

ACTIVITY IMPLEMENTATION AS A REFLECTION OF LIVING IN BALANCE: THE KAHNAWAKE SCHOOLS DIABETES PREVENTION PROJECT

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ABSTRACT

PURPOSE

Little research has been done to understand how the goals and objectives of a community health promotion program are translated into a program of intervention activities in Aboriginal communities. This study aimed to develop a theoretical framework of program implementation using a program in its sustainability phase, the Kahnawake Schools Diabetes Prevention Project (KSDPP).

METHODS

This qualitative study retrospectively analyzed the program of diabetes prevention activities implemented over an 11-month period by the KSDPP intervention staff. Analytic techniques of the constant comparative method and theoretical sampling were applied to uncover concepts and relationships between concepts. Observation notes, documents and in-depth interviews with intervention staff were collected and analyzed.

RESULTS

Activity implementation was embedded within an overall program intervention cycle directed towards promoting living in balance, in turn, a reflection of local cultural values. Strategies of teaching, enabling, reinforcing, networking and role modeling were aimed at developing individual capabilities and creating healthy spaces in the community for the children to live healthy lifestyles. The overall program of intervention activities was coherent and relevant. Implementation reflected elements of order and continuity, in addition to adaptation of the intervention staff to local conditions.

CONCLUSIONS

Implementation of diabetes prevention in Kahnawake is complex, encompassing elements of stability and adaptation and reflecting cultural values and practices.

INTRODUCTION

Ecological models for health promotion programs propose that interventions be directed at multiple levels and in multiple sectors within the community (Green and Kreuter 1999). These approaches have better chances of being effective since they address the complex interdependence of factors that influence behavior and the environment (Green et al. 1996). Emergent

views conceive health promotion programs from the perspective of systems theory where programs evolve within their environment as they transform resources and knowledge into services that are guided by the program objectives (Potvin et al. 2001). Based on this model, interventions implemented in the community can be regarded as dynamic and diverse with respect to their program of activities. Reviewing the literature reveals that little research has been directed towards understanding the complexity of implementing community-based health promotion programs in Aboriginal communities.

Community-based approaches for the primary prevention of diabetes have been favorably implemented in some Aboriginal communities (Daniel and Gamble 1995; Thompson and Gifford 2000). Few practice-based theories exist that illustrate how prevention programs are translated into action in the community. Developing culturally sensitive theory from research on community-based practices can inform community development as well as contribute to the edifice of scientific knowledge (Milburn 1996, Buchanan 1994). An identified priority for research in Aboriginal communities is the development of knowledge for the benefit of the community, with the understanding of the potential benefit of sharing new knowledge with other communities, including the scientific community (Smith 1999).

The analysis reported in this paper is embedded within a larger qualitative study examining the program life cycle of the Kahnawake Schools Diabetes Prevention Project (KSDPP). The purpose of this specific study was to develop a theoretical framework describing the translation of program goals and the integration of resources into a program of intervention activities for the primary prevention of type 2 diabetes in an Aboriginal community.

METHODS

BACKGROUND

Kahnawake is a Kanien'kehaka (Mohawk) community of approximately 7,200 people, located 15 km south of Montreal, Canada. In 1985, 12 percent of adults, aged 45–64, had documented type 2 diabetes, twice the rate of the general population of the same age (Macaulay, Montour, and Adelson 1988). Concerns about high rates of diabetes, perceived increase of obesity among children, combined with the Kanien'kehaka tradition of caring for future generations, spurred the community to develop a diabetes prevention program. The KSDPP intervention, which began in 1994, aims to change the physical environment and social norms of the school and community by promoting healthy eating and active lifestyles.

DESIGN

This study of KSDPP program implementation is based on the retrospective analysis of diabetes prevention activities implemented over an 11-month period, from September 2000 to July 2001.

DATA COLLECTION

Data collection relied on the analysis of documents, observations, and in-depth interviews by the primary author with intervention staff. Five in-depth interviews with the three intervention staff were conducted using a semi-structured interview guide to probe into program objectives, the planning process, resources consumed by the activities, and what the activities attempted to accomplish. Interviews were audio recorded and transcribed. Participants who were interviewed reviewed transcripts. Data sources included activity-related documents and observation notes collected prospectively from meetings where intervention activities were discussed. Activities were located on a community map to derive a sense of the social context for activity implementation. Forty major activities were identified from the search of materials. The Université de Montréal ethical review committee and the KSDPP Community Advisory Board granted ethical approval.

DATA ANALYSIS

Qualitative data analysis proceeded inductively through constant comparisons and theoretical sampling to construct categories and identify relationships between categories (Strauss and Corbin 1990). As activities were compared and contrasted, categories emerged in the analysis reflecting the underlying messages of the activities, activity characteristics, strategies used to convey intervention messages, how resources were consumed over the course of activity implementation, and features of the intervention approach. Questions were continually asked of the data as codes were sorted into meaningful conceptual groups, or categories, and their dimensions. Memos and diagrams were used to track the development of the theoretical framework. Data management was facilitated by ATLAS/ti, a qualitative data analysis package. Data trustworthiness was ensured by checking study findings with intervention staff and through persistent observation in the field (Guba and Lincoln 1989).

RESULTS

The focal point of this analysis is the KSDPP program intervention cycle, which is directed towards promoting living in balance. The two concepts of

promoting living in balance and the program intervention cycle and their relationships are described below. Results show that the implementation of the diabetes prevention activities embodied the overall program goal and objectives.

PROMOTING LIVING IN BALANCE

Living in balance reflects being well in mind, body, emotion, and spirit. The overall goal of the program of intervention activities embodies this concept of living in balance, which emerged from the data analysis.

Document analysis and interviews with intervention staff show that the program of intervention activities was driven by the program vision, developed in 1995 through a participatory community process involving Community Advisory Board members, community and academic researchers and KSDPP staff (Table 1). The vision reflects the underlying program philosophy and is based on the Kanien'kehaka value of caring for the Seventh Generation (the faces of those yet to come) (Lyons 1984), the Rotinohshonni (people of the longhouse) expression for what is known in contemporary health policy as primary prevention (Ottawa Charter for Health Promotion 1986).

The KSDPP vision anchors the program and serves as the foundation for the development of concrete goals and objectives, which are then translated into specific diabetes prevention activities. Examples and descriptions of ten of the forty activities that were implemented are provided in Table 2 as a way of showing the broad scope of school and community activities offered.

The KSDPP program of intervention activities takes a holistic approach to preventing diabetes in the community by embedding intervention activities

TABLE 1. Vision of the Kahnawake Schools Diabetes Prevention Project

“All Kahnawakero:non are in excellent health. Diabetes no longer exists. All the children and adults eat healthily at all meals and are physically active daily. The children are actively supported by their parents and family who provide nutritious foods obtainable from family gardens, local food distributors and the natural environment. The schools as well as community organizations, maintain programs and policy that reflect and reinforce healthy eating habits and daily physical activity. There are a variety of physical activities for all people offered at a wide range of recreational facilities in the community. All people accept the responsibility to cooperatively maintain a well community for the future Seven Generations.”

TABLE 2. Examples of 10 of 40 KSDPP Intervention Activities for September 2000 – July 2001

1. Breakfast buffet for schoolchildren, healthy food donated by parents. Food presented on colored tablecloths, by food groups to encourage the choice of a balanced meal
2. Classroom Snow Sculpture Contest, during winter carnival week
3. Health Education Program/Curriculum for elementary schoolchildren
4. Education System Healthy Nutrition Policy disallows unhealthy foods in school
5. Halloween, Christmas, and Easter “Healthy Alternative Treat List” brought home to parents by school children
6. 7 km Memorial Walk for diabetes prevention for the community
7. Healthy Food Booth offering fruit as a refreshment at annual Pow –Wow
8. KSDPP’s Traveling Diabetes Awareness Booth visited 18 separate organizations and conducted blood glucose testing and promoted healthy eating
9. Mother’s Day walk on the community recreation path
10. Earth Day Community clean up. KSDPP participated as an organization and sponsored refreshments

within the overall goal of living in balance. KSDPP’s messages are rooted in this traditional philosophy of health (Little Bear 2000) and were realized, in this program year, through program objectives aimed at *promoting active living, promoting eating in balance, and raising diabetes awareness.*

Key messages were distilled for the above three domains from comparing, contrasting and grouping the underlying intentions for each activity. For promoting active living, intervention activity messages encouraged *participation in regular physical activity, participation in a variety of physical activities, and fitting physical activity into daily living.* For promoting eating in balance, intervention activity messages encouraged *having regular eating patterns (e.g., meal pattern), making healthy food choices, and eating healthy meals (e.g., portion size, food groups).* Messages for raising diabetes awareness conveyed *the seriousness of the disease, the preventability of the disease and assessing personal risk of diabetes.* While several activities focused on either eating in balance, active living or diabetes awareness only, other activities focused on two or more domains (e.g., physical activity and nutrition).

Program activities were anchored to a common objective of encouraging a positive attitude by considering the whole person and encouraging participants to do their best. With respect to activities promoting active living, for example, an emphasis was placed on participating in a physical activity rather

than winning a race. The program of activities was framed by the cultural values of the Kanien'kehaka people, a reflection of the intervention staff being from and living in the community as well as knowing the community.

KSDPP PROGRAM INTERVENTION CYCLE

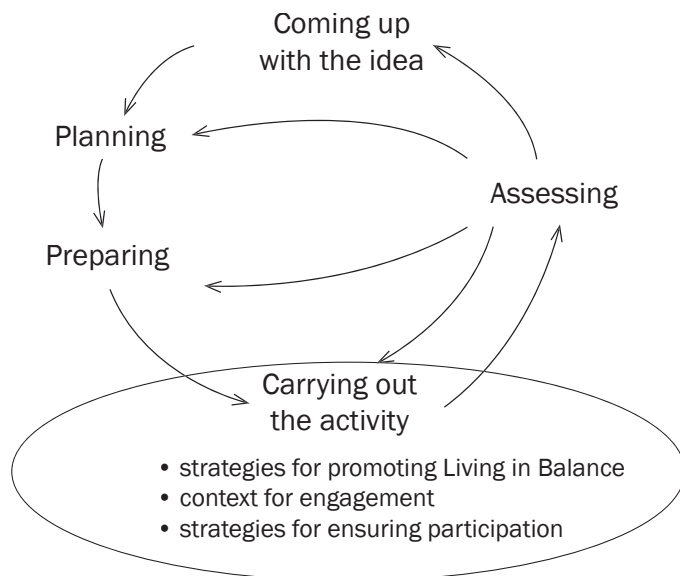
Promoting living in balance was translated into community practice by offering activities that were produced through the “program intervention cycle.” While the program goal (living in balance) directed the program of intervention activities for the intervention year we analyzed, it also served as the outcome towards which the program of activities was oriented.

The KSDPP program intervention cycle is the category that describes the process by which the goals of the intervention program are translated into intervention activities. The program intervention cycle is characterized by five sub-processes:

1. coming up with the idea,
2. planning the activity
3. preparing for the activity,
4. carrying out the activity, and
5. assessing the activity

Figure 1 provides a visual representation of the intervention cycle.

Figure 1. The KSDPP Program Intervention Cycle



The overall goal and objectives, while more enduring and fixed in nature as exemplified by the program's vision, represented the motivation for developing and implementing a program of activities. Thus, the program intervention cycle was the translation of the objectives into a workable plan of activities referred to as the program of intervention activities. The steps in the programming cycle provided a flexible structure for moving through the overall program of activities.

COMING UP WITH THE IDEA

"Coming up with the idea" involved the KSDPP intervention staff applying their expertise (e.g., knowledge, skills, and experience) through brainstorming and developing individual activity ideas as well as a plan of intervention activities. This happened formally during planning meetings or informally, on a more impromptu basis. An intervention worker described how some ideas arise:

[We realize], "Oh, we didn't try this." That's kind of how we make some ideas up, it's just a lot of talking, on how to change [activities] a bit to get across the same message.

The ideas for activities were derived from multiple sources including: the creativity of the intervention staff, the synergy of brainstorming in a group, being responsive to community requests, other community organizations, seeing activities in other places (e.g. workshops) or hearing about ideas from others, reflecting on previous activities and adapting ideas from everyday living to diabetes prevention. In assessing the origin or source for the ideas, intervention staff were adapting or modifying the ideas to the specific target group. As one example, a booth promoting health to adult men was offered beginning at 5:00 a.m. at a local convenience store where men gather for their early morning coffee.

An annual intervention plan was drafted in June 2000. This plan was influenced by the school calendar and annual community events. It served to guide the upcoming year of intervention activities and was adapted in response to participant feedback, community requests, situational circumstances, and intervention staff experiences. The presence of an annual intervention plan gave the program of activities a sense of stability. The openness and flexibility of the intervention staff to ongoing community requests, however, showed an element of responsiveness. As one example, it was not uncommon for intervention staff to check menus and respond to recipe requests for those who dropped by the KSDPP office.

PLANNING THE ACTIVITY

During planning, the intervention staff identified an overall action plan outlining required resources for each activity and assigning tasks and resource contributions to each collaborator. The required resources that were identified through data analysis were human resources, material resources, advertising, time, and space.

Planning was most often a collaborative process conducted in the context of meetings with partnering organizations. These organizations came together around a shared interest in one or more of the objectives related to the overall goal of promoting living in balance. The KSDPP program of intervention activities included activities led solely or primarily by KSDPP intervention staff; however, at this phase in the project, most were collaborative in nature. For this intervention year, about two-thirds of the activities were repeated from previous years while one-third were new activities.

Not all activities followed a formal planning process. In responding to community requests such as recipes and providing beverages at a community sporting event, the intervention staff planned informally, on their own, or with other intervention staff.

PREPARING FOR THE ACTIVITY

In the preparation phase, each collaborator followed through with assigned tasks leading to the mobilization of material goods, volunteers and other personnel. In addition to basic infrastructure resources, additional resources were required for carrying out each activity. These resources were acquired through a variety of modes including purchasing material resources (e.g., paper, water, food) or services (e.g., professional printing of cookbook) with community intervention funding, utilizing in-kind services, recruiting volunteers, pooling resources around shared objectives through community collaborations and asking for donations.

Transforming resources was a consequence of intervention agents acquiring resources and applying their intervention expertise. The result was the creation and production of new activities and activity tools (e.g., diabetes awareness booth, cooking demonstrations with students).

Lastly, preparing the activity involved contacting participating organizations to invest time in the activity as well as locating, reserving, or renting spaces for an intervention activity.

CARRYING OUT THE ACTIVITY

Carrying out activities represented the point of engagement of the intervention activity with the participants, either directly through contact with

the intervention staff or indirectly through their efforts to create healthy spaces for people in the community to live, work and play. An activity was defined as an event linked to a higher-order program goal and objective and related to messages transferred through specific strategies. Carrying out the activity was described and explained by the strategies used to convey the messages, the context of engagement and the intervention approach taken to link the messages with the people in the community.

Strategies for Promoting Living in Balance

Within the sub-process of carrying out the activity, intervention staff employed several strategies to transfer the program messages of *promoting active living*, *promoting eating in balance* and *raising diabetes awareness* to allow participants to live in balance.

Intervention staff promoted living in balance through the strategies of teaching, enabling, reinforcing, networking, and role modeling. Teaching strategies, both formal and informal, gave participants information and knowledge on: portion sizes, meal patterns, and how to prepare a healthy breakfast, for example, and how to influence attitudes and beliefs towards eating breakfast. Enabling strategies sought to develop skills by engaging participants in making a healthy breakfast; providing opportunities for active living (e.g., Earth Day clean up); and supporting teachers to implement the school curriculum for diabetes prevention and to feel comfortable with applying the nutrition policy.

And now with the nutrition policy [in the schools] we have made a better list for teachers to understand. Teachers want to know what can be brought in and what's not allowed. When there is a parent-teacher interview night we try to reinforce the nutrition policy with parents. We've rated different snacks that kids bring to school, to show parents what was healthy.

(KSDPP intervention worker)

Reinforcing actions included staff offering positive verbal reinforcement to elementary school children during an annual running event for school children, in addition to using an activity (e.g., Mother's Day Breakfast Contest) to reinforce prior learning (e.g., Breakfast Buffet). Networking interventions included staff participation in the community's Diabetes Working Group to facilitate the planning and implementation of diabetes prevention activities (e.g., community conference). Intervention staff viewed themselves as role

models and “walked the talk” of active living and eating in balance, working with parents, teachers and other professionals to develop their capabilities to influence the children. Further analysis showed that these strategies were directed towards developing the capabilities of the different groups of participants or creating healthy spaces within the community for people to eat in balance, live actively, and be aware of diabetes.

Context for Engagement

The context for engagement, embedded within the sub-process of carrying out the activity, reflected the “what” and “how” of the participants’ engagement with the activity. The “what” component referred to the variety of activity formats in which the participants became engaged. The formats were educational (e.g., curriculum, booths, presentations, demonstrations, exhibits); social (e.g., meals, parties, annual gatherings and events); recreational (e.g., walks, runs, contests, races, clubs); or political (e.g., policies) and were tailored to the needs and interests of the particular target groups.

The choice to participate reflected how participants engaged in the activity, either by their own choice (voluntarily, as in an open invitation to a community walk); where the choice to participate was strongly supported by a particular setting like the school (directed participation, as in classroom competition in a snow sculpture contest); or where participants had no choice (mandated, as in the school nutrition policy). KSDPP activities emphasized voluntary participation, but were balanced with mandatory and directed participation for school children, the primary intervention target.

Strategies for Ensuring Participation

The program of intervention activities was characterized by ten common practices, which we are addressing within the sub-process of carrying out the activity. These practices were directed towards ensuring that the intervention messages would reach the intended target groups. These practices are elaborated on below to facilitate their potential application at the community level.

1. Continuity of the message from activities, settings, and population groups

Promoting living in balance required intervention staff to craft a program of intervention activities with consistent and congruent messages, targeted at multiple groups within the community (e.g., children, teachers, parents, families, youth) in their everyday lives (e.g., work, home, school, play).

“We keep the messages the same but change the color of the table cloth and the paper it is printed on . . . it keeps it inter-

esting to put a new look or twist on a repeated activity, but we are always looking to try something totally new.” (KSDPP intervention worker)

2. Taking the message to the people

Carrying out intervention activities at places where the intended target groups would be facilitated getting living in balance messages to them. One intervention activity aimed to engage the adult male population by offering an activity (diabetes awareness booth with golf theme and putting contest) during a lacrosse game, which generally attracts large numbers of men.

3. Incentives engaging participation and reinforcing the message

The program messages were also linked to participation incentives. Activities such as community walks that required participants to become engaged on their own volition offered incentives to get them to participate as well as to reinforce their participation, in this case, completion of the walk.

4. Capitalizing on existing events, occasions, and opportunities

KSDPP's activities capitalized on events already happening in the community. Special occasions (e.g., Mother's Day) and cultural events (e.g., Pow-Wow), the season (e.g., Winter Carnival) or a holiday celebration (e.g., Easter) shaped the context for activity implementation and the delivery of activity messages. Knowing the community event calendar (e.g., annual events) and networking with community structures was central to positioning the program of activities to reach the target groups while supporting other organizations' activity efforts.

5. Using multiple strategies in a single intervention

A single intervention activity applied multiple strategies to convey a message. The intervention staff incorporated traditional ways of learning by sharing information, providing opportunities for asking questions, and showing participants how to carry out a new skill. Such was the case for showing youth how to read food labels.

6. Responding to concerns raised by the community

Intervention staff were responsive to community needs by their community presence and being open to feedback on their program of activities from community partners, parents, teachers, and other professionals. This information was fed back into the intervention cycle and influenced new and repeated intervention activities.

7. Embedding culture into the interventions

Intervention activities were designed to be familiar, pertinent, and appeal to participant tastes and interests through traditions (e.g., three sisters, corn, beans and squash) and socially based practices (e.g., gathering at a meal, walking as a family).

8. Creating a social environment for participation

Many intervention activities were characterized as recreational or social attesting to the importance of creating a social environment to provide a supportive, enjoyable and caring atmosphere for activities that aim to improve healthy eating and increase physical activity.

9. Blending new with old activities

Keeping popular activities interesting and attractive to participants was accomplished by adding new elements to long-standing intervention activities. To illustrate, in collaboration with the local recreational center, a contest coordinated with community organizations was added to the physical activity club. The contest recruited new participants, encouraged their on-going participation with newsletter updates and incentives and honoured their achievement of attaining the goal of a total number of physical activity minutes.

10. Collaborating with community organizations and groups

Collaborating with community organizations and groups for activity implementation allowed efforts to be shared through a network that created reciprocal support. It also permitted a greater presence through KSDPP's involvement with other activities being offered to the community. KSDPP's long-standing intervention worker explains:

We had started to work together on different initiatives, because we are all promoting the same thing, we're all promoting health. It was better for us to join forces rather than doing individual work. It reinforces everything we are doing. . . . It makes [carrying out activities] so much more fun if everyone does a little bit and it makes the booth all that more exciting.

The common practices outlined here illustrate the approach KSDPP has developed to extend the program of intervention activities widely into the community and to reach intended target groups. In its sustainability phase,

KSDPP has become embedded in the dynamic social, recreational, and educational structures of the community.

ASSESSING THE ACTIVITY

The sub-process of assessing the activity occurred prior to, during, and after an activity by intervention staff reflecting on their own or as a group, and at times with other project partners and participants. After carrying out the activity, assessing culminated in documenting the activity through completing activity reports and developing and compiling photographs. In formally assessing the activity, intervention staff identified the number and age groups of the participants, in addition to strengths, weaknesses, and potential ways to improve each activity. The knowledge derived from formally or informally assessing an activity was fed back into the intervention cycle. This knowledge was used to adapt or refine an existing activity, or drop an ineffective activity. Moving into new activities and other administrative and organizational responsibilities at times impeded completing the activity report. The intent of producing the activity report and the photographs, however, was to provide the KSDPP with a tangible record to inform planning in following years and for accountability purposes.

Although the vision and goal of the KSDPP intervention program to prevent diabetes by living in balance remains constant, the framing of messages is permeable and responsive to local conditions. The overall KSDPP program, however, is coherent in that the vision, goal, and objectives are all directed towards improving community lifestyles through the mechanisms of improved nutrition and eating habits, increasing physical activity levels, and strengthening knowledge, beliefs and attitudes towards diabetes prevention.

The acquisition, utilization, and transformation of resources were essential for the ongoing implementation of intervention activities, which carry the messages of and which are aimed at ensuring the health of the population for seven generations to come.

DISCUSSION

Findings characterize implementation of the diabetes prevention program for the 2000-2001 year as embedded in local cultural values and practices, ecological and reflective of elements of stability and adaptation. Sustaining the intervention cycle relies heavily on human and material resources.

The KSDPP intervention program embodies culture from its vision, which centres on caring for the children, to the translation of its goal of living in

balance through implementation of its objectives of promoting eating in balance and active living at the community level. The program takes a holistic approach by considering the person's connection within their surrounding social context and aims to influence children's lifestyles by intervening directly with the children and indirectly, through implementing activities through a variety of formats, to parents, teachers, organizations, and the community. In this way, there is continuity of the message across settings and target groups. For children to eat healthy breakfasts, they need to know what a healthy breakfast looks and tastes like. In addition to serving as role models for their children, parents need to know what foods to buy and their preparation for a healthy breakfast. Although framed as the ecological approach to health promotion (Richard, et al. 1996), the notion of connectivity and ecological thinking has been central to Aboriginal worldviews for hundreds of years (Battiste and Henderson Youngblood 2000). This ecological approach was found to be supported by a social resource network of community organizations and volunteers (e.g., especially parents) sharing an interest for keeping children healthy, which reinforces the collective responsibility of the Kanien'kehaka for the Seventh Generation (Alfred 1999). Findings imply that interventions need to consider local culture in their design and implementation and that interventions can no longer be conceived as "technical solutions," implemented as fixed packages (Sorenson et al. 1998; Scheirer 1994, 40-68; Basch 1984).

The elements of order and adaptation found in the KSDPP approach to program implementation are consistent with conceiving health promotion programs as social systems (Potvin et al, 2001; Raeburn and Seymour, 1979). The program of diabetes prevention activities was based on a linear logic, exemplified by the translation of the program vision into concrete goals and objectives, all of which were directed towards preventing diabetes in the community. This "teleological" element of directedness provided intervention staff with a general path to follow and an adaptive element reflected by the responsiveness of intervention staff to the context of activity implementation. Rather than a given activity or the program of activities being fixed, intervention staff were shaping the activity or the overall program of activities to local circumstances and conditions. This could mean, for example, responding to requests for recipes from a community group or adding an activity to follow up or reinforce a previous activity.

The maintenance of program activities relies on resources that are dedicated to the KSDPP program. Results demonstrated that the intervention cycle is driven by the intervention staff combined with material resources. Collaboration with community organizations, groups, and members resulted

in the pooling of human resource expertise and material resources, but it also served to share the responsibility for promoting the messages of living in balance in the community. These findings suggest that although collaborations are important for pooling resources and increasing community participation, a core of resources, the hiring of intervention staff and acquisition of material goods, is essential.

CONCLUSION

This study offers a practice-based theoretical framework that illustrates how a program goal and its objectives are translated into a program of intervention activities. The framework was based on data from practices of the KSDPP intervention program. While contributing to scientific knowledge of program implementation, findings may be useful for Aboriginal and non-Aboriginal practitioners seeking to implement diabetes prevention activities in communities sharing similar values to the community of Kahnawake. Study findings are limited, however, by the absence of prospectively collected observation data documenting activity implementation. Current findings provide a basis for future practice-based theory development and emphasize the importance of culture in community prevention programs.

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AN EDITORIAL COMMENT

The research process can be thought of as planting a seed. A seed becomes a plant full of many seeds. A research question finds an answer which contains within it the seeds of many more questions. There is always more to learn. Frustrating as it sometimes feels, this is a good thing. In fact, the better the research, the more questions arise.

Diabetes is a significant issue among Aboriginal and Indigenous populations. This article reports the implementation of one community-based intervention. Here are some of the questions their answer might raise.

1. How would intervention staff in other communities adapt this model to prevent type 2 diabetes??
2. What resources, financial and non-financial, are needed by intervention staff to carry out a community-based diabetes prevention program?
3. How can programs involve community members in planning and carrying out a community health program?
4. What is the role of elders in activity planning and implementation? Should they be part of the circle or the centre of the circle?
5. What was the relationship between the researchers and the community intervention staff in collecting and interpreting the data and in disseminating the research findings?
6. How is linear logic different from many Aboriginal worldviews embracing holistic or circular ways of thinking?
7. For one reviewer, the article raised questions about specific aspects of

an activity: the impact of the activity, what the participants thought of the activity, the level of participation, and how satisfied the participants were with the activity.

8. What conditions are important to consider when communities decide set priorities for programs for diabetes prevention and diabetes management and treatment?

And so it goes. One question leading to another. One research project here adapted to suit the need of a community there. We learn from each other even as we teach each other.