program, and had their names listed on highly visible signs.

To invite the broader community to the forum, the steering committee recommended that we advertise the community forum in the local press and try to gain media coverage of the event. To facilitate this, the planning committee developed a press release that included information about the forum, a description of CAAA, and this quote from a steering committee member emphasizing the importance of attending the forum:

“This is a great opportunity for community leaders who are interested in doing something in Detroit about asthma to learn more, in order to be better equipped to make a difference in this area.”

Unfortunately, we learned from a source at the University’s News and Information Services that our plans for media coverage should have been made earlier (at least three weeks prior to the forum) and that reporters rarely cover events held on Saturday mornings.

Forty-one people, including CAAA family participants, aides of locally elected officials, agency representatives, advocacy workers, and community members, attended the larger community forum. Again, several CAAA staff, researchers, and steering committee members were also in attendance. Each forum’s agenda was driven by the six objectives and emphasized interaction and engagement. Although similar, the family forums’ and community forum’s agendas differed slightly. In the next section, we will describe how we implemented activities to accomplish the objectives of the forum.

Objectives 1 and 2: Forum participants were greeted as soon as they arrived and given folders containing all of the materials they would need during the forum. Each forum began with a welcome, introductions of the CAAA staff and researchers, and a brief overview of the different study components. This was followed by two separate presentations by CAAA researchers reporting the preliminary findings from the household-level intervention and the epidemiological studies. Although the researchers felt the findings were reliable, they still wanted to complete additional analysis to verify initial results and thus, felt the findings presented were still somewhat preliminary in nature. During the family forums, equal time (approximately 30 minutes) and emphasis were placed on each the household-level intervention and epidemiological study findings. In contrast, the community forum agenda afforded more time and emphasis to the environmental epidemiological study findings. This was due to feedback from our field staff and the steering committee that the broader community would be more interested in learning about exposure and air quality issues.

MS® PowerPoint® was chosen as the mode of presentation because it would allow us to more easily use photos in the presentation and present to a large group. Given the diversity that would be represented by forum participants in terms of language spoken (Spanish and English), education level, and knowledge about asthma-related issues, it was a challenge to present the information so that it would be understandable and useful to multiple audiences. During the development of the presentations, one of the researchers submitted drafts of her PowerPoint slides to be reviewed by planning committee members for content, language, and visual format. Ultimately, the final presentations included several elements identified to be effective when using audiovisuals including: colorful photos, clear and easy to interpret bar charts and graphs, concise bullet points, and summarizing take home messages.

The household-level intervention presentation provided an overview of the demographic characteristics of the participating families (e.g., age range of children, gender, ethnicity, asthma severity at baseline), data about allergens found in participants' homes (e.g., cockroaches, cat dander, tobacco smoke), and several slides that used bar charts and bulleted text to visually and verbally reveal the areas where the intervention did or did not result in statistically significant improvements (e.g., reduction of asthma-related symptoms, appropriate use of health care services and medications, enhanced caregiver health and support, and decreases in allergens found in household dust samples). The epidemiological study presentation required that several slides be designated to defining and breaking down complex concepts before actual results could be reported. For example, several slides answered questions such as: 'what is particulate matter?' "What are the sources of particulate matter?" "What is ozone?" and "Why are particulate matter and ozone Important?" (See figure 1 for examples of presentation slides). Results were then reported using simple bar charts, pie graphs, bulleted summaries and conclusions. Family forum participants received handouts of the slides from each presentation to follow during the forum, and to keep for themselves. Handouts of results were not provided at the community forum because the findings presented were still preliminary and there was concern among academic researchers that once final analyses were completed, findings might

contradict those handed out. Time was allocated after each presentation for participants to ask the researchers questions.

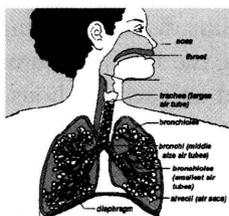
Figure 1: Examples of slides that verbally and visually breakdown complex concepts

What is Particulate Matter?



- “Particulate Matter” (PM), a form of air pollution, are very small particles found in the air.
- The two different sizes of PM that scientists often measure are called PM 10 and PM 2.5.

Why are PM and Ozone Important?



- PM 10 particles can be inhaled and get into the nose and larger airways.
- PM 2.5 particles can also get breathed in, and because they are smaller, they can reach deep into the lungs.
- Ozone is a gas and can easily be breathed deep into the lungs

Objectives 3 and 4: Discussion questions, based on the research findings highlighted during the presentations, were pre-determined by the CAAA researchers and the planning committee and posted around the room on newsprint. Each posted question was intended to be the topic of a small group discussion that would be facilitated by CAAA staff and steering committee members. After hearing the results and participating in a question and answer session, family forum participants self-selected into the small discussion group that they found to be the most interesting. Our rationale for breaking out into smaller groups was that participants might feel uncomfortable speaking in a larger group. Each group was responsible for discussing and coming up with at least three recommendations to address issues raised by their question. For example, the household intervention was not successful in reducing caregivers’ smoking behavior so one of the questions asked was, “What are some ways to assist caregivers to stop smoking?” Key discussion points were recorded on newsprint and after the larger group reconvened, one person from each small group reported the recommendations that resulted from their discussion (e.g., asking people to smoke outdoors, only smoke in designated areas).

A different activity was conducted during the community forum. In place of conducting small group discussions, one of the community organizers summarized findings from the more than 100 informational interviews conducted for the neighborhood-level intervention. During this presentation, the community organizer referred to the extensive list (posted on several sheets of newsprint) of environmental issues identified as concerns in east and southwest communities (e.g., illegal dumping, truck traffic, factories). To enable participants to prioritize these issues for future organizing efforts, the community organizer invited everyone to get up from their seats, come up to the lists, and (using stickers provided in their folders) vote on the three issues they felt should be CAAA priorities. A tally of the votes revealed that abandoned houses, illegal dumping and lead poisoning were viewed as priority issues

among participants from Detroit's eastside, while air quality, illegal dumping, and traffic were priority issues among participants from southwest Detroit.

Objectives 5 and 6: Since the participants in the household intervention and many members of the broader community were not yet aware of the additional neighborhood/community intervention component of CAAA, the steering committee wanted to use the forums to introduce this component and the organizers. At each of the family and community forums, the community organizers from the neighborhood-level intervention introduced themselves and described several of the environmental issues on which they had been working in their communities. They then invited participants to talk with them, pick up written informational materials, and sign-up to join them working on the issues that they found to be most interesting.

Post-forum communication and follow-up: The community organizers followed-up with each individual who signed up to work with them by telephoning them to thank them for their interest, and to pledge to keep them updated on future events and activities on which they could be involved. In addition, each forum participant and community forum sponsor was sent a letter thanking them for their support and attendance, and every person who was invited to the forums (whether or not they attended) was added to the CAAA mailing list so that they could receive CAAA newsletters, updates, and notifications about future events. Any contacts made during the forums were followed-up. For example, a meeting was set up with an elected official whose aide attended the community forum and showed interest in collaborating with and supporting the current and future efforts of CAAA.

Forum evaluation: Before adjourning, attendees were asked to complete a brief evaluation that included both closed- and open-ended questions pertaining to their satisfaction with the forum, their interest in being involved with future CAAA events, and what information was most and least helpful. Results from the forum evaluation questionnaires were later compiled, reviewed by the planning committee, and presented to the steering committee. Results of the evaluation, in part, serve as the basis of the Lessons Learned Section of this paper. Furthermore, results from the community forum voting activity were presented to the steering committee during a meeting and became the focus of a retreat during which the steering committee determined (within the guidelines of our funding mechanism) the three priority issues on which community organizers should focus (improving air quality, addressing housing issues, and raising community awareness about the link between the environment and health).

As part of a continuous process evaluation, the forum planning committee met and debriefed after each forum. In the following section we draw from information compiled from these forum evaluation activities, and feedback provided during planning committee debriefing sessions to share the lessons we learned through our experience in planning and conducting these forums within a CBPR approach.

Lessons Learned

Time and resources spent on planning and conducting dissemination forums need to be supported, acknowledged and incorporated into the research process and budget. Our experiences planning and conducting these dissemination forums concurs with other community-based participatory research literature that documents the extensive time and labor involved in disseminating research results (Israel et al, 1998, Parker et al, in press). As such, it was important that the forums were not merely an afterthought but were actually planned for and written into our initial grant proposal. This enabled the planning committee to make the forums a priority among other important CAAA-related responsibilities. Still, because federal funding constraints can make it difficult to purchase refreshments and incentives, the steering committee's suggestion to elicit sponsorship from community organizations, along with our capacity to draw from the relationships community-based staff possessed within their communities to obtain donations for the forum space, door prizes, and food, reduced our financial burden substantially. It also afforded our project the opportunity to develop reciprocal relationships with local businesses and organizations. The community-based staff took pride in the fact that the forums were almost 100% sponsored. Still, they cautioned that obtaining donations is time intensive and that generosity among community organizations and establishments is limited and can be exhausted.

Given the efforts and resources put toward planning and conducting the forums, our planning committee agreed that it was essential to have full support and guidance from our steering committee members. Having the six forum objectives set forth by the steering committee facilitated the planning process, and we found it especially helpful to have the steering committee review and make thoughtful suggestions on how to improve our forum agendas and materials so that they better facilitated achieving these objectives.

The planning process should strive toward co-learning among planning committee members. As described in O'Fallon and Dearry (2002), community-based participatory research provides an environment in which community and researchers contribute their respective expertise and partners learn from one another. Our planning process fostered co-learning as knowledge and expertise were transferred among the university- and community-based members. During our debriefing sessions it was clear that the university-based and community-based staff and partners gained insight and mutual respect for the values and norms that help to inform how things are done in Detroit and in the academic institution. Through this new understanding, we believe that our academic-community partnership was further strengthened. One particular source of tension arose when it was decided that because the results presented during the community forum were preliminary, we would refrain from giving out hard copies of the findings. This was viewed negatively by certain members of the planning committee who felt that the community should leave the forum with a copy of the results. When this issue was presented at a steering committee meeting, steering committee members agreed that only final findings should be provided as handouts

since distribution of preliminary findings may result in dissemination of findings that may ultimately change with further analysis. This exemplifies one of the challenges involved with disseminating results; striving to analyze complicated data in a manner that is valid and reliable while trying to disseminate results to the community in a timely manner (Israel et al, 1998; Jackson, 2002).

Logistical, social, cultural and language barriers to forum attendance, participation and engagement need to be identified and addressed. We identified several barriers that needed to be addressed to facilitate attendance and participation in the forums. For example, because it was difficult to locate one forum location convenient to both the east and southwest participants, we held two separate family forums. We also chose to hold the forums on Saturday mornings so that individuals who worked outside the home would be able to attend and bring their children if they wished. While this seemed to enhance participation from family forum participants, feedback offered from community members revealed that more people would have attended the community forum if it had been held right after work on a weekday evening. We also suspect attendance would have been augmented with increased advertising in local circulars and newspapers. Had we done a better job of identifying and adhering to local publications' deadlines for submitting press releases, we probably would have gained media coverage for the event. Finally, we would try to avoid holding future forums in January (or during any winter month) as Detroit's cold temperatures and dangerous driving conditions made it difficult for everyone involved.

To ensure that the forums were accessible, we drew upon the trusting relationships community environmental specialists had with the CAAA families to help assess what special accommodations were needed. Ultimately, not only did we offer childcare services, but also the childcare workers were bi-lingual. Cab vouchers enabled several families to attend and Spanish and American Sign Language translation services were required. Although individuals who used the translation services seemed satisfied, Spanish-speaking staff expressed concern that some of the information was not being translated accurately. In retrospect, we should have spent more time working with the translators to be certain that they were well versed in the information they were relaying (Randall-David, 1989).

We tried to address language and cultural barriers, such as too much academic jargon, that could impede participants from understanding the study findings. Reporting the findings using PowerPoint® presentations worked well, especially as they were targeted toward multiple audiences. Positive aspects were the use of colorful pictures, brief and concise bullet points, and clear summaries of the take-home messages. It was also helpful that the researchers were animated, humorous, and took time to define and break down complicated and potentially confusing concepts. Nevertheless, feedback indicated that there were still certain concepts that have become everyday language for CAAA researchers and staff that were not well defined and clarified for participants (e.g., Integrated Pest Management), and that too much information was covered in the short time allotted. Such comments highlight the importance of developing

presentations within a large enough timeframe before the forums so slides can be reviewed and edited for content, language and length.

A fun and welcoming ambiance should be incorporated into forums, but should not overshadow forum objectives. A potential social/cultural barrier was that some individuals might feel uncomfortable attending a “university lecture” or “meeting.” We tried to plan the forums so that they would be welcoming and fun. Throughout the planning process, community-based staff expressed concern that the forum would be equated with a party. They cautioned that sending “party-like” invitations and having colorful decorations (e.g., balloons and streamers) would give participants the impression that they were being invited to ‘attend’ a party instead of being invited to ‘participate’ in an informational and interactive forum. In response, the forum ambiance was festive, but did not overshadow the forum objectives. We were able to strike this balance by making certain that participants were greeted by friendly and familiar faces as soon as they arrived at the forums, by offering refreshments, and having tasteful decorations. By creating a welcoming atmosphere, participants felt respected, comfortable, and safe to participate and become engaged in the forum. Evaluation data from the forum participants indicated that all who attended would be willing to attend future CAAA events.

Research participants and community members can be actively involved in feeding back findings and information. In retrospect our planning committee wished we had made a greater effort to involve CAAA family participants in the forum planning and actually involve them in the forum agenda. Although steering committee members initially suggested this involvement, the planning committee and researchers were concerned that family participants would be overburdened or feel uncomfortable being in the spotlight. As a result, we focused our efforts on engaging participants during the forum (i.e., planning small group discussions, allotting time for question and answer sessions). Upon observing how comfortable many participants were while they recapped their small group discussions to the larger group, we agreed that for future forums we would try to involve family members in the forum program as presenters and educators in the same manner that the CAAA researchers were highlighted. As one planning committee member said, “I would hold the families at the same status as the researcher.”

Suggestions for achieving this at future forums included inviting and helping CAAA participants prepare presentations about what they learned through CAAA, or asking them to give testimonials about the challenges they face while caring for a child with asthma in their communities. During our debriefing sessions, planning committee members agreed that it would have been powerful for organizational representatives and policy makers who attended the community forum to see how CAAA has helped move many families from individual- to community- and policy-level awareness.

The forum agenda should integrate and promote ample opportunities for participants to interact. Feedback from participants revealed that they enjoyed the forums and felt that the mix of didactic presentations and interactive small and large

group activities made the time go by very quickly. Our forum agendas built in several opportunities for participants to interact with one another, and to meet people to whom they might normally not have access (e.g., other caregivers of children with asthma, researchers, elected officials, physicians, and community organizers). By enabling family forum participants to self-select into small discussion groups, for example, they had the opportunity to meet others who were interested in similar issues.

Feedback was equally positive regarding the interaction that resulted from inviting all of the community forum participants to literally get out of their seats to vote on the issues they felt were priorities. By generating a sense of “controlled chaos,” individuals were rubbing elbows, discussing issues, and sharing their insights with people they might not normally have the chance to meet.

Having informational displays and refreshments available at the forums further provided an excuse for participants to walk around and linger after the forums to sign-up to become involved with community organizing efforts, socialize with other forum participants, and meet CAAA staff and researchers. One participant relayed how he took advantage of his time in the food line to ask a researcher a question:

“... I didn’t bring that question up in front of all of you, but I did bring it up to one of the [researchers] over there in the chow line...when we was eating the sandwiches and I caught him over there because they ran out of time. But my thing was, about these diesel fumes...about the buses, you know in the cities. ... I wanted to know more about that.”

Opportunities for participants to become involved beyond the forum are key to continued engagement. Our objective to introduce the community organizers and have them describe the issues on which they have been working helped to further raise awareness about how environmental issues have been linked with health and quality of life. This was evident by the responses several participants wrote on their evaluations with regard to what they felt was most helpful about the forums. Such responses included, “Learning that some triggers are caused by the environment,” and “knowledge about our community.” Furthermore, several participants actually signed-up to become involved in community organizing activities, which suggested that they were motivated to participate in efforts, that reached beyond themselves and their immediate families. A suggestion for future forums is to provide an easy and achievable opportunity for participants make to a difference in their communities. For example, providing participants with sample letters (along with pre-stamped and pre-addressed envelopes) about specified environmental issues that they can sign and send to policymakers might be one such opportunity for participation.

It was important that people who signed up with the community organizers be contacted in a timely manner to acknowledge their initiative and reinforce their interest. As it turned out, the opportunity for involvement soon arrived. Not long after the forums, these same individuals were invited to join community organizers during the “Motor City clean-up” events held in several Detroit neighborhoods.

By adding the names of everyone who was invited to the forum (whether or not they attended) to CAAA's mailing list, we are now able to distribute our newsletters and updates about future CAAA events to a wider network. Finally, the planning committee and steering committee agreed that it was especially important to send thank-you letters to all of the forum participants, the sponsors and each organization that donated door prizes. Other suggestions (provided during our debriefing sessions) for showing our appreciation in future forums included presenting businesses with certificates of appreciation, and hosting a thank-you breakfast.

Throughout our forum planning process it was apparent that virtually every decision we made held ethical, social and cultural implications. Decisions regarding where to hold the forums, how best to present the information, who should be invited, who should hear the results first, what services to offer to reduce barriers to participation (e.g., translation, transportation and child care services), and which local establishments to approach for donations and sponsorship opportunities were all extremely important. These decisions could effect forum participation and success and also CAAA's positive reputation and credibility in the eyes of the communities with whom we were continually establishing trusting relationships. To assure that our decisions were sensitive and appropriate, it was important to have the diverse perspectives represented by our forum planning committee along with guidance from our steering committee. The community-based participatory research process we used to gain these diverse insights further represented a means by which relationships were strengthened among our community and academic partners. Also, the lessons we gleaned from this initial set of forums have been applied to subsequent forums. For example, on Earth Day 2004, CAAA held a leadership forum geared toward presenting epidemiological study findings to concerned community leaders and residents, giving them the opportunity to work together on developing community-level strategies to address priority air quality issues.

The interactive forums we have described benefited forum participants, CAAA, and the university. For participants who are concerned about the health of their communities, particularly children with asthma, discussions and activities offered during each forum enabled them to learn the findings of CAAA's air quality assessment and interventions, to be involved in interpreting these findings, identifying local priorities for future research and intervention endeavors, and for translating findings into social action through community organizing opportunities. For CAAA, gaining perspectives and insights from research participants and community members during these forums helped our community-based participatory research partnership to assess the current and future directions of our research and activities. Drawing from this local expertise and focusing on priorities deemed important by community partners, staff and participants enhanced the quality and validity of our research and further reinforced for us the benefits of using a community-based participatory research approach, which emphasizes involvement of all partners in all aspects of the research. (Israel et al, 1998).

Our project was successful in developing rapport and trust both among CAAA partners and with the communities involved in this research. Nevertheless, we realize how fragile even these trusting relationships can be. Offering interactive forums enabled us to develop further opportunities to reinforce CAAA's positive reputation in the community as a project that understands the ethical importance of disseminating research findings back to participants and concerned citizens. Such credibility is essential if we are to maintain these valuable community-academic collaborations, and to continue to conduct research that is beneficial (Areal and Gallagher-Thompson, 1996; Flaskerud and Anderson, 1999). For the academic establishment, gaining the community's trust is especially important to meeting the service learning and community engagement requirements that are increasingly being recognized as integral aspects of university mission statements (Nyden, 2003). As faculty and students express the desire to be involved in endeavors that give back to the community (Nyden, 2003), we believe that planning and conducting interactive forums within a community-based participatory research context offers vast learning experiences and opportunities for the university to make a positive impact. A steering committee member's comment exemplified this sentiment:

“Forums help to empower communities because you educate people about what's going on and then they can talk to other people! I think a lot of communities of color have been kept in the dark. But with forums, I think the benefits are manifest in how well the CAAA kids have done. Now parents feel that can do something about their child's asthma. It's very empowering.”

Conclusion

As community-academic research partnerships continue to grow, so will the need to disseminate research results to participants and the broader community. Finding ways to disseminate information so that it is timely, understandable, and helpful can be a challenge to researchers and practitioners. Throughout its five years, Community Action Against Asthma has employed diverse methods for sharing results and important information with participants and community members including the forums described in this article. Through a planning process that involved participation of community members and academic researchers, we were able to offer a series of forums that provided an interactive environment that was welcoming and engaging. In such an environment, forum participants had the opportunity to not only learn the results of CAAA research, but also to discuss and interpret the findings, help to determine the focus of future research endeavors, and become involved in addressing issues that extend beyond themselves and their families. By sharing our successes and the challenges we faced, we hope to better equip researchers and practitioners of community-based participatory research to communicate and translate findings so that research participants, their communities, and universities will ultimately benefit from the knowledge gained through scientific inquiry.

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